Economics_PG Class 01

Topics to be discussed [01:01 PM]

- Agriculture
- Land Reforms
- Food Processing Industry
- Indian industry and Industrial Policy
- Infrastructure and Investment Models
- Planning
- Banking & Capital Markets
- **References-** Class notes
- Value-added material- VisionIAS, Class handouts, VisionIAS printed notes
- Newspapers & Current Affairs magazine
- Economic Survey
- Books (Optional)- Uma Kapila, Dutt & Sundaram, Mishra and Puri

Agriculture [01:06 PM]

- What is Agriculture?
- Why is it important?
- Green Revolution and its analysis
- Government intervention in agriculture
- Regulation of agriculture markets- APMC, Farm Laws. Essential Commodities Act, etc.
- Price Support Intervention - Public Distribution System
- WTO's intervention
- Land Reforms- Digitization of records, Land Acquisition

What is Agriculture? [01:30 PM]

- Agriculture is the art and science of cultivating the soil, growing crops, and rearing livestock.
- **Why is Agriculture important? [01:52 PM]**
- It is the **source of food supply** for the population of a country.
- A surplus of production in agriculture can ensure food security in the nation.
- Diversified agriculture is important for ensuring nutritional security for the population.
- It **creates economic opportunities** at a relatively lesser skill as compared to other sectors.
- Approximately 45% of the workforce is employed in agriculture in India.
- It provides **raw materials** to the industry and also creates the demand for industrial goods and services that includes both agricultural inputs and consumer goods.
- It **acts as a shock absorber during times of economic distress.**
- In 2018-2019, a total of 25.7 Mn jobs were created in the economy out of which 70% were in agriculture.
- According to a World Bank study, a 1% growth in agriculture is 2-3 times more effective in poverty alleviation as compared to a 1% growth in non-agriculture sectors.
- It contributes to **foreign exchange earnings,** by exporting agricultural commodities.
- Some of the major exports from India are marine products, Basmati Rice, etc.
- Agriculture aids in **Capital formation** as a surplus in agriculture can lead to more savings which can be used for financing industrial and infrastructural development.
- Agriculture creates a demand for various services such as logistics, finance, insurance, marketing, etc.
- **Sub sectors of Agriculture in India-** Crops || Livestock || Fisheries || Forestry and Logging

Indian agriculture at the time of Independence - [02: 30 PM]

- In 1947, agriculture contribute 53% to the GDP and employed 73% of the workforce.
- Most of the farmers used primitive technology, for instance, more than 30% of the farmers used wooden plows and only 6% used chemical fertilizers and more than 80% of the agricultural land was dependent on monsoons for irrigation.
- **Farming in India was mostly subsistence farming** which meant that most of the farmers were producing for their own consumption.
- Lack of income due to a low surplus meant that there was a poor investment in agriculture.
- Therefore, Indian agriculture at this point was a poor productivity system coupled with poor production.
- Any failure of monsoon meant that India had significant food shortages and high food inflation.

Government Intervention [03:03 PM]

- 1. In the first five-year plan 1951-56, the government emphasized on creation of infrastructure for agricultural development.

- This included the construction of dams and canals, roads, storage facilities, and weighing facilities.
- 2. Along with this, the government pushed for land reforms with the objective of providing land to the tiller.
- However, these interventions were long gestation projects aimed at improving productivity in the longer run.
- This meant that food production did not improve immediately and the imports for both food and cash crops continued.
- Rising imports led to a crisis in 1957 and thereafter the government consulted the Ford foundation.
- Based on its recommendations, an **Intensive Agriculture Development Programme (IADP)** was started where capital and technology were to be provided to the farmers.
- 7 districts were selected from 7 states for this program.
- It was extended to 114 districts under the **Intensive Agricultural Area Programme (IAAP).**
- However, two significant droughts led to the failure of these programs, creating significant food shortages in India.

Features of the High Yielding Variety program - [03:39 PM]

- It was launched for 5 crops i.e. wheat, rice, jowar, Bajra, and maize.
- It was an input-intensive program as the seeds required a large amount of water, chemical fertilizers, and pesticides for them to be productive.
- As the seeds produced a sorted majority of crops, it gave an opportunity for the farmers to grow multiple crops in one year.
- The seeds were a significant technological revolution as they increased production by 2-3 times as compared to the previously used traditional seeds.
- **Why Punjab, Haryana, and Western UP?**
- Assured irrigation from dam and canal network.
- Availability of large contiguous parcels of land since the land consolidation reform was made compulsory here.
- The Mahalwari system meant that there were clear land records to analyze the impact of new seeds.
- More prosperous and risk-taking farmers in these areas.

