

Bcom sem 5 notes for exam

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Unit 1

NITI Aayog

NITI Aayog - Detailed Note

1. Introduction

* Full name: The full name of NITI Aayog is National Institution for Transforming India.

Establishment: It was established by a resolution passed by the Government of India on 1 January 2015.

Location of the Planning Commission: This body has replaced the 65-year-old Planning Commission.

Key Role: NITI Aayog is the 'Think Tank' of the Government of India.

* Development Model: It works on a 'bottom-up' approach, where plans are prepared and delivered to the centre from the village level. (When the Planning Commission was working on a top-down approach).

Cooperative Federalism: The main pillar of this organization is the coordination between the Centre and the states and the development of the country together.

Non-Constitutional Body: It is a non-constitutional and non-statutory body created by an executive resolution.

2. Structure of NITI Aayog

* Chairperson: Prime Minister of India (ex-officio).

Vice-Chairperson: Appointed by the Prime Minister.

* Governing Council: The Chief Ministers of all the states of the country and the Lieutenant Governor of the Union Territories are included.

- * Chief Executive Officer (CEO): Secretary level officer to the Government of India.
- * Members: Full-time Members, Part-time Members (from Universities and Research Institutes) and Ex-Officio Members (from the Union Cabinet).

3. Main Objectives of NITI Aayog

* Promote Cooperative Federalism: To make the States not only policy followers but also active partners in policy making of national development.

Bottom-up Planning: Develop a system of credible planning at the village level and integrate it at the highest level.

* Synergies between national security and economic policies: Ensuring that national security interests are incorporated into economic strategies and policies.

* Focus on disadvantaged sections of the society: Special attention should be given to those sections who have not adequately benefited from economic progress.

Long-Term Framework: Prepare a 15-year vision document, a 7-year strategy and a 3-year action agenda for the development of the country.

Innovation and Knowledge Hub: To promote research, innovation and innovative thinking in the country.

Use of Technology: To increase the use of modern technology in development works and governance.

4. Detailed Explanation of NITI Aayog

(a) Difference Between Planning Commission and Niti Aayog

The Planning Commission was based on the old thinking, where the central government itself framed policies and imposed them on the states ('Top-down Approach'). The Planning Commission had the power to allocate funds to the states.

NITI Aayog has changed this practice. The Niti Aayog does not have the power to allocate funds (which is vested with the Ministry of Finance). It provides high-level scientific and technical advice to the Centre and states only on economic and social issues.

(B) Key Pillar Frameworks.

1. Team India Hub: It acts as a bridge between the central government and the states. It gives every state the right to express its views at the Centre.

2. Knowledge and Innovation Hub: NITI Aayog studies the best ideas and global models to improve various sectors such as education, health, agriculture, and infrastructure.

(c) Key Initiatives and Indices of NITI Aayog

NITI Aayog not only formulates plans but also releases various indices to promote competitive federalism among states:

Atal Innovation Mission (AIM): Establishment of 'Atal Tinkering Labs' (ATLs) to promote research and innovation at school and college levels.

SDG India Index: Assessing the progress of a state in achieving the United Nations Sustainable Development Goals.

Aspirational Districts Programme: A special programme to bring more than 112 most backward districts of the country into the mainstream of rapid development.

Health and Education Index: Ranking states on the basis of quality of hospitals and education.

1. Composition of NITI Aayog

NITI AAYOG – COMPOSITION

NITI Aayog is the premier policy “Think Tank” of the Government of India, established on 1 January 2015.

- ① Chairperson : The Prime Minister of India.
- ② Governing Council : Comprises all Chief Ministers of States and Lt. Governors of Union Territories.
[Together with the Prime Minister – ex-officio]
- ③ Vice-Chairperson : Appointed by the Prime Minister.
- ④ Full-Time Members : Appointed by the Prime Minister.
(Experts in specified fields)
- ⑤ Part-Time Members : Up to 2 members
(From relevant fields / expertise)
- ⑥ Ex-Officio Members : Certain Union Ministers as nominated by the Prime Minister.
- ⑦ Special Invitees : Experts, specialists and practitioners in relevant fields, as invited by NITI Aayog.

Note :

The Governing Council is the apex body of NITI Aayog.

SUMMARY

- Chairperson – PM
- Governing Council – CMs of States & Lt. Governors of UTs
- Vice-Chairperson
- Full-Time Members
- Part-Time Members (up to 2)
- Ex-Officio Members
- Special Invitees

The institutional structure of NITI Aayog, which has been replaced by the Planning Commission, is divided into the following major parts:

Bullet Points (Key Members):

* Chairperson: Prime Minister of India.

* Vice-Chairperson: A key head appointed by the Prime Minister (equivalent to a cabinet minister).

Governing Council: Chief Ministers of all states and Lieutenant Governors/Administrators of Union Territories.

Regional Councils: A council formed for a specific period of time to solve specific regional problems.

* Special Invitees: Experts and experts from various fields nominated by the Prime Minister.

* Chief Executive Officer (CEO): A designated officer of the rank of Secretary to the Government of India (for infrastructure management).

* Full-time Members: Experts with the rank of Minister of State.

* Part-time Members: Maximum 2 members (on rotational basis) from premier Universities and Research Institutes.

Ex-officio Members: Up to 4 ministers nominated by the Prime Minister from the Union Cabinet.

(Detailed Explanation):

1. Governing Council:

In the old Planning Commission, the role of states was limited to advisory only. 'Cooperative Federalism' has been strengthened by giving a direct place to the Chief Ministers of each state in the Governing Council of NITI Aayog, so that the voices of the states are heard while making national policies.

2. Regional Councils:

When two or more states have common issues such as water, environment or infrastructure, these regional councils are formed under the chairmanship of the Prime Minister or his representative.

3. Special Invitees and Subject Experts:

Sectoral experts, agronomists, economists and industrialists from appropriate fields are consulted to solve the complex economic and social problems of the country.

2. Future Planning Framework of NITI Aayog

NITI Aayog has done away with the practice of "5-Year Plans" and presents a new futuristic roadmap for the country based on a long-term and modern quadrilateral model:

Bullet Points (Key Pillars of Future Planning):

15-Year Vision Document - Viksit Bharat @2047: A roadmap for the long-term development of the country.

7-Year Strategy Document: Medium Term Economic and Social Strategy.

3-Year Action Agenda: A short-term plan for immediate implementation.

Aspirational Blocks Programme: Rapid development of downtrodden backward areas.

Green Growth and Sustainable Development: Eco-friendly economic development.

Digital Public Infrastructure and New Technologies (DPI & Deep Tech): AI, Semiconductors and Digital India.

(Detailed Explanation):

1. Three-Tier Planning Framework:

15 Year Vision @ 2047: NITI Aayog's main objective is to make India a developed nation (Viksit Bharat) by 2047, setting long-term goals for health, education, infrastructure and economic growth.

7 Year Strategy: This provides a medium-term roadmap for policies and asset planning to achieve the goals of the Vision Document.

3 Year Action Agenda: Creates a practical planning framework for immediate reforms in the government budget and policies.

2. Aspirational Districts and Blocks Programme:

The focus is on speedy reforms in the 112 most backward districts and more than 500 blocks of the country by monitoring the development of health, nutrition, education and agriculture through real-time data.

3. Green Growth and Energy Transition:

Reducing dependence on fossil fuels and increasing the use of green hydrogen, electric vehicles (EVs) and renewable energy (solar/wind) is key to future planning.

4. Frontier Technologies and Innovation:

NITI Aayog is working on a plan to make India a global hub in areas such as Artificial Intelligence (AI), semiconductor manufacturing, and robotics. At the same time, the Atal Innovation Mission (AIM) is promoting a start-up culture among the youth.

Key Takeaway for Exams:

NITI Aayog is the focal point of realizing the dream of a 'Viksit Bharat by 2047'. Its framework makes the Centre and the States equal partners and its future planning moves away from the traditional 12th Five Year Plan towards sustainable, technological and inclusive development.

Structural/Sectoral Changes in the Indian Economy

Structural/Sectoral Changes in Indian Economy

1. Overview of 3 Sectors

The Indian economy is broadly divided into 3 parts:

Primary Sector: Agriculture, Animal Husbandry, Forestry, Fisheries and Mining.

Secondary Sector: Manufacturing, Construction, Electricity, Gas and Water Supply.

Tertiary Sector / Services: Trade, Hotel, Transport, Banking, Insurance, IT (IT), Education and Health Services.

2. Structural Changes in GDP Contribution

At the time of independence (1950-51), India's economy was agrarian oriented, but with the passage of time, the dominance of the service sector has increased.

Data Comparison:

| Sector | Share of 1950-51 (%) | Share of 2013-14 (%) | Latest Episode (2024-25/26)

| Agriculture | 51.81% | 18.20% | ~14% to 18% |

| Industry | 14.16% | 24.77% | ~27% to 30% |

| Services | 33.25% | 57.03% | ~54% to 55% |

Sector-wise Detailed Analysis:

(a) Agriculture and Allied Sector :

* Status: In 1950-51, the share of agriculture in GDP **was more than 51%**, which has now come down to around 14-18%.

* Reason: There has been mechanization in the agriculture sector, but the growth rate of non-agricultural sectors (industry and services) has been much faster than agriculture.

* Positive aspects: Due to the Green Revolution, food grain production in India has definitely increased (India used to import food grains at the time of independence, today it has become an exporter).

* Major change: Along with traditional crops (wheat-rice), the contribution of horticulture, fisheries and livestock has increased.

(b) Industry and Manufacturing Sector:

* Status: The share of industry in 1950-51 was only **14.16%**, which has increased from **27%** to **30%** today.

* Reason: Industrial Policy of 1956, Establishment of Heavy Industries and New Economic Policy Reforms of 1991 (LPG - Liberalisation, Privatisation, Globalisation).

* Key changes: Today, manufacturing is being boosted through 'Make in India', PLI (Production Linked Incentive) schemes, and semiconductor mission.

(C) (Services Sector - The Growth Engine):

* Status: The service sector, which **accounted for 33%** in 1950-51, today represents **more than 54%** of the country's GDP.

* Specialty: India has made a big leap from direct agriculture to the service sector instead of progressing in a phased manner (agriculture/industry/service) like the developed countries.

Key drivers: Software/IT (IT & Software Services), Telecommunications, Financial Services (UPI, Digital Banking) and Transportation.

3. Structural Changes in Employment

This is the biggest paradoxical aspect of the Indian economy:

* Dependence on Agriculture: At the time of independence, about 72% of the country's population was dependent on agriculture. Even today, about 42% to 45% of the country's population depends on agriculture for their livelihood, but the contribution of agriculture to GDP is only 14-18%.

* Limitation of the Service Sector: The service sector contributes 55% of the GDP, but it provides employment only about 30%. The service sector requires 'skilled labour', so rural and unskilled labour cannot be absorbed quickly.

Industry Sector: The manufacturing and construction sector employs about 25-28% of the workers.

4. Other Structural Shifts

1. Organized vs Unorganised Sector:

Earlier, most of the economy was unorganized.

Reforms such as GST (Goods and Services Tax), Digital Payments (UPI), and the e-Shram portal are rapidly formalising the Indian economy.

2. Rural vs Urban Shift:

In 1951, only 17% of the population lived in cities.

Today, about 35% to 36% of the population lives in cities. Rapid urbanisation is increasing the demand for services and infrastructure.

3. Foreign Trade Composition:

At the time of independence, India used to export only raw materials (tea, cotton, spices) and import finished goods.

Today, India is a major exporter of IT services, pharmaceuticals, refined petroleum and engineering goods.

5. Quick Memory Notes for Students

* GDP shift: Agriculture (51 → 14%), Services (→ % → 55%), Industry (14% → 27%).

* Employment paradox: Agriculture employs 42%, but only ~14-18% of GDP.

* : Reforms of 1991 (LPG - Liberalization, Privatization and Globalization).

* Current Trends: Digitalization, Formalisation and Green Energy Transitions.

Conclusion

The structural transformation in the Indian economy shows that India is rapidly moving from a traditional agrarian economy to a modern, service-driven and technology-driven global economic power. To achieve the goal of 'Viksit Bharat @ 2047', it is very important to strengthen the manufacturing sector and create more and more jobs.

Federal finance only means the recommendations of the existing Finance Commission

1. Meaning of Federal Finance

In the Federal System of Governance, the system of sharing of financial resources, sources of revenue and expenditure responsibilities between the central government and various state governments is called 'Federal Finance'.

The salient features and policies of federalism are as follows:

* Financial Independence: In the federal structure, both the central and state governments have the right to collect taxes from certain areas as stipulated by the constitution and spend it independently.

* Vertical Imbalance between Income and Expenditure:

Most of the major sources of revenue in the country (such as income tax, corporate tax, GST, etc.) are with the central government, while the primary responsibility for public expenditure

such as education, health, and roads rests with the states. Removing this inequality is one of the main objectives of federalism.

Horizontal Imbalance:

The economic condition of all the states of the country is not the same. Some states are developed and prosperous, while some states are geographically or economically backward. The balance is maintained by giving more grants or money to the backward states through the federal economy.

Cooperative Federalism:

The Centre and the States complement each other for the overall development of the country.

2. Introduction to 16th Finance Commission

Under Article 280 **of the Constitution of India**, the Finance Commission is set up by the President of India every five years. The main function of the Finance Commission is to prepare a roadmap for how much of the taxes collected by the Central Government should be given to the states.

Chairman: The Chairman of the 16th Finance Commission is Dr. Arvind Panagariya (who was the first Vice Chairman of NITI Aayog).

* Composition: The Commission was constituted in December 2023.

* Implementation Period: The recommendations of the 16th Finance Commission will be applicable for a period of 5 years from 1st April, 2026 to 31st March, 2031.

Time to submit its report: The Finance Commission has been directed to submit its final report by October 31, 2025.

FINANCE COMMISSION OF INDIA

1) MEANING :

The Finance Commission is a constitutional body constituted by the President of India every five years under Article 280 of the Constitution.

2) CONSTITUTIONAL PROVISIONS :

- Provided in Article 280.
- Constituted once in every five years.
- President defines the terms of reference.

3) FUNCTIONS / TERMS OF REFERENCE :

- ① To recommend the distribution between the Union and the States of the net proceeds of taxes.
- ② To recommend the distribution among the States of the shares of such proceeds.
- ③ To recommend the principles which should govern the grants-in-aid of the revenues of States.
- ④ To review the financial position of the States.
- ⑤ To perform any other task referred by the President in the interest of sound finance.

4) COMPOSITION :

- Consists of a Chairman and four other Members.
- Appointed by the President of India.

5) CURRENT FINANCE COMMISSION :

16th Finance Commission

- Chairman : Dr. Arvind Panagariya
- Members : Shri Ajay Narayan Jha
Dr. Annie George Mathew
Shri Manoj Panda
Dr. Soumya Kanti Ghosh
- Term : From 1st April, 2026 to 31st March, 2031
- Constituted on : 31st December, 2023

6) KEY RECOMMENDATIONS (16th FINANCE COMMISSION) :

Tax Devolution :	41% of the net proceeds of taxes to States (same as 15 th FC)
Horizontal Devolution :	Population (2011) - 15% Income Distance - 45% Area - 15% Forest & Ecology - 10% Demographic Performance - 12.5% Tax Effort - 2.5%
Vertical Devolution :	Union : States = 59 : 41
Grants-in-Aid :	Recommended ₹5,35,437 crore as Grants-in-Aid to States.
Other Points :	• Untied grants to be priority. • Focus on disaster management, health, education, and infrastructure.

NOTE : The recommendations of the Finance Commission are advisory in nature. The final decision on implementation rests with the Government.

3. Terms of Reference and Recommendations of the 16th Finance Commission

The 16th Finance Commission has been giving its major recommendations and guidelines for strengthening India's federal finance on the following aspects:

(a) Vertical Devolution of Central Taxes :

It provides for the percentage of the amount that the central government will give to the states from its collected tax funds.

The 15th Finance Commission had earmarked 41 per cent share for the states (after the reorganisation of Jammu and Kashmir and Ladakh).

The 16th Finance Commission is reviewing the percentage and structure of this tax share in view of the growing financial needs of the states and introducing new provisions.

(b) Horizontal Devolution Criteria :

The 16th Finance Commission takes into account the following basic criteria while devolution of funds among different States:

Income Gap: States whose per capita income is less than the national average, should be given more share to make them financially capable.

Population: Determine the financial needs of the states on the basis of the 2011 census data.

Area and Geography: States with large geographical area or hilly areas should be given special weight as the cost of infrastructure is high.

Forest and Ecology: To encourage states that protect the environment and have green forest areas.

* **Demographic Performance:** Appropriate rewards should be given to the states that have done good work in the field of population control and family welfare.

* **Tax and Fiscal Efforts:** To encourage the states which improve their tax collection and maintain fiscal discipline.

(c) Grants-in-Aid:

Under Article 275 of the Constitution, the Finance Commission gives special grants to the states which have a revenue deficit even after tax devolution.

* Special grants are recommended for important social sectors such as health, education and disaster management.

(d) Financial Assistance to Local Bodies:

* Provision of direct grants to Gram Panchayats, Taluka Panchayats, District Panchayats and Municipalities/Municipal Corporations to make them financially self-sufficient.

The grants are used by local bodies for works such as drinking water, sanitation and local infrastructure.

(e) Disaster Management Financing:

* Recommend financial provisions for restructuring and strengthening of National Disaster Response Fund (NDRF) and State Disaster Response Fund (SDRF) to deal with natural disasters (such as cyclones, floods, droughts).

4. Key Challenges before the 16th Finance Commission

* North versus Southern States Dispute: Southern states allege that despite doing well in population control and economic development, the distribution of money based on the 2011 population gives them a lesser share, while the more populous northern states get more funds. Balancing the two is a big challenge for the 16th Finance Commission.

* Issue of Cess and Surcharge: States do not get their share of the cess and surcharge collected by the Central Government. The states are demanding that this amount should also be included in the divisible tax fund.

* Fiscal Consolidation:

Prepare a definite roadmap for both the Centre and the states to stay within their debt-to-GDP ratio.

□. Conclusion

Federal finance is the foundation of the country's unity and economic stability.

The 16th Finance Commission is not just a money-sharing body between the Centre and the States, but it is an important pillar of maintaining trust and equality in India's federal structure.

Dr. The recommendations of the 16th Finance Commission headed by Arvind Panagariya will play a crucial role in taking India towards the goal of 'Viksit Bharat @ 2047' and reducing economic inequality among States in the period 2026 to 2031.

Unit 2

~~Topic 1~~

1. Importance of Agricultural Sector in Indian Economy

India is considered to be a traditional agrarian country. The important role played by the agriculture sector in the social and economic development of the country is as follows:

1. Primary Source of Employment:

About 42% to 45% of India's total active population is directly or indirectly dependent on agriculture and allied sectors (such as animal husbandry, fisheries) for their livelihood.

2. Contribution to National Income:

Although the contribution of agriculture to the GDP has decreased over time, the share of agriculture in the total GDP/GVA of the country has remained significant in the range of about 14% to 18%, which is the pillar of the country's economic system.

3. Food Security for the Nation:

The agriculture sector works to make the country self-sufficient in food products by producing food grains (wheat, rice, pulses), vegetables, milk and oilseeds for India's more than 140 crore population.

4. Supply of Raw Materials for Industries:

The major and traditional industries of the country such as cotton textiles, jute, sugar, processed food, and vegetable oil are completely dependent on agricultural products.

5. Large Market for Industrial Goods :

The rural population of India derives income from agriculture. Through this income, they create demand for tractors, threshers, chemical fertilizers, pesticides, pumpsets as well as FMCG items of daily use, thereby boosting the growth of the industrial sector.

6. Foreign Exchange Earnings:

Tea, coffee, spices, rice (especially basmati), cotton, groundnuts, and horticultural crops are largely exported from India, earning valuable foreign exchange to the country.

7. Support to Services and Transport:

Rail, truck transportation, warehousing, cold storage and banking/insurance sector demand increases to transport farm produce from farm to markets and processing units.

8. Socio-Economic Stability and Poverty Alleviation:

Agricultural development is very important to reduce poverty in rural areas of the country and to improve the standard of living of the rural people. The prosperity of the agricultural sector helps in preventing rural-urban migration.

IMPORTANCE OF AGRICULTURE IN INDIAN ECONOMY

Agriculture is the backbone of the Indian economy. It plays a vital role in the economic development of the country.

① <u>Source of Livelihood</u>	: Agriculture is the main source of livelihood for about 45-50% of the population in India.
② <u>Contribution to National Income</u>	: Agriculture contributes around 15-18% to India's GDP.
③ <u>Provider of Food</u>	: It ensures food security by providing food grains, vegetables, fruits, milk, meat, etc. to the nation.
④ <u>Raw Material Source</u>	: Agriculture provides raw materials to various industries such as textile, sugar, jute, paper, oil, etc.
⑤ <u>Industrial Growth</u>	: It promotes the growth of agro-based industries and cottage industries and helps in balanced regional development.
⑥ <u>Foreign Exchange Earnings</u>	: Agriculture and its allied activities like tea, coffee, spices, cotton, jute, marine products, etc. earn valuable foreign exchange.
⑦ <u>Capital Formation</u>	: Surplus from agriculture provides capital for investment in other sectors of the economy.
⑧ <u>Market for Industrial Goods</u>	: Agriculture provides a large market for industrial goods like fertilizers, tractors, pumps, tools, etc.
⑨ <u>Employment Generation</u>	: It generates large-scale employment opportunities both directly and indirectly.
⑩ <u>Equitable Distribution of Income</u>	: Being a widespread activity, it helps in reducing economic inequality and promotes inclusive growth.
⑪ <u>Support to Allied Sectors</u>	: It supports allied sectors like animal husbandry, fisheries, forestry and sericulture.

Thus, agriculture is the backbone of the Indian economy and its development is essential for overall economic growth and social welfare.

2. Agricultural Production and Productivity Trends

Since independence, Indian agriculture has witnessed major changes due to technological and policy changes:

* Initial Phase After Independence (1950 to 1966):

During this period, India was facing acute shortage of food grains and was dependent on imports from countries like USA under the "PL-480" programme. Agricultural productivity was extremely low.

Green Revolution (1966 to 1990):

The Green Revolution began in 1966-67 with the use of high yielding seeds (HYV seeds), chemical fertilizers, pistol irrigation and pesticides. There was a grand success in the production of wheat and rice and India became self-sufficient in food grain production.

* Productivity Shift:

There has been a significant increase in yield per hectare. For example, the productivity per hectare of wheat in 1950-51 was only 663 kg/ha, which has now increased to more than 3500 kg/ha.

*** Diversification Trend**

In the last two decades, farmers have rapidly shifted from growing only traditional crops (wheat-rice) to cash crops (cotton, sugarcane), horticultural crops (fruits, vegetables), and animal husbandry/dairy industry (White Revolution).

3. Factors Affecting Agricultural Productivity

The following factors are responsible for low productivity per hectare in India as compared to other developed countries:

1. Natural Factors and Dependence on Rainfall:

Indian agriculture is still largely regarded as "gambling with the seasons". Irregular rainfall, drought or excessive rainfall directly adversely affects productivity.

2.Sub-division & Fragmentation of Land Holdings

In India, land is being fragmented due to hereditary laws. More than 85% of the farmers in the country are small and marginal farmers, who have less than 2 hectares of land, in which it is not economically affordable to use modern machines.

3. Lack of irrigation facilities:

Only 50% to 55% of the total cultivated area gets perennial irrigation. The productivity remains low as the rest of the area is rain-fed.

4. Old and Traditional Farming Methods:

Most of the small farmers still use ploughs, bullocks and traditional tools. The scope of modern technology like tractors, harvesters and drones is limited.

5. Lack of quality seeds and fertilizers:

The high cost of quality seeds and lack of knowledge about proper use of balanced fertilizers reduce the fertility of the soil and the quality of the crop.

6. Inadequacy of Agricultural Credit/Credit:

Small farmers do not get timely and affordable government or banking credit, forcing them to take loans from moneylenders at high interest rates and are unable to invest.

7. Soil Degradation :

Due to the reckless use of chemical fertilizers, excessive irrigation water and soil erosion, the natural nutrients present in the soil are depleting.

8. Lack of Market Arrangement and Storage Space:

In the absence of proper godowns and cold storage, a large amount of crops get damaged after harvesting. Also, farmers have not been getting adequate prices for their produce because of intermediaries.

4. Measures to Increase Productivity

The following steps have been taken by the Government and economists to increase production per hectare in agriculture sector:

1. Expansion of Irrigation Facilities:

Augmentation of irrigation coverage through "Har Khet ko Pani" and "Per Drop More Crop" under "Pradhan Mantri Krishi Sinchayee Yojana (PMKSY)".

2. Quality Seeds and Organic Manure:

Easy supply of hybrid and disease-resistant seeds. Balanced use of fertilizers should be encouraged through the 'Soil Health Card' scheme to maintain soil fertility.

□(Mechanization of Agriculture

Setting up of 'Custom Hiring Centres' and providing subsidies to small farmers so that they can also use equipment such as tractors, threshers, sprayers and drones.

4. Facility of cheap agricultural credit:

Providing short and long term bank loans to farmers at low interest rates (4% interest rate) through Kisan Credit Card (KCC) and NABARD.

5. Market reforms and establishment of e-NAM:

Digital platform like e-NAM (National Agriculture Market) to eliminate middlemen so that farmers can get the best price for their produce anywhere in the country.

6. Crop Insurance and Risk Management:

'Pradhan Mantri Fasal Bima Yojana' (PMFBY) provides financial protection to farmers against loss due to excessive rains, drought or pest attack at low premium.

7. Agricultural Research and Extension Services:

To disseminate knowledge to the farmers through 'Krishi Vigyan Kendras' (KVKs) by exploring new technologies through ICAR (Indian Council of Agricultural Research) and agricultural universities.

8. Food Processing and Infrastructure:

Setting up of mega food parks, cold chains and godowns to prevent post-harvest wastage and value addition.