Topics to be discussed in the next class: Implications of Green Revolution, Subsidies
Economics_PG Class 02

Positives of Green Revolution:

- Substantial increase in Food grain production, making India self-sufficient in food.
- This is also made feasible for the government to plan for poverty alleviation and hunger eradication, for example, Pradhan Mantri Garib Kalyan Yojna.
- Increase in production of commercial crops, such as sugar cane, spices, etc due to new techniques learned and the development of new linkages.
- It increased agricultural employment initially, as multiple cropping systems required more labor.
- Surplus production increased the income of farmers, leading to more prosperity, which further led to the growth of the industry.
- There was a significant change in cropping pattern, as the area under the cultivation for rice and wheat increased significantly.

The issue with Green Revolution: (01: 58 PM)

- **Regional inequality**, as most of the benefits, went to only 3 states.
- All the other states and their agriculture system such as dryland agriculture, and Agri. in coastal areas, etc were neglected.
- **Interpersonal inequality**, as most of the benefits, went to a small percentage of rich and influential farmers. Small and marginal farmers remain vulnerable to poverty even today.
- **Inter-crop imbalance**, as most of the area under pulses, oilseeds, and coarse grains shifted to rice and wheat, thereby destroying crop diversification in the country.
- **Ecological damage**, government support to inputs incentivized overutilization of these resources leading to environmental damage, for example, loss of soil fertility due to excessive use of fertilizer, and receding ground water table due to free electricity.
- Growth in the production of food grains has made the government complacent, and they have neglected institutional and structural reforms such as land reform, creation of cooperatives, etc.
- Due to the increasing burden of subsidies, public investment in agriculture has declined consistently. Lack of institutional reform and missing infrastructure are the reasons why India has a poor productivity system in agriculture today.
- The green revolution established a capitalist mode of farming without developing the capitalist institution of the free market.
- The whole program was backed by the govt. support, thereby creating an unsustainable system as the govt. support through input subsidies cannot continue forever.

Question: (02:15 PM)

- **What are the reasons for the success of the rice-wheat system in India? In spite of this success, this system has become a bane for Indian Agriculture. (250 words/ 10 marks)**
- **What are the problems of crop diversification in India? How can emerging technologies promote crop diversification? (250 words/15 marks)**

AGRICULTURE MARKETING: (02:20 PM)

- It is the study of all the activities, agencies, and policies involved in the procurement of farm inputs by the farmer and the movement of agriculture products from the farm to the consumer, i.e farm to fork.
- Various activities involved are procurement, collection, and aggregation of produce, storage, value addition in the form of preservation and processing, transportation, finance, retail and wholesale trade.

Need for an efficient marketing system:

- To enable the farmers to monetize their produce through a transparent price discovery mechanism.
- To provide farmers with relevant demand-related information and other specifications of the produce.
- A market provides facilities for lifting all farmer produce that is willing to sell at a price incentive.
- It makes available all products to the consumers, without impairing the quality of produce.
- It ensures that the price gap between the primary producer and the ultimate consumer is minimal.
- A market system generates a need for investment in modern infrastructure and information and communication technologies across the full range of farming practices.

SUBSIDY: (02:42 PM)

- It is a type of transfer payment, i.e it is a unilateral transfer from the government, so as to incentivize the production of any good or service.
- Subsidy of center and state:
- Center- Fertilizer subsidy, price support subsidy, credit subsidy, farm insurance.
- State- Power subsidy, insurance, irrigation subsidy, loan waiver.

Needs for subsidy in Agriculture: (03:15 PM)

- To increase the application of inputs, which will increase production and help ensure food security.
- To guard against price fluctuations, for instance, an increase in production can lead to an increase in supply which will depress the prices, thereby causing farmer distress and also disincentivizing further production that can create shortages.
- Subsidization of inputs can positively influence the acceptance of new technology.
- Input subsidies can have a moderating effect on food prices.
- Farm subsidies can ease the process of structural transformation where the decline in agricultural share is faster than its decline in employment share.
- Thereby leading to substantial disparity in workers' income and productivity across the sector.