FACTORS AFFECTING AGRICULTURAL PRODUCTIVITY AND MEASURES TO INCREASE PRODUCTIVITY	
I. FACTORS AFFECTING AGRICULTURAL PRODUCTIVITY	II. MEASURES TO INCREASE AGRICULTURAL PRODUCTIVITY
① Nature of Land : Fragmentation, small and uneconomic holdings, soil erosion, low soil fertility.	① Improvement in Irrigation : Expand irrigation facilities, promote minor irrigation, ensure proper water management.
② Irrigation Facilities : Dependence on monsoon, inadequate irrigation coverage, inefficient water use.	② Use of Quality Inputs : Use high yielding seeds, balanced fertilizers, organic manures and effective plant protection.
③ Quality of Inputs : Use of low quality seeds, imbalanced use of fertilizers, inadequate plant protection.	③ Adoption of Modern Technology : Promote HYV seeds, mechanization, precision farming, biotechnology and ICT in agriculture.
④ Capital Formation : Low investment in agriculture, lack of credit availability, poor farm mechanization.	④ Soil Conservation & Improvement : Soil testing, crop rotation, mulching, afforestation, check soil erosion and maintain soil health.
⑤ Technology : Traditional methods of farming, low adoption of improved technology and innovations.	⑤ Increase in Institutional Credit : Provide timely and adequate credit at low interest rate, strengthen cooperative credit system.
⑥ Human Resources : Low level of education and training, lack of technical knowledge and skills.	⑥ Extension Services & Training : Strengthen extension services, train farmers, disseminate knowledge and latest technologies.
⑦ Institutional Factors : Inadequate credit, weak marketing system, lack of storage and cold chain facilities.	⑦ Development of Infrastructure : Build rural roads, storage, cold chains, warehouses, and improve marketing facilities.
⑧ Natural Factors : Uncertainty of rainfall, droughts, floods, pests and diseases.	⑧ Supportive Policies : Ensure minimum support price, crop insurance, stable policies and public investment in agriculture.
⑨ Socio-economic Factors : Poverty, population pressure, low risk-bearing capacity, tenancy problems.	⑨ Diversification : Promote crop diversification, horticulture, animal husbandry, fisheries and allied activities.
Conclusion : Increasing agricultural productivity is essential for food security, higher farmer income and balanced economic growth. It can be achieved through integrated efforts of farmers, government and other institutions.	

5. Challenges for Agricultural Sector

The following 10 major challenges are prevalent in front of the rapid and sustainable development of the agriculture sector in India:

1. Climate Change and Global Temperature:

Due to global warming, there are unseasonal rains, cyclones, heatwaves and changes in temperature, which have a serious impact on crop yields.

2. Small Landholdings:

Commercial farming is difficult due to continuous fragmentation of land. Most small farmers can only cultivate for their subsistence.

3. Depleting Groundwater Levels:

Excessive withdrawal of water by tubewells and pumpsets in states like Punjab, Haryana and Gujarat has deepened groundwater, which could lead to severe water scarcity in the future.

4. Low Public and Private Investment in Agriculture:

Long-term investment in agricultural infrastructure (e.g., irrigation, research, storage) by the public and private sectors as a proportion of GDP is comparatively low.

5. Price Volatility and Market Risk:

Due to a sudden fall in market prices at the time of crop production (e.g., onion, tomato, cotton), farmers do not even get the cost of production, leaving them under the burden of debt.

6. Value Addition and Underdevelopment of Food Processing:

Less than 10% of the total agricultural production in India is processed. This spoils 15% to 20% of the crop after harvesting.

7. Unorganized and Critical Supply Chains:

APMC mandis, brokers and middlemen are a chain of APMC mandis to reach the consumer from the farm, due to which the consumer pays a higher price but the farmer gets a lower price.

8. Rural Indebtedness:

Farmer suicides and indebtedness are major challenges in rural areas due to crop failure, rising production costs and high-interest loans taken from informal moneylenders.

9. Youth Disinterest in Agriculture:

Due to low incomes, high risk and lack of social prestige, the new generation is leaving agriculture and moving to cities to work as labourers or jobs.

10. Soil Salinization and Toxicity:

Excessive use of chemical fertilizers and pesticides is making the soil saline and unproductive, posing a threat to both the environment and human health.

CHALLENGES FOR AGRICULTURAL SECTOR IN INDIA

Despite being the backbone of the Indian economy, the agricultural sector faces several challenges that hinder its growth and sustainability.

- ① Low Productivity : India's farm productivity is lower than the world average due to traditional farming methods, small landholdings and low use of quality inputs.
- ② Fragmented Land Holdings : Small and fragmented land holdings lead to unscientific farming, higher cost of production and lower economies of scale.
- ③ Dependence on Monsoon : A large part of agriculture is rainfed and highly dependent on monsoon, causing uncertainty in production.
- ④ Inefficient Irrigation : Irrigation potential is not fully utilized. Inefficient water use and inadequate irrigation facilities affect productivity.
- ⑤ Soil Degradation : Continuous use of chemical fertilizers, soil erosion, and imbalance in nutrients reduce soil fertility and productivity.
- ⑥ High Cost of Inputs : Rising cost of seeds, fertilizers, pesticides, diesel and electricity increases the cost of cultivation.
- ⑦ Limited Access to Credit : Many farmers, especially small and marginal farmers, face difficulty in getting timely and adequate institutional credit.
- ⑧ Inadequate Marketing & Infrastructure : Poor storage, cold chain, transportation and lack of regulated markets lead to post-harvest losses and exploitation of farmers.
- ⑨ Price Volatility : Fluctuating prices of agricultural produce and lack of assured minimum price affect farmers' income.
- ⑩ Lack of Technology Adoption : Low adoption of modern technology, mechanization, and ICT in farming limits productivity and efficiency.
- ⑪ Post-Harvest Losses : Due to poor handling, storage and transportation, a significant quantity of produce is wasted after harvest.
- ⑫ Climate Change : Rising temperatures, erratic rainfall, droughts, floods and extreme weather events threaten agricultural sustainability.

Quick Recap for the Exam:

- * Importance: 42%+ employment, 14-18% GDP share, raw materials for industries, food security.
- * Productivity constraints: Small farms, dependence on rainfall, traditional tools, lack of credit.
- Reform measures: e-NAM, Soil Health Card, PM-KISAN, PMFBY, DRIP IRRIGATION.
- * Key Challenges: Climate Change, Land Fragmentation, Groundwater Depletion, Middlemen, and Insolvency

Topic-2

1. Need for Agricultural Finance

Agriculture sector is the soul of the Indian economy, but the income from agriculture is seasonal and volatile. The farmer has to go through a long period between sowing and harvesting and selling the crop. During this period, there is a need for agricultural finance to meet various agricultural and personal expenses.

Classification of Agricultural Credit Requirements:

The need for agricultural finance is mainly characterized by two perspectives:

(a) Need on time period:

1. Short-term credit (up to 15 months):

- * Farmers need this money to meet the daily/seasonal production cost of the crop.

Objective: To buy improved seeds, chemical and organic fertilizers, pesticides, pay the irrigation water bill, and pay labourers.

2. Medium-Term Credit (15 months to 5 years):

* This loan is taken to acquire equipment and livestock to increase the efficiency of the farm.

Objective: Purchase of bullocks or milch animals, fencing (wire fence) in the field, purchase of small pump sets or threshers and repair of old farm implements.

3. Long-term credit (5 years to 20 years):

* This loan is required as a permanent investment to bring about a permanent and major improvement in agriculture.

Objective: To buy tractors or harvesters, to construct a well or borewell in the field, to purchase land or to level the land and to repay old large debts.

(b) Purpose Based on Purpose:

1. Productive Needs:

* The money is directly used for crop production, soil fertility and mechanization of agriculture. This leads to an increase in the income of the farmer.

2. Unproductive Needs:

* Money that is not directly related to agricultural production but has to be spent by farmers for social and family reasons (such as weddings, family festivals, social rituals, sick expenses and court-court cases).

In the past, informal moneylenders exploited farmers by giving them loans at high interest rates for such non-productive needs.

Importance of Government Debt:

Due to lack of timely and adequate amount of money, farmers are not able to adopt modern technology. Therefore, it is imperative for the country's food security and agricultural development to free the agriculture sector from the clutches of moneylenders and to provide institutional finance at reasonable interest rates.

2. Important Institutions Providing Finance

Agricultural credit in India is mainly provided through two sources: informal sources (moneylenders, landlords, traders) and formal/institutional sources.

The proportion of institutional credit has increased from 70% to 75% since independence. The major institutions providing credit to agriculture sector are as follows:

1.NABARD - National Bank for Agriculture and Rural Development

Founded: Established on 12 July 1982 on the recommendation of the Sivaraman Committee.

Introduction: NABARD is the apex institution of rural and agricultural credit in India.

Function: It does not lend directly to farmers, but facilitates refinance to commercial banks, RRBs, and cooperative banks.

2. Commercial Banks:

After the nationalization of banks in 1969 and 1980, commercial banks (such as SBI, Canara Bank, Bank of Baroda) have become active in agricultural credit.

Priority Sector Lending (PSL): It is legally mandatory for commercial banks to give at least 18% of their total credit to the agriculture sector.

* They provide large amounts of loans for Kisan Credit Card (KCC) and tractors/infrastructure.

3. Regional Rural Banks (RRBs):

Founded: On October 2, 1975, M. It started with the recommendation of the Narasimham Committee.

Objective: To provide affordable credit to small and marginal farmers, agricultural labourers and rural artisans at their doorstep.

* Structure: RRBs have the participation of the Central Government (50%), the respective State Government (15%), and the Sponsor Bank (35%).

4. Cooperative Credit Institutions:

* India's oldest institutional credit structure.

* Provides affordable short and medium term credit to the farmers at the last mile through a three-tier structure (PACS, DCCB, StCB).

5. Land Development Banks / State Cooperative Agriculture and Rural Development Banks (LDBs/SCARDBS):

There are specialised co-operative banks that provide long term (5 to 20 years) loans to farmers by mortgaging their land.

AGRICULTURAL FINANCE INSTITUTIONS IN INDIA

Agricultural finance institutions play a vital role in providing timely and adequate credit to farmers and promoting agricultural development in India.

I. COOPERATIVE CREDIT STRUCTURE

① Short-Term Co-operative Credit Structure

- Primary Agricultural Credit Societies (PACS): Village level institutions.
- District Central Co-operative Banks (DCCBs): District level.
- State Co-operative Banks (SCBs): State level apex institutions.

② Long-Term Co-operative Credit Structure

- Primary Agricultural Co-operative Societies (PACS)
- Central Co-operative Banks (CCBs)
- State Co-operative Agriculture and Rural Development Banks (SCARDBs)

③ Land Development Banks (LDBs)

Provide long-term credit for land improvement, irrigation, soil conservation, etc.

II. COMMERCIAL BANKS

- Scheduled Commercial Banks (Public, Private, Foreign and Regional Rural Banks) provide short-term, medium-term and long-term credit for agricultural and allied activities.

III. REGIONAL RURAL BANKS (RRBs)

Established in 1975 under the Regional Rural Banks Act. They operate at the regional level with the objective of providing credit and other banking facilities to small and marginal farmers, agricultural labourers, artisans, etc.

IV. NABARD

National Bank for Agriculture and Rural Development (Established in 1982)

- Apex development bank for agriculture and rural development.
- Provides refinance to banks and cooperatives.
- Promotes rural infrastructure and non-farm sector.
- Supports SHGs, JLGs and financial inclusion.

V. EXIM BANK (EXPORT-IMPORT BANK OF INDIA)

Provides finance and credit for export of agricultural commodities and import of inputs required for agriculture.

VI. OTHER INSTITUTIONS

- National Cooperative Development Corporation (NCDC)
- State Land Development Banks (SLDBs)
- Agricultural Refinance Corporation (ARC) (subsidiary of NABARD)
- SIDBI (for agri and allied small enterprises)

Conclusion : These institutions ensure the flow of credit to agriculture, promote investment, improve productivity and support the overall development of the rural economy.

3. Role, Progress & Evaluation of Cooperative Agencies

The history of the cooperative movement in the field of agricultural credit in India is the oldest. The first 'Cooperative Credit Societies Act' was passed in India in 1904.

The main principle of cooperatives is based on "One for All and All for One".

(A) Structure of Cooperative Credit System

The cooperative credit structure in India is mainly divided into two parts :

1. Three-Tier Short-Term Structure:

* Primary Agricultural Credit Societies (PACS): Functioning at the village level, where farmers are directly members.

District Central Cooperative Banks (DCCB): Functioning at the district level, providing funds to the PACS of the taluka.

State Cooperative Bank (STCB): The apex body at the state level, which manages cooperative credit across the state.

2. Two-Tier Long-Term Structure:

* Primary Co-operative Agriculture & Rural Development Banks (PCARDBs): At Taluka/District level.

State Co-operative Agriculture and Rural Development Bank (SCARDB): State level.

(b) Role of Co-operative Agencies :

1. Freedom from Exploitation by Moneylenders: Co-operative societies provided legal and cheap credit to farmers against exorbitantly high interest rates and land grabbing policies by moneylenders in villages.

2. Loans at cheap interest rates: Cooperative banks provide crop loans to farmers at very low interest rates (0% or 3-4% interest in many states) along with government subsidy.

3. Financial Inclusion in Villages: In remote areas where private or commercial banks did not have branches, Primary Cooperative Societies (PACS) provided banking facilities to the farmers.

4. Distribution of agricultural inputs: PACS not only provide cash credit, but also physical distribution of certified seeds, fertilizers and pesticides to the farmers at remunerative prices.

5. Development of Democracy and Local Leadership: Cooperatives are managed by members elected by the farmers themselves, thereby developing democratic values and leadership in the rural sector.

(c) Progress of Co-operative Agencies :

* **Extraordinary increase in the amount of credit:** In 1950-51, the share of cooperatives in the country's total agricultural credit was only 3.1%. Due to various five-year schemes and government incentives, this share has increased from 30% to 35%.