Indirect Subsidy: (03:34 PM)

- Indirect subsidies are in-kind transfers, where the subsidized product or service reaches the farmer.
- For example Urea subsidy, Power subsidy, etc.
- **Issues with Indirect subsidy:**
- They are market-distorting as there are 2 prices for one product, thereby creating an incentive for fraud, leakage, and diversion.
- Most of the indirect subsidies are cornered by a small percentage of rich and influential farmers, thereby defeating the whole purpose of the subsidy.
- The government incurs a significant cost in the administration and monitoring of the whole supply chain of the product, as timing is of prime importance in agriculture.
- The government needs to ensure that the product or service reaches the farmer at the right time.
- Indirect subsidy provides less freedom to the beneficiary as the benefit is linked to the product.
- Therefore indirect subsidies are considered inefficient and more wasteful as compared to direct subsidies.

Direct subsidy: (04:05 PM)

- Direct subsidies are in the form of cash transfers given directly to the beneficiaries, for example, PM Kisan, where 6000 is paid per year to all land-owning farmers, Ryuthy Bandhu of Telangana, and Kalia of Odisha.
- **Challenges with Direct subsidies:**
- Identification of beneficiaries: in the absence of complete and updated land records, the identification of farmers becomes a huge challenge.
- The database of beneficiaries can have 2 types of errors- inclusion error(where ineligible persons are included) and exclusion error(where eligible persons are excluded).
- Another major challenge is identifying the tenant who is the actual tiller in the land.

- If the transfer is not linked to inflation, the real value delivered to the beneficiaries would reduce over a period of time.
- Financial inclusion and financial literacy need to be ensured so that farmers are not cheated.
- A robust supply chain for the product has to be ensured so that regular and timely delivery of the product is made possible.
- The end use of the transfer needs to be controlled, otherwise, the direct transfer might be used for the wasteful purpose

The topic for the next class: Fertilizer subsidy and MSP.
Economics_PG Class 03

<u>A Brief Overview of the Previous Class & Answered Queries:</u>(01:03:00 PM)
<u>Fertilizer Subsidy:</u>(01:12:00 PM)

- *(Explained with charts and diagrams)*
- *Urea**:***
- The mechanism followed here is the Cost Plus Approach where the selling price of the Urea is fixed by the government and the difference between the delivered cost of fertilizer and the selling price paid by the farmer is given as a subsidy to the manufacturer.
- The subsidy amount varies between the first which is based on the cost of the production(Largely based on its cost of energy- Natural Gas or Naptha)
- Imports of Urea are canalized which means only licensed players are allowed to import Urea.
- Since the retail price is fixed by the government the subsidy amount varies according to the consignment cost.
- *Nutrient-based Subsidy for Non-Urea fertilizers:*
- Each kilogram of Potash and Phosphorus fertilizers receives a fixed rupee amount as a subsidy that is directly paid to the manufacturer.
- The final price is unregulated and determined in the market although it is expected that this price will be reasonable as it will be adjusted for the subsidy amount.
- ***Issues of Fertiliser Subsidies:***
- a. Subsidies have lowered the relative price of urea wrt to other fertilizers as a result of the application of fertilizers being heavily skewed towards urea, disturbing the nutrient balance of the soil.
- b. The low subsidized price of urea has encouraged illegal diversion to the adjoining regions of Nepal and Bangladesh.
- c. As a result of the low prices and illegal diversion, farmers are rationed, and the excess demand has resulted in a black market.
- Roughly 50% of the farmers get urea from the black market where the average price is about 60% higher than the MRP.
- The implication of this is that the subsidy the farmers receive is smaller than the fertilizer subsidy expenditure of the government.
- d. Since the urea subsidy amount differs between the firms it neutralizes the advantage of efficient firms by giving more incentives to the highly inefficient firms.
- Therefore there is no capacity for addition and improvement in the processes.

<u>Administration of Subsidies:</u>(01:59:00 PM)

- *(Explained with charts and diagrams)*
- *The Implemented Reforms:*
- a. Neem Coating Urea has been made mandatory since September 2015.
- This not only stops diversion to the industries but the neem oil also works as a nitrification inhibitor(it slows down the conversion of nitrogen into nitrates thereby preventing the loss through leaching and improving the absorption by the plants)
- b. Shifting from Naptha to Natural Gas for the production of Urea.
- ***Recommended Reforms:***
- a. Shifting Urea to the nutrient base regime.
- b. Aadhar authentication of the farmers and linking it with their land records and soil health card data to limit the number of bags provided.
- c. Providing Direct Benefit transfer to the farmers and freeing the fertilizer market from all types of government intervention.
- This data can be used to provide direct benefit transfer to the farmers, freeing the fertilizer market from any regulation.

<u>Should Subsidy Continue or Not?</u>:(02:26:00 PM)

- *(Explained with charts and diagrams)*
- All the subsidies started with an intended objective.
- When the intended objective is achieved then there should be an exit mechanism.

- So first the efficacy of the subsidy mechanism should be assessed and if it has not achieved its mechanism then its mechanism should be improved.
- So the subsidies should be based on a rational basis.
- Subsidies are burdens only when the intended objective is not achieved or even when the objective is achieved there is no exit.
- ***Problems with Subsidies:***
- a. It creates fiscal pressure on the government as there is no exit from the subsidy.
- b. Excessive expenditure on subsidies compromises the capital expenditure in agriculture which has the potential of increasing long-term productivity in agriculture.
- c. Subsidies can lead to the wastage of resources as the resources are provided for free or at a lesser cost.
- d. This can also lead to ecological damage like groundwater depletion due to power subsidies.

Price Support- Minimum Support Price(MSP): (03:04:00 PM)

- *(Explained with charts and diagrams)*
- *Need for price support:*
- a. It insulates farmers from the unwarranted fluctuations in prices caused by variations in supply, lack of market integration, information asymmetry, and other elements of market imperfections plaguing the agricultural markets.
- b. The guaranteed price and assured market encourage higher investment adoption of modern technologies in the agricultural sector.
- c. It can help encourage the surplus generation and marketization of that surplus.
- d. It can also help protect the consumer against the excessive price rise.
- e. It can be used as a stool for crop diversification.
- The GoI established the Food Corporation of India in 1964 to run its PDS operations and also maintain a buffer stock of food grains and also maintain price stability in the market.
- Agricultural Price Commission was established in 1965 to recommend prices for agricultural commodities.
- It recommends MSP, issue price, and fair and remunerative price(FRP) for sugarcane.
- It was later renamed Commission for Agricultural Cost and Prices(CACP).
- The final decision wrt to these prices is taken by the Cabinet Committee for Economic Affairs.
- ***Minimum Support Price(MSP):***
- MSP is in the form of a long-term guarantee to the producers so that in the event of excess production prices are not allowed to fall below these minimum support prices.
- The MSP was intended to serve as a floor price and an assurance against the risk that could arise from a sharp fall in the market prices.
- *Procurement Prices:*
- They were fixed at a higher level as compared to the MSP and were meant essentially for maintaining a buffer stock and for distribution under the PDS.
- Normally the procurement price was kept higher than the MSP but lower than the open market prices.
- This provided the farmers a choice to avail of either the price in the open market or sell to public agencies.
- However, gradually the procurement price was made equal to the MSP, also this MSP is used as a market benchmark.

Crops under MSP:(03:25:00 PM)

- *(Explained with PPTs)*
- The Commission for Agricultural Cost and Prices (CACP) recommends MSPs for 22 mandated crops and fair and remunerative prices (FRP) for sugarcane.
- The mandated crops include 14 crops Kharif Crops, 6 Rabi Crops, and 2 other commercial crops.
- In addition, the MSPs of Toria and de-husked coconut are fixed based on the MSPs of rapeseed/mustard and copra, respectively.
- The list of crops is as follows:
- Cereals (7): Paddy, Wheat, Barley, Jowar, Bajra, Maize, and Ragi,
- Pulses (5): Gram, Arhar/Tur, Moong, Urad, and Lentil,
- Oilseeds (8): Groundnut, rapeseed/mustard, Toria, soybean, sunflower seed, sesamum, safflower seed, and niger seed,
- Raw cotton, Raw jute, Copra, De-husked coconut, and
- Sugarcane (Fair and remunerative price).
- ***Calculation of MSP:***
- The recommendation of CACP takes into account various factors like:
- a. Cost of production,

- b. Change in input price,
- c. The trend in market prices,
- d. Demand and supply situation,
- e. Intercrop price parity,
- f. Effect on the general price level/inflation,
- g. Effect on the cost of living, and
- h. International market price situation.
- In addition to this, the CACP also considers the overall nutritional and even calculates implicit costs (costs that are incurred by the farmers but not paid for) such as the imputed value of family labor, rent on own land, and interest on own capital assets.
- Since 2018-19 the government has announced a minimum of 150% of the MSP where the input cost(A2+FL), however, the farmers demand the MSP to be fixed at 150% of the Comprehensive cost(C2).

***Discussed PYQs*:(03:52:00 PM)**

- *(Explained with PPTs)*
- Q: What is the Minimum Support Price? How MSP can rescue farmers from the low-income trap? (10 Marks/150 Words)
- Discussed a brief approach for the above question.
- Showed &discussed MCQs from PYQs based on the topics completed.