* **Network Expansion:** Today there are more than 95,000 Primary Agricultural Credit Societies (PACS) in India, covering more than 95% of the villages in the country.

* **Implementation of Kisan Credit Card (KCC):** Cooperative banks have given KCC to crores of farmers, through which farmers can withdraw crop loans from ATMs or societies whenever they want.

* **Computerization of PACS:** The work of connecting all the primary cooperative societies (PACS) of the country with central software at a cost of more than Rs. 2,500 crore is going on at a rapid pace by the Government of India to make them digital and transparent.

(d) Evaluation and Weaknesses of Co-operatives:

Though the scope of agricultural credit in the cooperative sector has increased, some serious limitations and shortcomings emerge while evaluating its performance:

1. High Overdues / NPAs:

The biggest problem of cooperative banks is that they do not recover loans from farmers.

* Due to political reasons, farmers do not repay loans in anticipation of government loan waivers, which deteriorates the financial condition of cooperative banks.

2. Excessive Political Interference:

* Co-operative societies and banks have become the bastion of local politics. Loans are given to undeserving people to win elections and save vote bank.

3. Uneven regional imbalances:

* The co-operative movement has not been equally successful in all the states of the country. The cooperative sector is very strong in Maharashtra, Gujarat, Tamil Nadu and Punjab, while cooperatives are in a very weak position in states like Bihar, Odisha, Jharkhand and West Bengal.

4. Neglect of Small and Marginal Farmers:

* The societies are controlled by the big and influential landlords of the village. As a result, small, marginal and poor farmers do not get timely credit.

5. Lack of Professional Management:

These societies lack experts with knowledge of modern banking, risk management and technology. Financial irregularities occur because employees are unskilled.

6. Failure to collect deposits:

* Co-operative societies have been weak in collecting savings deposits from the public. They are completely dependent on NABARD and the Government for their funds.

Conclusion

Cooperatives are the backbone of Indian agricultural credit. "If the cooperative movement fails, it will be the failure of rural hope of India." To rectify this situation, it is extremely necessary to remove politics from the cooperative sector, implement strict collection policy, and establish professional administration by digitizing PACS.

~~Topic 3~~

1.NABARD - National Bank for Agriculture and Rural Development

(a) Introduction:

* Full name: National Bank for Agriculture and Rural Development.

Establishment: It was established on 12 July 1982 by the central government by an Act of Parliament.

* Recommendation of the Committee: Establishment of this bank b. It was based on the recommendations of the B. Sivaraman Committee.

Form: It is the apex development institution for the development of rural, agricultural, cottage industries and small scale industries in India.

* Original location: It replaced the erstwhile Agricultural Credit Department (ACD) and Rural Planning and Credit Cell (RPCC) of the Reserve Bank of India (RBI).

(b) Objectives of NABARD :

Integrated Rural Development: Holistic and sustainable development of agriculture, animal husbandry, handicrafts and village industries in the rural areas of the country.

* Function as a Apex Lending Institution: To provide refinance to various lending institutions (commercial banks, cooperative banks and RRBs) operating in rural areas.

Strengthening of Institutional Structure: Enhancing the Efficiency and Governance of Cooperative Banks and Regional Rural Banks (RRBs).

Regulation of Co-operative Institutions: Inspection and evaluation of Regional Rural Banks and Co-operative Banks under the Banking Regulation Act, 1949.

* Poverty alleviation and employment generation: To provide self-employment and productive opportunities in the non-farm sector to the rural population.

(c) Main Functions of NABARD :

1. Refinancing Function:

NABARD does not lend directly to the public or farmers.

It provides short, medium and long-term refinance to State Cooperative Banks (STCBs), District Central Co-operative Banks (DCCBs), Regional Rural Banks (RRBs) and Commercial Banks.

2. Developmental Functions:

* SHG-Bank Linkage Programme: Disseminate the SHG model to connect rural women and the poor with banking.

* Watershed and rural infrastructure: Providing affordable loans to the State Governments for construction of irrigation, rural roads and bridges through the Rural Infrastructure Development Fund (RIDF).

3. Regulatory and Supervisory Functions:

* Conduct legal inspection to ascertain the financial position of Regional Rural Banks (RRBs) and State/District Cooperative Banks.

4. Research and Training:

* Research for rural economy and agricultural development and to provide proper training to banking personnel.

2. Kisan Credit Card (KCC)

(a) Introduction:

Introduction: The Kisan Credit Card Scheme was launched by the Government of India in August 1998.

* Committee: The plan is R. v. It was prepared by NABARD on the basis of the recommendations of the R.V. Gupta Committee.

* Significant improvement: In 2019, the scope of the scheme was expanded to include farmers engaged in animal husbandry and fisheries.

(B) Objectives of Kisan Credit Card :

* Single window system: Providing easy and fast credit to farmers for crop cultivation and other inputs from one place.

* Timely and affordable credit: Providing money to farmers at reasonable rates (with government interest subsidy) to buy seeds, fertilizers and medicines during the sowing season.

* Reduce dependency on moneylenders: To free farmers from high interest loans taken from informal moneylenders.

Ease of credit process: Freeing farmers from cumbersome paperwork and repetitive loan applications.

(c) Functions and Features of KCC:

1. Credit Limit:

* The five-year credit limit is determined on the basis of the size of the farmer's land, cropping pattern and the 'Scale of Finance' decided at the district level.

□Flexible Usage

In addition to crop production, KCC can be used for post-harvest expenses, household consumption expenses and working capital maintenance of farm equipment.

3. ATM / RuPay Card Facility:

* Digital RuPay KCC cards are being issued to farmers, so that they can withdraw money at any time through ATMs or micro-ATMs.

4. Subsidised Interest Rate:

* The normal interest rate on KCC is 7%. But if the farmer repays the loan on time, he gets an interest subvention of 3%, which means the effective interest rate remains only 4% per annum.

5. Accident Insurance Cover:

* KCC holder farmer gets Rs. Death or permanent disability up to Rs. 50,000/- and Rs. Personal Accident Insurance covers partial disability up to Rs. 25,000.

6. Human Validity:

* The validity of the credit card is 5 years, which is renewed on the basis of an annual review.

NABARD AND KCC	
NABARD (National Bank for Agriculture and Rural Development)	KCC (Kisan Credit Card)
1. <u>Introduction</u> : NABARD was established on 12 July, 1982 under NABARD Act, 1981. It is the apex development bank in India for promoting sustainable and equitable agriculture and rural development. 2. <u>Objectives</u> : • Promote integrated and sustainable rural development. • Provide credit and refinance for agriculture and rural sectors. • Strengthen the financial inclusion in rural areas. • Support development of infrastructure in rural India. • Promote innovations and capacity building in rural India. 3. <u>Functions</u> : • Acts as an apex bank for refinance to Banks, RRBs and Cooperative Banks. • Undertakes development activities in agriculture and allied sectors. • Promotes self-help groups, JLGs and rural institutions. • Conducts research, surveys and projects for rural development. • Provides assistance for watershed development, irrigation, farm mechanization, etc. • Supervises and supports RRBs. 4. <u>Organizational Structure</u> : It has a Chairman, a Managing Director and several Directors appointed by the Government of India. 5. <u>Headquarters</u> : Mumbai, Maharashtra. ★ NABARD plays a pivotal role in rural credit, rural infrastructure and overall rural development.	1. <u>Introduction</u> : Kisan Credit Card (KCC) scheme was introduced in 1998 by NABARD in association with RBI and IBA to provide timely and adequate credit support to farmers. 2. <u>Objectives</u> : • To meet the short-term credit needs of farmers. • To simplify the credit delivery system. • To provide flexibility in the use of credit. • To reduce the dependence on moneylenders. 3. <u>Features of KCC</u> : • Provides short-term credit for crop production, maintenance of farm assets and allied activities. • Credit limit is based on the scale of finance. • Flexible withdrawal and repayment. • Validity period is usually 3 to 5 years. • Interest subvention available on timely repayment. • Accident insurance cover for card holders (optional). • Can be used at ATMs and PoS (RuPay KCC card). 4. <u>Benefits of KCC</u> : • Ensures timely availability of credit. • Reduces paperwork and number of loan applications. • Encourages scientific farming and higher productivity. • Helps in improving the economic condition of farmers. 5. <u>Eligibility</u> : All farmers – Individual, Joint or Group – who are engaged in agriculture and allied activities. ★ KCC is a farmer friendly scheme for hassle-free and timely credit to meet short-term agricultural needs.

3. Indebtedness of Farmers: Reasons & Remedies.

There is a well-known saying in India: "The farmer of India is born in debt, lives in debt and dies in debt."

(A) Main Causes of Farmer Indebtedness :

1. Poverty and Ancestral Debt:

* Farmers inherit the debt due to their father or grandfather. Considering it a legal and moral obligation, the farmer is unable to repay this old debt for the rest of his life.

2. Uncertain Monsoon & Crop Failure:

Indian agriculture is highly susceptible to excessive rainfall, droughts, cyclones and pest attacks. The farmer is unable to repay the loan taken due to crop failure.

3. Small & Fragmented Landholdings:

* Pieces of land are getting smaller due to hereditary division. The income of marginal farmers with less than 2 hectares of land is so low that even the family barely survives on it.

4. Unproductive Expenditures:

* Farmers spend more than they can afford on weddings, funerals, family festivals and court cases to maintain their social prestige, for which they take loans.

5. Exploitation by Moneylenders:

In villages, local moneylenders and traders lend to farmers at high interest rates ranging from 24% to 36%. The interest amount increases so much that the principal amount is never paid.

6. Rising Cost & Low Price Realisation:

The cost of seeds, fertilizer, diesel and labour is continuously increasing, but the farmer does not get the right or affordable price (MSP) for his crop.

7. Lack of Irrigation and Infrastructure:

Due to insufficient irrigation, only one crop can be grown in a year, so the annual income of the farmer is limited.

(B) Remedies for Farmer Indebtedness:

1. Expansion of Institutional Credit:

* Expanding the network of commercial banks, RRBs and cooperative societies to the last mile so that farmers do not have to go to moneylenders.

2. Maximum coverage of Kisan Credit Card (KCC):

* All small, marginal and tenant farmers in the country should be covered under the KCC scheme.

3. Strengthening of Crop Insurance Scheme (Effective Crop Insurance):

* To expand the scope of 'Pradhan Mantri Fasal Bima Yojana' (PMFBY) to provide quick and adequate compensation to the farmer in case of crop failure.

4. Assurance of Affordable Price (MSP):

* Minimum Support Price (MSP) for all major crops should be fixed by the government as per the recommendations of the Swaminathan Commission (C2 + 50\%) and effective procurement of the same.

5. Interest Subvention and Debt Restructuring:

* Conversion of short-term loans to farmers into medium or long term loans in case of natural calamities and waiver of interest.

6. Agricultural Diversification:

* Encourage farmers to take up animal husbandry, dairy, poultry, beekeeping and vegetable/organic farming instead of dependent on traditional crops.

7. Social Awareness and Financial Literacy:

* Conduct awareness programmes in villages to reduce non-productive expenditure on social occasions and to enable farmers to learn to plan finances.

Quick Recap for the Exam:

* NABARD (1982): Sivaraman Samiti, apex body for rural credit, refinance and RIDF fund.

* KCC (1998): R. v. Gupta Committee, crop loans, 4% effective interest rate, RuPay card facility.

* Indebtedness: Inherited debt + irregular season + exploitation of moneylenders.

* Remedy: Institutional credit, assurance of KCC, PMFBY, MSP and allied occupations like Animal Husbandry.

INDEBTNESS OF FARMERS : REASONS AND SOLUTIONS

Indebtness of farmers refers to the situation where a farmer is unable to repay his loans on time, resulting in a burden of debt.

I. REASONS FOR INDEBTNESS

- ① Low and Uncertain Income : Dependence on monsoon and price fluctuations leads to low and unstable income.
- ② High Cost of Cultivation : High cost of seeds, fertilizers, pesticides, irrigation, and labour increases production cost.
- ③ Dependence on Moneylenders : Farmers rely on private moneylenders at high rate of interest due to lack of institutional credit.
- ④ Inadequate Institutional Credit : Timely and sufficient credit from banks and cooperatives is often not available.
- ⑤ Small and Uneconomic Holdings : Small size of landholdings leads to low productivity and low income.
- ⑥ Natural Calamities : Droughts, floods, hailstorms and pests cause heavy crop loss and income instability.
- ⑦ Lack of Storage Facilities : Farmers sell produce immediately after harvest at low prices due to lack of storage.
- ⑧ Social and Family Obligations : Expenses on marriages, festivals, health and education increase financial burden.
- ⑨ Lack of Knowledge and Skills : Lack of awareness about improved farming methods and new technologies affects income.

II. SOLUTIONS TO REDUCE INDEBTNESS

- ① Timely and Adequate Credit : Provide easy, timely and sufficient credit through banks, cooperatives and KCC (Kisan Credit Card).
- ② Lower Rate of Interest : Ensure low rate of interest on crop loans and regulate moneylenders.
- ③ Crop Insurance : Promote crop insurance schemes to protect farmers from natural calamities and crop loss.
- ④ Increase in Productivity : Use of quality seeds, fertilizers, irrigation, improved techniques and mechanization.
- ⑤ Assured and Fair Prices : Provide Minimum Support Price (MSP) and ensure proper procurement of crops.
- ⑥ Diversification of Income : Encourage allied activities like dairy, poultry, fisheries, horticulture and agro-processing.
- ⑦ Development of Infrastructure : Improve irrigation, storage, transport and rural infrastructure facilities.
- ⑧ Financial Literacy and Awareness : Educate farmers about modern farming, credit facilities and financial management.
- ⑨ Debt Relief Measures : Implement loan waiver, rescheduling and interest subvention in times of distress.

★ Indebtness of farmers is a serious issue that affects their economic and social life. Through proper credit support, technology, fair prices and farmer welfare schemes, we can reduce indebtedness and improve the condition of farmers.

Topic-4

1. Agricultural Marketing in India

(a) Introduction

Agricultural marketing is the complete economic activity from harvesting of the produce to the end consumer. It includes harvesting, assembly, grading, storage, transportation, processing, and distribution.

(b) Indian Agricultural Marketing

1. Dominance of Middlemen:

The Indian agricultural market is characterized by a long chain of brokers, middlemen, and wholesalers, who fetch huge profits between the farmer and the consumer.

2. Distress Sale:

Farmers are compelled to sell their produce at lower prices immediately after harvest to meet their immediate cash needs and repay their debts.

□. Lack of Storage Facilities

In the absence of proper godowns and cold storage facilities in the villages, 15% to 20% of the crops get damaged.

4. High Price Volatility:

According to the season, as the income in the market increases, the prices fall and in times of scarcity, the price increases, which is benefited by the trader instead of the farmer.

5. Information Asymmetry:

Accurate information about daily prices and demand of major markets of the country does not reach the rural farmers on time.

6. Role of APMC Mandis:

Most of the agricultural trade takes place through the 'Agricultural Produce Market Committee' (APMC) regulated mandis.

7. Lack of Grading and Standardisation:

Uniformly low prices are fixed for the whole quantity without checking the quality of the goods, so that the good harvester does not get proper compensation.

8. Poor Transportation Infrastructure:

Poor rural road infrastructure and lack of proper vehicles increase the cost of transporting agricultural produce to the market.

(c) Agricultural Marketing

1. Authorized and Unauthorized Deductions:

Unauthorised amounts are deducted from the farmers' compensation in the name of Kataki, Tolai, Charity and Sample by the middlemen in the mandis.

2. Inadequate Credit Facilities:

The 'pledge loan' (mortgage loan) is not easily available to the farmer to hold the stock immediately after the harvest.

3. Fraudulent Weights and Measures:

Farmers are cheated by manipulating penalties and weighing scales in unorganised markets.

4. Inadequate Transport Network:

The roads from the villages to the main mandis are not perennial and the raw material cannot reach on time.

5. Congestion and lack of facilities in mandis:

Basic amenities like drinking water, sheds, rest rooms and vehicle parking in APMC markets are of poor quality.

6. Cartelization by Traders:

The traders of the mandi form cartels to keep the prices of crops artificially low in the auction.

7. Lack of Processing and Value Addition:

Less than 10% of the total agricultural production in India is processed, thus reducing the value of exports.

8. Delayed Payments

After selling the goods, traders extend the payment for months instead of giving immediate cash to the farmer.

(d) Improving agricultural marketing.

1. Establishment of Regulated Markets (APMC Reforms):

Bringing in legal controls in the mandis to stop unauthorised deductions and ensure immediate release of procurement amounts

.

2. Expansion of e-NAM:

- Creating a transparent auction system by connecting buyers across the country through digital platforms.

3. Grading and Laboratory (AGMARK Testing):

Grading labs should be set up in every mandi to provide a higher premium price based on the quality of the goods.

4. Promotion of Cooperative Marketing:

To increase the power of wholesale buying and selling by forming Farmers' Groups (FPOs) and Cooperative Societies.

5. Infrastructure Development (AIF Fund):

Increase the capacity of silos, cold storages and pack houses in villages through the 'Agriculture Infrastructure Fund'.

6. Market Intelligence and Digital Services:

Daily intimation of price of each mandi to farmers through mobile app and SMS.

7. Transport Reform (Kisan Rath & Kisan Rail):

Availability of cold chain railways and vehicles for perishable commodities (vegetables, fruits, milk).

8. Contract Farming:

Reduction of price risk by making legal provisions for direct contract between farmers and processing industries.

2. Cooperative Marketing.

(a) Introduction and Meaning

Co-operative marketing means organization formed by small and marginal farmers to collect their produce and sell it voluntarily, without the purpose of making a profit, on a cooperative basis.

* Principle: "We are weak alone, but we are strong together."

Methodology: Farmers hand over their produce to the co-operative society. The society processes and grades the goods and sells them in bulk in the market and distributes the entire profit to the farmers by saving the cost of commissioning.

(B) Structure of Cooperative Marketing

There is a four-tier structure of cooperative marketing in India:

1. Primary Cooperative Marketing Societies:

They collect the goods directly from the farmers at the taluka or mandi level.

2. District Cooperative Marketing Federations:

Coordinates the functions of primary societies at the district level and assists in sales.

3. State Federations (e.g., GUJCOMASOL):

The apex body for the wholesale sale of fertilizers, seeds and agri-produce at the state level.

4. National Cooperative Marketing Federation (NAFED):

It is a country-level apex body that handles inter-state and international export trade.

(c) Main Advantages of Co-operative Marketing

* Elimination of middlemen: By eliminating middlemen and middlemen, the compensation is directly credited to the farmer's account.

* Strong Bargaining Power: Small farmers accumulate their goods and produce large quantities, so that higher prices can be demanded from the traders.

* Storage and Lending Facility: The goods can be kept in the warehouse of the society till they get a fair price in the market and up to 70% of the 'advances' can be obtained by mortgaging the goods.

Value Addition (Processing Facilities): Societies get higher prices by processing them through their ginning mills, oil mills or rice mills.

* Inputs at reasonable prices: The societies provide fertilizers, seeds and medicines to the farmers at wholesale prices at cheap rates.

AGRICULTURAL MARKETING AND COOPERATIVE MARKETING IN INDIA

I. AGRICULTURAL MARKETING IN INDIA

Agricultural marketing refers to the activities involved in moving agricultural produce from the producers to the consumers. It includes all the operations like assembling, grading, storing, transportation, processing and selling of farm produce.

1. Features

- Large number of small and scattered producers.
- Perishable nature of agricultural produce.
- Seasonal and fluctuating supply.
- Inadequate storage and transport facilities.
- Multiple intermediaries.
- Lack of market information.
- Price uncertainties.

2. Functions

- Assembling of produce.
- Grading and standardization.
- Storage and warehousing.
- Transportation.
- Processing and packaging.
- Financing.
- Risk bearing.
- Providing market information.
- Distribution and sale.

3. Marketing Channels

- (i) Producer → Consumer (Direct)
- (ii) Producer → Retailer → Consumer (One level)
- (iii) Producer → Wholesaler → Retailer → Consumer (Two level)
- (iv) Producer → Commission Agent → Wholesaler → Retailer → Consumer (Three level)

4. Problems

- Small size of holdings.
- Perishable nature of produce.
- Inadequate storage facilities.
- Poor transport and communication.
- Multiple intermediaries and high marketing costs.
- Lack of standardization and grading.
- Lack of market information and price forecasting.
- Exploitation of farmers.

5. Measures to Improve Agricultural Marketing

- Regulated markets (Mandis).
- Cooperative marketing.
- Improvement in storage and transport facilities.
- Standardization and grading.
- Price support and stabilization measures.
- Dissemination of market information.
- Promotion of agro-processing industries.
- Use of digital technology and e-NAM.

II. COOPERATIVE MARKETING IN INDIA

Cooperative marketing refers to the marketing of agricultural produce through cooperative societies owned and managed by the farmers themselves for their mutual benefit.

1. Meaning

It is a system of marketing in which farmers unite voluntarily and form cooperative societies to sell their produce collectively and obtain better prices and services.

2. Features

- Voluntary membership.
- Democratic control (One member - One vote).
- Mutual help and self-reliance.
- Distribution of surplus among members.
- Limited interest on capital.
- Education and training of members.
- Service motive, not profit motive.

3. Objectives

- To secure fair prices for farm produce.
- To eliminate middlemen.
- To provide storage, transport and grading facilities.
- To supply fertilizers, seeds and other inputs.
- To provide credit and other services to members.
- To improve standard of living of farmers.

6. Problems

- Lack of adequate finance.
- Limited storage and transport facilities.
- Political interference.
- Poor management and professional staff.
- Lack of market information.
- Low participation of farmers.

4. Types of Cooperative Marketing Societies

- Primary Agricultural Co-operative Marketing Societies (PACS)
- Central Co-operative Marketing Societies
- State Co-operative Marketing Federations
- National Co-operative Marketing Federation of India (NAFED)

5. Importance

- Protects farmers from exploitation.
- Ensures fair prices.
- Promotes collective bargaining.
- Reduces cost of marketing.
- Encourages production and improves farm income.
- Strengthens rural economy.

Conclusion : Efficient agricultural marketing and strong cooperative marketing are essential for removing intermediaries, ensuring fair prices, reducing wastage and improving the income and welfare of farmers in India.

(D) Examples and Limitations

* **Successful Model:** GCMMF (AMUL) is a global example of cooperative dairy marketing, while NAFED and Gujarat's GUJCOMASOL provide a successful framework for agri-produce.

* Key limitations:

* **Administrative weakness and politics:** Many societies run at a loss due to local politics and clumsy administration.

* **Lack of Capital:** Lack of financial funds required to set up modern processing plants.

* **Lack of loyalty of farmers:** Often, when traders offer them the lure of cash, the farmers sell the goods outside the mandal instead of the mandal.

□. e-NAM: National Agriculture Market

(a) Introduction and Concept

* **Launch Date:** Introduced by the Prime Minister of India on 14 April 2016.

Tagline: "One Nation, One Market".

* Concept: e-NAM is a pan-India electronic trading portal linking the existing APMC mandis across the country on a single digital platform.

Nodal Agency: Small Farmers Agribusiness Consortium (SFAC) under the Ministry of Agriculture and Farmers Welfare implements the scheme.

(B) Key Objectives of e-NAM

1. Transparent Price Discovery: Digitize the bidding process and fix real-time prices based on quality.

2. Control of Middlemen: To establish a direct link between the farmer and the traders/exporters of the entire country.

3. National Level Inter-State Trade: Facilitate the farmer to sit in his mandi and sell his goods to traders from other states.

4. Online Instant Payment: Directly into the bank account as soon as the auction is approved through BHIM-UPI, Net Banking, and RTGS.

5. Quality Based Business: Grading of goods as per AGMARK standards and providing digital assaying certificates.

(C) e-NAM How e-NAM Works - Step-by-Step

1. Gate Entry: When the farmer brings his produce to the market, digital registration is done on the mobile app or gate and 'Unique Lot ID' is generated.

2. Sampling and Quality Assaying: The lab checks the moisture, size and quality of the material and the report is uploaded on the e-NAM portal.

3. E-Auction (Online Bidding): Registered traders across the country place online bidding on that lot through their computer or app.

4. Bid Acceptance: The farmer sees the highest bid on his screen and gives online approval only if he is satisfied.

5. Online Payment: After the auction is approved, the merchant deposits the amount, which is directly transferred to the farmer's account.

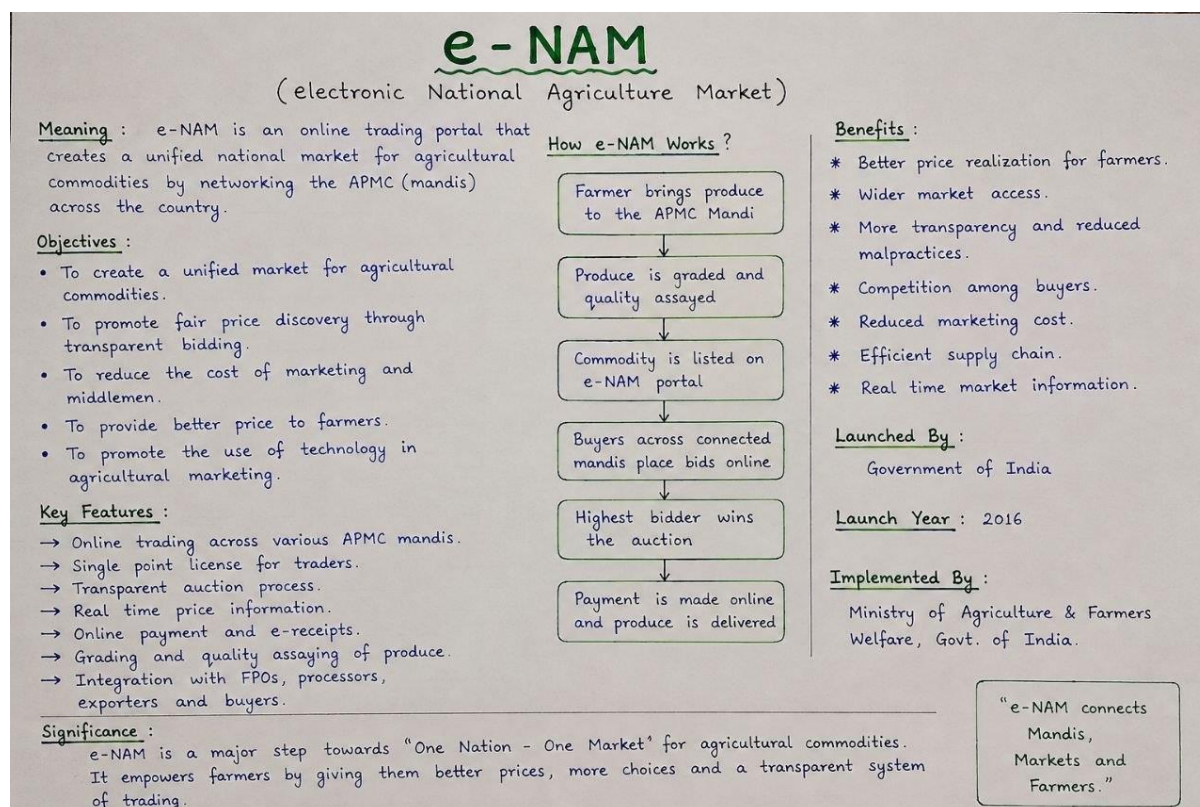
(D) Current Status and Key Statistics of e-NAM

* Integrated APMC mandis: More than 1,650 mandis are integrated across 23 States and 4 UTs.