Topics for the next class: Procurement under the MSP.

Economics_PG Class 04

MINIMUM SUPPORT PRICE (1:08 PM)

- They are a long-term guarantee given to the producer so in the event of excess production prices are not allowed to fall below this MSP.
- MSP was intended to serve as a floor price and an assurance against the risk that could arise from a sharp fall in Market prices.
- **Procurement Price**
- They Are fixed at a higher level as compared to MSP and were meant essentially for maintaining a buffer stock and distribution under the PDS. Normally this was kept lower than the open Market prices. The purpose of this was to provide the farmers with a choice to avail either a price in the open market or sell to the public agencies.
- However, the procurement price was gradually made equal to the MSP and MSP itself is now used as the market benchmark.
- **MSP Crops**
- MSP is recommended by CACP but finally decided by the cabinet committee on economic affairs
- **The 22 mandated crops include-**
- 14 Kharif crops viz. paddy, jowar, bajra, maize, ragi, tur (arhar), moong, urad, groundnut, soybean (yellow), sunflower seed, sesamum, nigerseed, cotton
  and
- 6 Rabi crops viz. wheat, barley, gram, Masur (lentil), rapeseed and mustard, safflower, and 2 commercial crops viz. jute and copra.
- **Kindly refer to the handouts for the Procurement Part**

ISSUES WITH MSP (1:35 PM)

- Increasing Burden on the government as the MSP is being revised every year but the Central issue price has remained constant since 2013.
- MSP was meant to be a support system but has now become a regular feature with procurement of rice and wheat rising every year.
- It is led to the distortion of cropping patterns as farmers tend to produce crops with higher MSP and assured procurement ignoring geographical suitability and other commercial factors. This has made India dependent on imports of pulses and oil seeds.
- The open procurement system of rice and wheat combined with a lack of storage infrastructure has led to huge wastage of grains.
- The MSP system is biased toward some states (Punjab and Haryana) and also benefit mostly the rich and influential farmers.
- A higher MSP can put upward pressure on the price of grains in the open market.
- Announcing MSP has become one of the primary tools of intervention in agriculture while other critical issues such as the development of irrigation, land reforms, etc. have been ignored.
- An over-emphasis on price policy has distracted attention from more important tasks which would have enabled a technological breakthrough in Indian agriculture.
- **Agreement on Agriculture (WTO):**

- The objective of the Agreement on Agriculture is to reform trade in the sector and to make policies more market-oriented.
- **The new rules and commitments apply to:**
- **Market access —** various trade restrictions confronting imports.
- This will lead to Tarrification i.e. converting Non-Tariff Barriers into Tariff Barrier
- Tariff Rate Quota.
- Special Safeguard Mechanism
- Market access simply means the right which exporters have to access a foreign market.
- The WTO agreements allow WTO Members to protect their markets. In practice "market access" refers to the ways in which that protection can be implemented.
- **Domestic support —** subsidies and other programs, including those that raise or guarantee farmgate prices and farmers' incomes
- **Export subsidies** and other methods are used to make exports artificially competitive.

Solutions to MSP:

- Price deficiency payment system: The farmers are compensated for the difference between Government announced MSP and the actual market prices the farmer receives on selling. Eg: Bhavantar Bhugtan Yojana of Madhya Pradesh.
- Private procurement and stockist Mechanism: Under this system, the MSP-linked procurement is open to the private sector where designated private players would be chosen through a transparent auction and allowed to purchase the farmer's produce at MSP.
- Reserve Price Mechanism: It is the minimum price below which no trade will be allowed in the market. It can be set equal to or less than the MSP.

SUGARCANE (03:06 PM)

- Regulations in the Sugarcane Market:
- Under the Sugarcane control order of 1966 issued under the Essential Commodities Act.1955, the central government decided the price of sugarcane payable by the mills to the farmers.
- Under this provision, the government announces a Fair and Remunerative Price for sugarcane. Even the State government can announce prices for sugarcane which are known as the state advice prices (SAP)
- SAP is generally higher than the FRP
- Every designated mill is obliged to purchase from the farmers within the cane reservation area and conversely, all farmers are bound to sell to that mill.
- Minimum distance criteria: Under the sugarcane control order the central government has prescribed a minimum radial distance of 15 km between any 2 sugar mills. This is expected to ensure the maximum availability of sugarcane to all mill owners.
- Levy Sugar Mechanism: A percentage of sugar produced by the mill has to be given to the government at concessional rates for distribution under the PDS.
- Based on the recommendations of the Rangarajan Committee the system was abolished in 2013.
- **Regulated Release Mechanism:**
- Government sets the quota for the release of sugar in the open market by each mill.
- Though the system was abolished in 2013 it was re-introduced in 2018.