* Registered Partners: More than 1.80 crore farmers, more than 2.70 lakh traders and more than 4,700 FPOs connected.

* Items Covered: More than 245 agricultural products (cereals, pulses, oilseeds, vegetables, spices) are traded.

* Total Trading Value: Since the inception of the scheme, Rs. Trade of more than Rs 4.80 lakh crore has already been registered through the portal.



(E) Major Challenges against e-NAM.

* Lack of internet and digital literacy: Poor network in villages and lack of app usage among farmers.

• Slow pace of labs and quality check: Sampling takes time as there is a shortage of assaying labs and technicians in the mandis.

* Old habits of traders: Local traders are not willing to give up cash transactions and the traditional credit system.

* Logistics and Delivery: In inter-state trade, the transportation cost and risk of transporting goods from one state to another becomes a challenge for the investor.

Unit 3

Topic 1

1. Importance of Industrial Sector in India

After the agriculture sector, the industrial sector is the main driver of the economic development of the country. Its importance is as follows:

1. Rapid Economic Growth:

Industries have the potential to increase production and income faster than the agricultural sector, which leads to a faster increase in the country's Gross Domestic Product (GDP).

2. Employment Generation:

The industries and their ancillary manufacturing units provide direct and indirect employment to a large number of skilled, semi-skilled and unskilled labourers.

3. Modernisation of Agriculture:

Industries increase agricultural productivity by producing tractors, harvesters, drip irrigation equipment, chemical fertilizers and pesticides required for the agricultural sector.

4. Improvement in per capita income and standard of living:

Due to high labour productivity in the industrial sector, workers get higher wages, which improves the standard of living of the people.

5. Export Earnings and Foreign Exchange Earnings:

India earns valuable foreign exchange by exporting products such as readymade garments, pharmaceuticals, engineering equipment and refined petroleum.

6. High Rate of Capital Formation:

Industries have a high capacity for ploughing back of profits, thereby increasing the rate of capital creation in the country rapidly

.

7. Human Resource and Skill Development:

Industrialization leads to development of new technology, management, research and professional skills among the youth.

8. National Defence and Self-Reliance:

The country becomes self-reliant by manufacturing all the weapons, tanks, fighter aircraft and equipment needed for the defense of the country domestically.

2. Performance of Industrial Sector

The performance of the Indian industrial sector has been evaluated in two major parts:

(a) Positive Performance/Achievements

1. Growth in Industrial Production: India's Index of Industrial Production (IIP) has increased manifold as compared to 1951.

2. Diversification of Industrial Infrastructure: India is no longer confined to traditional industries like textiles and sugar, but has now moved into semiconductors, automobiles, pharma and space technologies.

3. 'Make in India' and PLI Schemes: The Production Linked Incentive (PLI) schemes have led to tremendous progress in electronics and mobile manufacturing in the country.

4. Capital Goods Industry: The country has achieved self-sufficiency in basic industries like heavy machinery, electrical equipment and cement.

5. Balance between public and private sector: Private conglomerates like Tatas, Reliance and Adani have emerged globally.

6. Strength of MSME Sector: Small and Micro Enterprises (MSMEs) contribute more than 40% to the total industrial output of the country and 45% to the exports.

7. Foreign Direct Investment (FDI Inflow): After liberalization, billions of dollars of foreign investment has come into India's auto, IT and chemical sectors.

8. Digital and Innovation Ecosystem: Innovation and startup culture has made India the 3rd largest startup ecosystem in the world.

(b) Negative Performance/Failures

1. Sustainability of the share of the manufacturing sector in GDP: The share of manufacturing in GDP has remained hovering around 16% to 17% (which was a target of 25%) despite the target of 'Make in India'.

2. Slow Jobless Growth: Due to the increase in mechanization in industries, production has increased, but new jobs have not been created in that proportion.

3. Loss of Public Sector Undertakings (PSUs): Many public sector enterprises are continuously incurring financial losses due to clumsy administration and corruption.

4. Regional Imbalance: Industrial development has been limited to a few states like Maharashtra, Gujarat, Tamil Nadu and Karnataka; states like Bihar or Odisha are lagging behind.

5. Underutilisation of Capacity: Many industries work below their full production capacity due to lack of demand or shortage of raw materials.

6. Low Expenditure on Research and Development (R&D): Indian companies spend less than 1% of GDP on research, so they are dependent on foreign technology.

7. Old and non-efficient technology: Small businesses still run on traditional and energy-consuming old machinery.

8. Domination of Unorganized Sector: Since a large part of the industrial sector is unorganized, the workers do not get legal protection or social security.

3. Industrial sector

1. Inadequate Infrastructure:

Irregular power supply, delays in loading of goods at ports, and high logistics costs reduce the competitiveness of industries.

2. Financial Instruments and Credit Availability:

Small and Medium Enterprises (MSMEs) do not get easy and affordable loans from banks.

3. Volatility in Raw Material Costs:

The sudden increase in the prices of raw materials such as steel, coal, diesel and plastic increases the cost of production.

4. Red Tape and Regulatory Hurdles:

The complexity of environmental clearances, land acquisition and labour laws delay the start of a new factory.

5. Competition between China and Foreign Goods (Cheap Imports):

Cheap and abundant goods coming from countries like China hurt local Indian small businesses.

6. Industrial Sickness:

Thousands of small and medium enterprises are shutting down due to lack of financial planning and mismanagement.

7. Industrial Disputes:

Conflicts, strikes and lockouts between workers and employers cause huge losses to production.

8. Environmental Regulations and Pollution:

Adoption of green technologies to prevent air and water pollution caused by industries is proving to be economically costly.

4. 8 Main Features of Industrial Development in India

1. Shift from Public to Private Sector:

Before the 1991 reforms, heavy industries were dominated by the public sector, whereas now the private sector plays a major role.

2. Capital-Intensive Growth:

Industrial development has become more and more machine-intensive and capital-intensive.

3. Close engagement with the Services Sector:

Modern industries are now more dependent on services such as software, logistics, finance, and marketing.

4. Foreign Technology and FDI Dependence:

Foreign investment (FDI) and technology transfer have been a major contributor to industrial development.

5. Concentration in Urban and Semi-Urban Areas:

Most of the industrial clusters and SEZs have developed around major cities and highways.

6. Reform Based Approach (LPG Framework):

Industrial policies now emphasize liberalization and ease of doing business instead of licensing system.

7. Phenomenal growth in Electronics and Automobile Sector:

Over the last two decades, India has emerged as a global hub for automobile and smartphone manufacturing.

8. Emphasis on Green Manufacturing:

In the current industrial development, special focus is on clean energy based industries such as solar panels, electric vehicles (EVs) and green hydrogen.

Quick Exam Recap:

* Importance: GDP growth, employment, agricultural modernization, export earnings.

* Positive Performance: Product diversification, PLI schemes, growth of MSMEs, FDI attractiveness.

* Limitations/problems: Lack of infrastructure, slow employment growth, sick industries, lack of research (R&D).

* Characteristics of growth: Leaning towards privatization, automation, eco-friendly manufacturing, cluster-based development.

~~Topic 2~~

Current Industrial Policy: Preamble and Background

1. Current Industrial Policy: Introduction and Background

The New Industrial Policy (NIP 1991) announced on 24 July 1991 was an epochal turning point in India's industrial history. This policy ended the earlier license, permit and quota raj ('License-Permit-Quota Raj') in India.

Today, the Government of India is taking this policy forward from LPG (Liberalisation, Privatisation, Globalisation) model and linking it with modern reforms like 'Make in India', 'Atmanirbhar Bharat', and PLI (Production Linked Incentive) schemes.

The 3 main pillars of the current industrial policy are:

1. Liberalization: Elimination of unnecessary government controls and licensing policy.

2. Privatisation: Encouraging the private sector by opening up the reserved public sectors.

3. Globalization: Linking the Indian economy with the world market and attracting FDI.

2. Key Features of Industrial Policy

The basic features of India's current industrial policy can be classified as follows:

1. Abolition of Industrial Licensing :

In the past, a government licence was mandatory to start or expand a new industry.

In the current policy, most industries have been exempted from licensing.

Currently, only 4 safety and environmental industries require a license:

- * Defence and aerospace equipment
- * Hazardous chemicals
- * Industrial explosives
- * Tobacco and cigarette products

2. De-reservation of Public Sector:

In the 1956 policy, 17 industries were reserved only for the government.

* To encourage private participation under the present policy, the public sector limit has been reduced to only 2 reserved areas:

* □□□ □□□□□ (Atomic Energy)

* Railway Operations

3. Liberalization of Foreign Direct Investment (FDI):

Foreign companies have been encouraged to bring capital and modern technology to India.

* FDI (automatic route) up to 100% has been allowed in most sectors, including defence, railways, insurance, and retail.

4. Automatic approval of Foreign Technology Agreements:

Approvals for technology transfer and collaboration with foreign companies have been made automatic to make Indian industry globally competitive.

5. Amendments to MRTP Act and 'Abolition of MRTP Act':

* The 'MRTP Act' (Monopolies and Restrictive Trade Practices Act), which restricts the area of large companies, has been repealed.

It has been replaced by the 'Competition Act, 2002', which promotes free and healthy competition.

6. Disinvestment Policy:

* The government is disinvesting/privatising its stake in loss-making public sector enterprises (PSUs) and handing them over to the private sector (e.g. privatisation of Air India).

7. Production Linked Incentive (PLI Scheme):

The recent reforms include PLI schemes for 14 core sectors (such as Electronics, Semiconductors, Pharmaceuticals, Automobiles).

Under this scheme, the government provides direct financial incentive subsidy to companies that increase manufacturing and export in the country.

8. Ease of Doing Business and Digitization:

Approvals have been expedited through the National Single Window System.

The implementation of GST has transformed the entire country into a unified national market.

3. Evaluation of Current Industrial Policy: Positive Impacts

The implementation of the present policy has brought about the following positive and significant changes in the Indian economy:

1. Extraordinary progress in industrial production:

The abolition of license raj has made it easier for companies to increase production capacity, leading to a huge increase in the Index of Industrial Production (IIP).

2. Flood in FDI Inflows:

Due to its liberal policies, India is one of the most attractive FDI destinations in the world. Billions of dollars have been invested in software, automobiles and chemicals sectors.

3. Options for consumers and reduction in prices:

Free competition has led to abundant availability of foreign and domestic equipment in the market, thereby reducing prices and improving quality in electronics, auto and telecom sectors.

4. Tremendous success in the field of exports:

The establishment of SEZs (Special Economic Zones) and NIMZs has led to phenomenal growth in exports of products such as pharmaceuticals, software, and processed petroleum from India.

5. Reduced burden on the public exchequer:

Disinvestment of PSUs and placement of private sector has reduced the financial burden of the government.

6. Innovation and Startup Culture:

India has become the 3rd largest startup ecosystem in the world with the policy giving a free hand to private entrepreneurship.

Current Industrial Policy : Evaluation

India's current industrial policy is based on inclusive growth, global competitiveness and "Make in India" initiative launched in 2014.

<u>Key Features :</u>	<u>Evaluation :</u>				
• Focus on manufacturing sector. • Make in India initiative. • Liberal FDI policy. • Promotion of MSMEs. • Development of industrial corridors. • Skill development and innovation. • Emphasis on sustainability and green industrialization. • PLI (Production Linked Incentive) schemes.	<table border="1"><thead><tr><th><u>Strengths / Positive Aspects</u></th><th><u>Limitations / Challenges</u></th></tr></thead><tbody><tr><td> * Encourages investment and industrial growth. * Boosts employment opportunities. * Enhances global competitiveness through Make in India & PLI. * Development of infrastructure and industrial corridors. * Supports MSMEs and start-ups. * Attracts FDI and improves technology transfer. * Focus on sustainability ensures long term balanced growth. </td><td> * Complex regulatory framework and compliance burden. * Inadequate infrastructure in many regions. * Limited access to finance, especially for MSMEs. * Skill mismatch and shortage of skilled workforce. * Regional imbalance in industrial development. * Environmental concerns due to industrial expansion. * Global uncertainties and trade protectionism affect exports. </td></tr></tbody></table>	<u>Strengths / Positive Aspects</u>	<u>Limitations / Challenges</u>	* Encourages investment and industrial growth. * Boosts employment opportunities. * Enhances global competitiveness through Make in India & PLI. * Development of infrastructure and industrial corridors. * Supports MSMEs and start-ups. * Attracts FDI and improves technology transfer. * Focus on sustainability ensures long term balanced growth.	* Complex regulatory framework and compliance burden. * Inadequate infrastructure in many regions. * Limited access to finance, especially for MSMEs. * Skill mismatch and shortage of skilled workforce. * Regional imbalance in industrial development. * Environmental concerns due to industrial expansion. * Global uncertainties and trade protectionism affect exports.
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Way Forward :

- Simplify regulations and improve ease of doing business.
- Strengthen infrastructure, logistics and digital connectivity.
- Provide easy and affordable finance to MSMEs.
- Focus on skill development aligned with industry needs.
- Promote research, innovation and adoption of new technology.
- Ensure balanced regional industrial development.
- Promote green technologies and sustainable industrial practices.