GOVERNMENT HELP FOR THE MILLS

- The government provides concessional loans to the mills so as to clear the dues of the farmers
- A **Sugar Development Fund** has been constituted for this purpose.
- A minimum selling price of sugar has been set by the government under the powers of the Essential Commodities Act
- A buffer stock of sugar is to be collectively maintained by the sugar mills the cost of which is paid by the government.
- Government facilitates the supply of Ethanol under the Ethanol Blended Programme by fixing the remunerative price of Ethanol coming from 3 different sources i.e. C- Heavy Molasses; B- heavy Molasses and Sugarcane Juice.
- The government regulates the external trade in Sugar, for instance: In case of surplus production, it can impose import duty and can also incentivize exports by providing subsidies.

TOPIC FOR THE NEXT CLASS: WILL CONTINUE WITH THE REGULATION OF THE MARKET AND APMC

Economics_PG Class 05

Regulation of Market (01:09 PM)

- APMC laws
- Essential commodities act 1955
- **Need for regulation**: In the absence of a regulated market, the farmers can be exploited at the hands of the traders because of **two specific features** of the agricultural market i.e **monopsony-**

like situations where the number of sellers is much more than the buyers and high perishability of the produce.

- This trade between a farmer and a trader can have various **exploitative practices** such as secretive price setting adulteration delayed payments customary deductions and conflicts over quality and weight.
- In the absence of a dedicated **dispute resolution mechanism,** there is no solution provided for the counterparty risk.
- Also, such a system does not provide the demand and the information to the farmer.
- **Agricultural produce marketing legislation**:
- Introduced in the 1960s in most states, agricultural produce marketing legislation was passed to regulate the trade between the farmer and traders by setting up a designated marketplace, called the **principal yard or APMC mandi**.
- These yards were to be administered by a committee called APMC which are representatives of farmers, traders, local government, etc.
- The trade was to take place via **licensed traders and commission agents** where each mandi had its own system of licenses.
- In order to run the mandi and also build market infrastructure, market fees, license fees, and other types of penalties and fines were imposed.
- The **role of the commission agent** was that of an aggregator providing assistance in transportation, providing temporary liquidity, and in some cases acting as a buyer of last resort.
- They charge nominal fees for providing these functions.
- This system of **mandi-based trade** is aimed to ensure that farmers are paid a price determined by a transparent auction and accompanied by regulatory oversight by the APMC in order to ensure fair terms of trade.

Issues with APMC Mandis (02:16 PM)

- **Lack of access to Mandis**: Most of the states have not invested in building enough market yards. e.g the average area served by a regulated mandi in Punjab is one per 117sq km whereas it is 1 per 11000sq km in Meghalaya.
- **Lack of market infrastructure in agricultural markets**: Studies indicate that only 25% of the markets have drying yards, cold storage units exist in less than 1/10 of the market, and grading facilities in less than 1/3 of markets.
- Electronic weighing bridges are available in only a few markets.
- **High incidence of market charges**:
- APMC is authorized to collect market fees ranging between 0.5%-2% of the sale value. In addition to this other charges such as purchase tax weighing charges etc have to be paid.
- In some states, this works out to be a total of 15% which is excessive.
- The **nexus between traders and commission agents** leads to poor price realization by the farmer.
- APMC is often dominated by a **trader lobby** which restricts the competition by reducing the number of new licenses issued.
- The large variation across states in the scope and stringency of the APMC acts has led to the **fragmentation of the agricultural market** in India.
- This means the commodity changes hands 5-6 times before reaching the final consumer. which creates a significant price gap without adding any value.

Question: There is a point of view that APMCs established by the state acts have not only impacted the development of agriculture in India but also caused food inflation in the country. Critically examine. (15marks/ 250 words)

Reforms in marketing (03:15 PM)

- **<u>Reforms in APMC</u>**: democratizing APMC by conducting regular elections, and rationalization of market fees and commission charges.
- Declaration of warehouses cold storage and other related structures as designated market yards to provide linkages to the farmers.
- Limiting the regulation of APMC within the yard.
- Providing a single license for all states and a single point of market fee collection.
- Denotifying some of the commodities such as fruits and vegetables.
- **<u>Promoting alternative marketing systems</u>**: Promotion of direct interface between the farmers and the consumers.
- Creation of a conducive environment so as to set up and operate private wholesale market yards which will enhance the competition among different markets for the farmer's produce.
- Promoting cooperative marketing and contract farming.
- **<u>Introduction of technology</u>**: It includes the promotion of electronic trading so as to enhance transparency in trade operations and integration of markets across different geographies.

- **eNAM** (electronic national agriculture market) is a pan-India electronic trading portal that networks the existing APMC Mandis to create a unified national market for agricultural commodities.
- It will remove the **information asymmetry** between the buyers and sellers and promote real-time price discovery based on actual demand and supply.

Essential commodities act (ECA) 1955 (03:47 PM)

- It gives the center wide-ranging powers to impose restrictions on the storage and movement of certain essential commodities by private parties mainly to protect consumer interest.
- State governments are free to set stocking limitations based on the center's notification.
- Historically, **ECA-related restrictions have neither been predictable nor infrequent**.
- Since the restrictions are **imposed temporarily** typically for 6 months or 1 year at a time, the uncertainty hinders the operation of agribusiness logistic firms and traders. Therefore there is a lack of investment by private players in agricultural marketing processes.

Question: What are the main bottlenecks in the upstream and downstream process of agricultural marketing in India? (15 marks/ 250 words)

The topic for the next class is PDS (public distribution system).

Economics_PG Class 06

A Brief Overview of the Previous Class & Mains Answer Writing Tips:(01:05:00 PM)

Public Distribution System(PDS):(01:58:00 PM)

- *(Explained with charts and diagrams)*
- Topics to be covered:
- Evolution of PDS.
- RPDS(1992)
- TPDS(197)
- Issues with TPSD
- NFSA, 2013.
- Reforms in TPDS.
- ***Evolution of PDS:***
- PDS started during World War II as a wartime rationing measure to manage scarcity and distribute food grains to the population at accessible prices.
- The system was limited to only urban areas.
- The system ended after the war. However, with the renewed food inflation and shortages, the government reintroduced PDS in 1947 with the objectives of:
- a. Rationing during the situation of scarcity.
- b. Providing food grains and other essential items at reasonable prices.
- c. Maintain price stability by keeping a check on private players.
- d. To attempt socialization in the matter of distribution of essential commodities.
- In 1964, the PDS was institutionalized with the creation of the Food Corporation of India(FCI) and the distribution of responsibilities between the center and states.
- The center was made responsible for procurement, bulk allocation, storage, and distribution.
- The state government was given operational responsibilities including distribution within the states, issuance of ration cards(RCs), and supervision & Monitoring of fair price shops on the ration shops.
- After the green revolution, the PDS evolved from a rationing system to a fair Price System.
- Some states expanded it to even rural areas and also started targeting creatin, specific groups.
- ***Revamped PDS:***
- It was launched in 1992, in 1775 blocks throughout the country, where area-specific programs such as drought-prone area programs, integrated tribal development programs, etc to be run.
- Under the scheme, food grains were allocated to the states for the RPDS blocks at prices lower than the normal PDS blocks.

Targeted PSD(TPDS):(02:53:00 PM)

- *(Explained with charts and diagrams)*
- It was launched in 1997 following the advice of the World Bank to control the food subsidy.
- The word targeted here means that the focus is on poor and vulnerable sections of society therefore the PDS transformed from a general and universal scheme to a targeted food subsidy for the poor.
- ***Feature of TPDS:***
- a. The households were classified into three categories.
- First Above Poverty Line(APL) households,
- BPL Households.
- Antyodaya Households(Poorest of the poor)
- b. It has a two-tier pricing structure where the CIP for the BPL households is 50% of the economic cost of the foodgrains to FCI and it is 100% for the APL households.

- c. Allocations to the states were to be decided on the poverty line estimates of the Planning Commission.
- The entitlements for the Households were also to be decided by the central government.
- d. Identification of the beneficiary was the responsibility of the state government.
- e. The State governments also got the freedom to decide the end retail price considering the cost of interstate distribution and margin for fair price shop owners.
- However, the central government recommends that this price should be closer to the CIP.
- f. If extra items are to be given or more population is to be covered or a discount on CIP is to be given, the expenditure of all these activities will be borne by the respective state governments.

<u>Issues with TPDS:</u>(03:29:00 PM)

- *(Explained with charts and diagrams)*
- a. Identification of beneficiaries:
- There are a large number of eligible persons are left out(Exclusion error) and a lot of ineligible persons are included in the beneficiary list(inclusion errors)
- b. Illegal diversions of the PDS commodities to the open market through a highly institutionalized network of agents and middlemen severely undermine the capacity of the whole system.
- c. The quality of food grains is very poor due to a lack of storage capacity and corruption in the system.
- d. Access-related issues include erratic timings of fair price shops, discrimination on caste and gender lines, etc.
- e. Mostly Rice and Wheat are distributed through the PDS system, thereby ignoring the nutritional requirements of the population,
- f. The system excludes the migrants as the identification is done through the state government and there are no provisions for them in the destination state.