Conclusion :

The current industrial policy has strong potential to make India a global manufacturing hub, if challenges are addressed effectively.

4. Evaluation of the Current Industrial Policy: Negative Impacts / Limitations

While this policy has brought about economic progress, it also has some serious limitations:

1. Stagnant Manufacturing Share in GDP:

The National Manufacturing Policy aimed to increase manufacturing to 25% of GDP, but it is currently stuck between 16% and 18%.

2. Jobless Growth:

Economic output has increased due to the increase in automation and the use of machines in industries, but it has not created new jobs in proportion.

3. Negative Impact on Small and Micro Enterprises (MSMEs):

Small enterprises are not able to withstand foreign multinational corporations (MNCs) and local large conglomerates and are lagging behind in competition.

4. Increase in Regional Imbalance:

Private investors invest only in prosperous states (Maharashtra, Gujarat, Tamil Nadu) with basic infrastructure, which has left states like Bihar, Odisha and northeast India behind industrially.

5. Lack of R&D:

Indian industries are still dependent on foreign technology. The expenditure on R&D as a percentage of GDP is very low.

6. Environmental Degradation:

Rapid industrialization and laxity of environmental regulations have led to an alarming increase in water and air pollution.

5. Conclusion and Way Forward

India's current industrial policy has made a fundamental contribution in taking the country out of a closed economy and making it a global economic superpower. But following policy amendments are necessary to realize the dream of a 'Viksit Bharat @ 2047':

* Strengthening MSMEs: Providing easy bank loans and digital support to small businesses.

* Reduction in logistics cost: Reduction in transportation cost through PM GatiShakti and National Logistics Policy.

* Skill India: Training the youth according to the needs of Industry 4.0 (AI, Robotics).

Thus, the current industrial policy is constantly changing, which is moving towards making India a Global Manufacturing Hub.

Key Points to Remember for the Exam (Quick Exam Summary):

The main 3 words are: Liberalisation, Privatisation, Globalization.

Reserved areas: Atomic energy and railways.

* License free industries: All licenses are free except for 4 sectors.

* Recent initiatives: PLI schemes, Make in India, PM Gatishakti, and GST reforms.

~~Topic 3~~

Agro-Based Industries: Concept and Importance

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1. Introduction

India has traditionally been an agrarian country. More than 40% of the country's population is directly or indirectly dependent on agriculture for their livelihood. But crop production alone cannot eradicate poverty, unemployment and rural inequality in the country. In this situation, the industries that act as a bridge between agriculture and the industrial sector are called 'Agro-Based Industries'.

Agro-based industries process the produce and make it more useful, sustainable and marketable. This sector is considered as the 'Sunrise Sector' of the economy as it has immense potential to create non-farm employment in rural areas and double the income of farmers.

2. Concept of Agro-Based Industries

(A) Definitions:

General Definition: Industries that obtain raw materials required for their production from plant or animal husbandry based agricultural products and process them to produce marketable finished products are called agro-based industries.

According to the Famine Commission of Inquiry (1944): "All industries which are engaged in the processing and transportation of agricultural produce, as well as in the provision of necessary tools and facilities for agriculture, are all agro-based industries."

(b) Classification of Agro Based Industries :

Agro-based enterprises are broadly divided into four categories based on their nature and working style:

1. Agro-Produce Processing Units:

These units make the raw material only preserved and transportable without changing its original form.

Examples: Rice Mills, Dal Mills, Cotton Ginning.

2. Agro-Produce Manufacturing Units:

These units produce a completely new product by a complete industrial process on raw materials, which is completely different from the raw materials.

* Examples: Sugar Factories, Textile Mills, Vegetable Oil/Oilseeds Processing, Paper Industry, and Leather Industries.

3. Agro-Inputs Manufacturing Units:

These are industries that manufacture tools and inputs to increase agricultural productivity or mechanization of agriculture.

* Example: Chemical fertilizer manufacturing units, pesticides, pump sets, tractors and farm-tool manufacturing industries.

4. Agro-Service Centres:

Institutional units providing technical, repair and workshop services required for agriculture and allied industries.

* Examples: Tractor and pumpset repair centers, cold storage facilities, and drone service units.

3. Major Agro-Based Industries in India

The following major agro-based industries constitute a major share of the economy in India:

Textile Industry: It is one of the oldest and largest agro-based industries in India. It employs cotton farmers and crores of labourers.

Sugar Industry: This industry based on sugarcane crops plays a leading role in improving the economic condition of the villages in India.

* Vegetable Oil Industry: Based on oilseeds like groundnut, soybean, mustard and sunflower.

Tea and Coffee Industry: It provides export oriented employment to lakhs of people in Assam, West Bengal and the hilly areas of South India.

Food Processing and Horticulture Products: Modern units producing fruits, vegetables, jams, jellies, pickles, and juices.

* Dairy and Animal Husbandry: Co-operative and private entities manufacturing milk, butter, cheese and dairy products (e.g. Amul).

4. Importance of Agro-Based Industries

Agro-based industries are the backbone of the Indian economy. Its social and economic significance is as follows:

(a) Solution of Rural Unemployment and Seasonal Unemployment :

* In agriculture, work is available only during certain months of the year, which creates 'seasonal unemployment'.

Agro-based industries provide employment to agricultural labourers in post-harvest non-farm jobs such as packing, processing, transportation and storage.

(b) Value addition to agricultural produce :

The price of its processed products is much higher in the market as compared to raw grains or fruits.

For example: making wafers out of potatoes rather than selling them, or making ketchup out of tomatoes instead of selling them gives farmers and processing units many times more profits.

(c) Increasing Farmers' Income :

* During the harvest season in the market, when the income of the crop increases, the price falls.

* Processing industries buy raw materials directly from farmers (also through contract farming), so that farmers get fair and stable prices for their produce.

(D) Reduction in Food Wastage

India is the world leader in the production of fruits and vegetables, but billions of rupees are wasted every year due to lack of proper storage and processing.

Agro-based industries (such as cold storage, canning units) prevent wastage by increasing the shelf life of these fast perishable produce.

(e) Prevention of Rural-Urban Migration :

Due to lack of livelihood resources in villages, people migrate to cities, which increases the pressure on slums, pollution and infrastructure in cities.

Setting up of agricultural industries in the vicinity of villages provides livelihood to the people at the local level.

(F) Foreign Exchange Earnings :

Processed foods, spices, tea, textiles, leather and readymade garments have huge demand in the international market.

* India can earn valuable foreign exchange by exporting these products.

(g) Balanced Regional Development :

Large ultra-modern industries are set up only in cities, but agro-based industries can be easily set up even in remote and backward rural areas where raw materials are available.

This enables balanced regional development of the country.

5. Main Challenges Faced by Agro-Based Industries

In spite of its large scale in India, the following problems are a major problem:

1. Seasonal Availability: Since agricultural crops are seasonal, the industries get raw materials only during certain months of the year, so the factories have to be closed for the rest of the time.

2. Lack of Supply Chain and Infrastructure: There is an acute shortage of perennial roads, electricity, cold storage and refrigerated transport vehicles in rural areas.

3. Lack of Finance: Small and medium agricultural enterprises do not get long or short term loans easily from banks.

4. Unstable quality of raw materials: As agricultural production is dependent on environment and rainfall, raw materials of the same quality are not available every year.

5. Lack of technology: Small and cottage scale units use old methods and machinery, which increases the cost of production.

6. Government Initiatives

The Government of India has brought a number of reforms to promote agro-based industries:

* PM-KSY (Pradhan Mantri Kisan Sampada Yojana): Financial assistance is provided for setting up of Mega Food Parks, Cold Chain and Processing Clusters.

PLI Scheme (Food Processing Sector): Large investments are being attracted through the Production Linked Incentive scheme for the food processing sector.

MSME support: Provide affordable loans to small and rural agricultural entrepreneurs under MUDRA loans and interest subvention schemes.

AGRO BASED INDUSTRIES

Meaning :

Agro based industries are those industries which use agricultural raw materials as the main input and convert them into finished or semi-finished products. These industries are closely linked with agriculture.

Characteristics :

- Based on agricultural raw materials.
- Location is near the source of raw material.
- Seasonal nature of production.
- Capital intensive.
- Provide employment opportunities.
- Help in reducing wastage of agricultural produce.

Importance / Significance :

- Provide value addition to agricultural products.
- Generate employment in rural areas.
- Promote balanced regional development.
- Reduce regional disparities.
- Increase farmers' income.
- Reduce post-harvest losses and wastage.
- Contribute to industrial growth of country.

Types (On the basis of raw material) :

1. Sugar Industry (from Sugarcane)
2. Paper Industry (from Wood / Bamboo / Bagasse)
3. Textile Industry (from Cotton, Jute, Wool, Silk)
4. Vegetable Oil Industry (from Groundnut, Soyabean, Mustard, Sunflower, Coconut etc.)
5. Dairy Industry (from Milk)
6. Food Processing Industries (Fruits, Vegetables, Pulses, Cereals, Spices etc.)
7. Beverages Industry (Tea, Coffee)
8. Rubber Industry (from Natural Rubber)
9. Tobacco Industry

Examples :

- Sugar mills (from sugarcane)
- Rice mills (from paddy)
- Cotton ginning and textile mills
- Jute mills (from jute)
- Vegetable oil mills (from groundnut, soyabean, mustard)
- Dairy plants (milk processing, ice-cream, cheese, butter)
- Paper mills (from bamboo, bagasse, wood)
- Tea and coffee processing units
- Fruit processing units (jam, jelly, squash, pulp)
- Tannery (from animal hides)

Benefits :

- * Utilize agricultural produce effectively.
- * Increase farmers' income.
- * Generate large scale employment.
- * Promote rural industrialization.
- * Help in export promotion.
- * Ensure decentralization of industries.
- * Reduce burden on import by producing substitute products.

Problems / Challenges :

- * Seasonal and perishable nature of raw materials.
- * Lack of proper storage and transport facilities.
- * Inadequate availability of capital.
- * Outdated technology.
- * Lack of skilled labour.
- * Competition from large scale industries.
- * Fluctuation in prices of raw materials.

Conclusion : Agro based industries play a vital role in the economic development of India by linking agriculture with industry, providing employment, reducing wastage and ensuring balanced regional growth.

7. Conclusion

Agro-based industries are not just an economic activity, but they are a major weapon to rejuvenate India's rural economy. It has the potential to transform agriculture into a profitable 'business' rather than a means of subsistence. Strengthening agro-based industries by making greater investments in agro-processing, supply chain, and infrastructure is essential to realize the dream of a 'Viksit Bharat @2047'.

Quick Exam Summary:

* Concept: Industries that use agricultural produce as raw materials to make marketable goods.

* Types: Processing units (rice mill), manufacturing (sugar/textile), inputs (fertilizer/tools), service centres.

Importance: Rural employment, value addition, wastage prevention, migration, and foreign exchange earnings.

Unit 4

Human Resource Development

1. Meaning of HRD

General Meaning: Human Resource Development (HRD) is the continuous process of enhancing the physical, mental, intellectual and vocational abilities, skills, and knowledge of the people of the country.

Economic Perspective: The development of physical capital (machines, factories) alone is not sufficient for economic progress. Investing in human resources through education, training, health and research and converting them into 'Human Capital' is called HRD.

Main Objective: To improve the quality of human life and to make people active and productive partners in the economic development of the country.

2. Importance of Human Resource Development (HRD)

Human Resource Development serves as the foundation for the social and economic development of the country:

* **Increase in productivity and efficiency:** Trained and trained workers can work more quickly and in quality, thereby reducing production costs and increasing productivity.

Innovation and Innovation: Research and higher education lead to the development of new technology, modern manufacturing methods and start-up culture in the country.

* **Optimum use of natural resources:** Only skilled manpower can make optimum and efficient use of natural resources such as soil, water and minerals by preventing their wastage.

* **Reduction in poverty and unemployment:** HRD provides skill development to the youth, which increases self-employment and reduces poverty.

* Improvement in quality of life and health: Good health and nutrition increase the efficiency of workers, prolong life expectancy, and improve the overall standard of living of the people.

Modernization and Social Change: The spread of education eliminates superstitions, child marriage and evil customs and establishes a modern and scientific approach in the society.

3. Structure of HDI (Human Development Index)

* Establishment: HDI was first launched in 1990 by the United Nations Development Programme (UNDP) under the vision of Pakistani economist Mehboob-ul-Haq and Indian economist Amartya Sen.

Main Objective: To make "human welfare" the true measure of development rather than just GDP or economic growth as a measure of growth.

* The main 3 dimensions:

Health / Longevity: Long and healthy life.

Education / Knowledge: Acquisition of knowledge.

Standard of Living: Proper standard of living.

4. Calculation of HDI - 2010 Report Methodology

The UNDP made major international improvements to HDI's calculation methodology, indicators, and formulas in the 2010 Human Development Report (20th Anniversary Edition).

(a) Dimensions and Indicators as amended in 2010:

1. Health Dimension:

* Index: Life expectancy at birth.

2. Education Dimension - 2 New Indicators:

Mean Years of Schooling (MYS): Average years of education received by adults aged 25 years and above.

Expected Years of Schooling (EYS): The years of education that a child entering school is expected to achieve in the future.

□ Standard of Living Dimension

* Index: Gross National Income per capita (GNI per Capita in PPP\$). (Note: GNI was used instead of GDP in 2010).

(B)(Goalposts - Min and Max Values as per 2010 Report)

Maximum and minimum limits have been fixed for each indicator:

Life expectancy at birth: Minimum = 20 years, maximum = 83.2 years (as per actual data of 2010).

* Average Years of School Education (MYS): Minimum = 0 years,
Maximum = 13.2 years.

* Expected Years of School Education (EYS): Minimum = 0 years,
Maximum = 20.6 years.

* National Income per capita (GNI per Capita PPP\$):
Minimum = \$100, Maximum = \$108,211.

(c) Steps and Formulas :

The calculation is mainly done in three stages:

Stage 1: Normalization of Dimension Sub-Indices Calculation

This general formula is used to convert each real value between 0 and 1:

* General Formula:

1. Life Expectancy Index - LEI

□. Education Index - EI

There are first two distinct sub-indexes for education:

* Mean Years of Schooling Index (MYSI):

* Expected Years of Schooling Index (EYSI):

* Calculation of Composite Education Index (EI) (Geometric Average):

(Here the geometric averages of the two sub-indices are normalized).

3. Income Index - II:

Its relative utility decreases with the increase in income, so it uses the logarithm ($\ln$):

Stage 2: Calculation of Final HDI (Geometric Mean - Geometric Average)

HDI (Human Development Index)

$$HDI = \sqrt[3]{I_{\text{health}} \times I_{\text{education}} \times I_{\text{income}}}$$

$$1) \text{ Health Index } (I_{\text{health}}) = \frac{\text{Life Expectancy at Birth (LE)} - 20}{85 - 20}$$

$$2) \text{ Education Index } (I_{\text{education}}) = \frac{2}{3} \times \left(\frac{\text{Mean Years of Schooling (MYS)}}{15} \right) + \frac{1}{3} \times \left(\frac{\text{Expected Years of Schooling (EYS)}}{18} \right)$$

$$I_{\text{education}} = \frac{2}{3} \times I_{\text{MYS}} + \frac{1}{3} \times I_{\text{EYS}}$$

$$3) \text{ Income Index } (I_{\text{income}}) = \frac{\ln(\text{GNI per capita}) - \ln(100)}{\ln(75,000) - \ln(100)}$$

where,

LE = Life Expectancy at Birth (years)

MYS = Mean Years of Schooling (years)

EYS = Expected Years of Schooling (years)

GNI = Gross National Income per capita (USD)

Minimum & Maximum Values used :

LE : 20 to 85

MYS : 0 to 15

EYS : 0 to 18

GNI per capita : 100 to 75,000 (USD)

The biggest change to the 2010 system was the use of Geometric Mean (Cube Root) instead of the old arithmetic mean:

1 * Advantage of geometric average:

In the old system, a country could achieve a higher HDI even if it was far ahead in one area (e.g., income) and lagging behind in education or health. The weakness of a single region from the 2010 geometric average method has a direct negative impact on the final score which shows that all three sectors are equally important.

5. Key Summary for Exams

* HRD: The process of increasing the efficiency and capabilities of manpower.

* HDI: Human development scale (value between 0 and 1).

Human Development Trends, Limitations and Parameters of Women's Empowerment in India (GII & GEM)

1. Trends in Human Development in India

India has made steady progress in the field of human development since the first Human Development Report (HDR) was released by the United Nations Development Programme (UNDP) in 1990.

Key Trends and Statistical Advancements:

* Continuous increase in HDI value: India's HDI score in 1990 **was around 0.434**, which has increased from **0.64** to 0.65. This shows that India has moved from 'Low Human Development' to 'Medium Human Development'.

* Health Trend: India's average life expectancy in 1951 was only 32 years, which increased from about 58 years in 1990 to about 67 to 70 years in the present time. The main reasons for this are the decline in infant mortality rate and the expansion of vaccination and health facilities.

* Education Trend: India's literacy rate was only 18% in 1951, which has increased to more than 77%. The enrolment ratio in schools has increased due to the missions undertaken for universalization of primary education (such as the Sarva Shiksha Abhiyan, the New Education Policy).

Income and Income Trend: There has been a significant improvement in the per capita gross national income (GNI per Capita in PPP\$), especially after the 1991 economic reforms (LPG - liberalization, privatization and globalisation).

Positive impact of social schemes: Schemes such as the Aspirational District Programme, MGNREGA, Atal Pension Yojana, and Ayushman Bharat have helped in taking the benefits of human development to the grassroots.

2. Limitations of Human Development in India

Although India has improved its HDI score, India still has some serious limitations and challenges in the field of human development:

* Regional and Regional Disparities: There is a huge difference in human development between different states of India. States like Kerala and Goa have high HDI, while states like Bihar, Jharkhand, Uttar Pradesh and Odisha are still at the lower level of human development.

Gender Inequality: There is a huge gap in education, health and income levels between men and women. Female literacy rate and women's participation in the labour force (FLFPR) is much lower than that of men.

Income Inequality: The benefits of economic growth have not reached all sections of the country equally. Most of the wealth of the country is concentrated in the hands of the rich class, while the large section is still struggling with poverty and malnutrition.

* Lack of quality of health and education: Enrolment in primary and secondary schools has increased, but the quality of education and skills is low. Similarly, the poor people do not get quality treatment due to low government spending (only 1.5% to 2% of GDP) in the field of public health.

* Environmental Degradation: In the obsession with economic development, air pollution, water pollution and environmental damage have increased, which negatively affect the health and quality of life of the people.

3. Gender Empowerment Measure (GEM)

(a) Meaning and History of GEM :

* Definition: GEM is an index that measures the level of participation and empowerment among women and men in the economic and political decision-making process.

* History: It was started by the UNDP in the 1995 Human Development Report.

* Main goal: It is not enough for women to have access to health or education, but to measure how active they play an active role in the economic and political leadership of the country.

(B) The 3 main dimensions and indicators of GEM are:

1. Political Participation and Decision-Making:

* Index: The percentage of seats/seats in Parliament with women and men.

2. Economic Participation and Decision-Making:

Index 1: Share of women and men as legislators, senior officials and managers.

Index 2: Share of women and men in professional and technical positions.

3. Control over Economic Resources:

* Index: Estimated per capita income of men and women.

(C) Calculation of GEM

The Equally Distributed Equivalent Percentage (EDEP) method is used in the calculation of GEM:

- * Stage 1: EDEP is computed on the basis of male and female share for each parameter, where comparison is made with male and female population share.

- * Stage 2: An estimated income index is prepared on the basis of per capita income for the economic income parameter.

- * Stage 3: The mathematical mean of all three basic parameters (political, professional/decision-making power and income) is taken as an unweighted arithmetic mean.

- * Value: The value of GEM is between 0 and 1. A value close to 1 indicates a high level of female empowerment.

4. Revised Report of the Gender Inequality Index (GII) - 2010

The UNDP introduced a new, comprehensive and modern index called the GII (Gender Inequality Index) in the 2010 Human Development Report to overcome the limitations of the old indicators (such as GEM and GDI).

(a) Meaning of GII:

GII measures the potential loss or loss of human development due to gender inequality. It shows how much the country is deprived of its full human development due to discrimination against women.

(b) 3 Dimensions and 5 Indicators of GII as per 2010:

1. Reproductive Health:

- * Index 1: Maternal Mortality Ratio (MMR) - Deaths of women during childbirth.

Index 2: Adolescent Birth Rate (ABR) - The birth rate of adolescent girls in the age group of 15 to 19 years.

2. Empowerment:

- * Index 3: Share of Parliamentary Seats - Representation of women and men in the Union Parliament.

Index 4: Educational attainment - Percentage of men and women aged 25 years and above with secondary or higher education.

□.Labour Market / Economic Status

Index 5: Labour Force Participation Rate (LFPR) - The active percentage of men and women aged 15 years and above working in the economic sector.

(C)(Calculation Steps of GII as per 2010 Report):

The calculation of GII is technically complex using Geometric Mean and Harmonic Mean. It is calculated in 5 main stages:

Phase 1: Treatment and Normalization of Data (Treating Zeroes and Extreme Values)

- * If the Maternal Mortality Rate (MMR) is very low or zero, it is considered as a minimum of 10 and a maximum of 1000 is accepted.

If the share of women parliamentarians is less than 0.1 per cent, it is considered 0.1 per cent, so that there is no problem of zero in mathematics/minority.

Stage 2: Calculate different geometric averages for men and women (G_F and G_M)

- * First, the Aggregate Index for Women (G_F) is found using the values of three parameters for women (health, empowerment, labour force):

(Note: Since reproductive health does not apply to men, value 1 is taken for men's health).

- * Then, the geometric mean (G_M) is similarly found for men:

Stage 3: Calculation of Harmonic Mean (HNK)

- * The harmonic average of the index of the female (G_F) and the male (G_M) is taken:

- * Harmonic averages are used because they clearly highlight the internal differences and inequalities between men and women.

Stage 4: Computation of Benchmark/Equal Economy

In this stage, a 'Perfectly Distributed Mean' is calculated using the average figures of both the male and female groups, called the reference standard.

Stage 5: Final GII Formula

- * The following formula is used to calculate the final GII:

(D) Interpretation of GII Values

- * Value Range: The value of the GII is between 0 and 1.

- * Value 0 (Zero): Indicates Complete Gender Equality, where there is no discrimination or inequality between men and women.

Value 1: Refers to Complete Gender Inequality, where women are completely disadvantaged in all spheres.

* Indicative Property: Unlike HDI, the lower the GII score, the better it is for the country.

GII (GENDER INEQUALITY INDEX)

Meaning :
Gender Inequality Index (GII) measures inequality between men and women in three dimensions - Reproductive health, Empowerment and Labour market participation.

Significance :

- Helps in measuring gender-based disparities in a country.
- Useful for comparing gender inequality across countries.
- Helps in policy making for women's empowerment and inclusive development.

Dimensions and Sub-indices :

1. Reproductive Health (1/3 weight)	- Maternal Mortality Ratio (MMR) - Adolescent Birth Rate (ABR) - Unmet Need for Family Planning (UNFP)
2. Empowerment (1/3 weight)	- Share of parliamentary seats held by women - Share of women aged 25+ with at least secondary education
3. Labour Market Participation (1/3 weight)	Labour force participation rate of women

Indicators Used and Deprivation Calculation :

For each indicator :

$$I_i = \frac{(\text{Actual value} - \text{Optimal value})}{(\text{Worst value} - \text{Optimal value})}$$

Formula :

$$GII = 1 - \sqrt[3]{(I_{RH} \times I_E) \times I_L}$$

Where,

I_{RH} = Index for Reproductive Health
 I_E = Index for Empowerment
 I_L = Index for Labour Market Participation

All indices range between 0 and 1.
 GII ranges between 0 and 1.
 0 = No inequality (best)
 1 = Complete inequality (worst)

Then, the average of indicators in each dimension gives sub-index. Finally, GII is calculated using the formula above.

GEM (GENDER EMPOWERMENT MEASURE)

Meaning :
Gender Empowerment Measure (GEM) reflects women's active participation in economic and political life. It measures the ability of women to make choices and participate in decision-making.

Significance :

- Shows the level of empowerment of women in a country.
- Complements GII (while GII shows gender inequality, GEM shows empowerment).
- Important for achieving gender equality and sustainable development.

Components and Indicators :

1. Political Empowerment (1/3 weight)	- Share of parliamentary seats held by women - Share of women in ministerial positions
2. Economic Empowerment (1/3 weight)	- Proportion of women in the labour force - Share of women in professional and technical jobs - Estimated earned income of women
3. Decision-making Empowerment (1/3 weight)	- Share of women in decision-making positions in households - Share of women who own assets (alone or jointly)

Calculation of Sub-indices :

For each indicator :

$$I_i = \frac{(\text{Actual value} - \text{Minimum value})}{(\text{Maximum value} - \text{Minimum value})}$$

Formula :

$$GEM = \sqrt[3]{I_{PE} \times I_{EE} \times I_{DME}}$$

Where,

I_{PE} = Index of Political Empowerment
 I_{EE} = Index of Economic Empowerment
 I_{DME} = Index of Decision-making Empowerment

All indices range between 0 and 1.
 GEM ranges between 0 and 1.
 0 = No empowerment (worst)
 1 = Full empowerment (best)

Key Point :
Higher the GEM, higher the level of gender empowerment.

→ Average of indicators gives sub-index. Then GEM is calculated using the formula.

5. Quick Summary for the Exam

* HDI trend in India: Low to moderate improvement (0.434 to 0.64+).

* Indian limitations: regional disparities (Kerala vs Bihar), low female labour participation, poor quality education/health.

GEM (1995): A measure of women's economic and political decision-making power and income capacity.

GII (2010): Measures the loss of human development due to female inequality. Its 3 points: Reproductive Health (MMR, ABR), Empowerment (Parliament, Education), and Labor Force Participation (LFPR).

Thank you

Best wishes