<u>Topics for the next class:</u> NFS Act, and reforms in TPDS.

Economics_PG Class 07

National Food Security Act :(1:06 PM)

- *(Discussed with diagrams & charts)*
- *(Dictation from **1:53 PM**)*
- Providing a **legal guarantee** for food security covering the targetted PDS, mid-day meal scheme
- That is trying to follow a life cycle approach for food security.
- Increase in coverage of targetted PDS to **75% of the Rural** population and **50% of the urban population**.
- Only two categories of household i.e priority and Antyodaya.
- Uniform Entitlement of **5kg o**f foodgrains to every individual, The Antyodaya households will continue to receive 35 kg per household.
- Reduction in central issue prices and it has been fixed at **Rs 3, Rs 2, and Rs1 for Rice, wheat,** and coarse grains respectively. The central govt has been given the responsibility of revising these prices provided they do not charge more than the MSP.
- In case the food grains are not given the entitled families will be paid a food security allowance by the state govt.
- The Norms for the calculation and distribution of allowance will be **decided by the central govt.**
- The state govt will appoint a district grievance redressal officer and constitute a state food commission for reviewing and monitoring the implementation of the act.
- The **center will pay the dealer's margin** and the interstate transportation cost to the state govt so that the central issue price and end retail prices are the same.

Reforms Suggested by NFSA in Targeted PDS:(02:05 PM)

- *(Discussed with diagrams & charts)*
- *(Dictation form **02:24 PM**)*
- Doorstep delivery of PDS to fair price shop
- Application of **ICTs** with the aim of end-to-end computerization of targeted PDS.
- Transparency of records i.e displaying the beneficiary list in the public domain.
- Shifting management of Fair price shops from private owners to public bodies such as women cooperatives, SHGs, etc.
- **Diversification of commodities** distributed.
- Biometric authentication for identification of beneficiaries and introduction of Epos to stop leakage.
- Implementation of programs such as cash transfers and food coupons.

Discussed the approach to PYQ from Mains CSE:(03:10 PM to 3:40 PM)

- *(Discussed with diagrams & charts)*

- Q: How far do you agree with the view that the focus on the lack of availability of food is the main cause of hunger takes the attention away from ineffective human development policies in India? (15 Marks/250 words)
- The main theme of the Question the govt is facing on availing food to beat hunger, However, the focus should be on other development indicators, Like the capability approach of Amartya sen could come in handy.

Land reforms (03:41 PM)

- *(Discussed with diagrams & charts)*
- Land reforms refer to the redistribution of land from the rich to the poor.
- More Broadly it includes regulation of ownership, leasing sales, and inheritance of land.
- **Need for Land reforms:**
- In the early stages of development, most of the population is employed in agriculture, and demand increases much more than supply.
- Therefore landlords leased the land at a very high rent.
- Tenants facing stiff rent along with little security of tenure are not able to make investments that will improve productivity.
- Landlords could invest but they make more money by extracting the highest possible rent.

The Indian scenario(03:47 PM)

- *(Discussed with diagrams & charts)*
- The British policy of land settlements created a class of people with ownership rights between the government and the cultivated tenant to collect the revenue.
- In the Ryotwari and Mahalwari areas, the ownership rights were vested in the farmer, but the practice of renting out rent emerged.
- Also, money lenders were able to confiscate the land if the farmers could not pay the rent as a result the system that emerged in India had the following **features:**
- Absentee land ownership
- Rent has no relationship with the output value of the land.
- The increasing population meant that there was a decline in the average size of landholding.
- The agricultural labor inquiry in 1951 **revealed that**
- One-fifth of the agricultural families were landless laborers
- Among the families that had land to cultivate, 38% has less than 2.5 hectares and in total, they cultivated only 6% of the area.
- As many as **59%** of the cultivating families had holdings of **less than 5 hectares** and in total operated on 16% of the area.

The topic for the next class: Continuation of Land reforms.

Economics_PG Class 08

Land Reforms (01:08 PM)

- The intention was clear behind the Land reform i.e social reforms must precede economic reform
- Social reform will lead to economic growth in Agriculture
- Discussed the reforms, and types of reforms undertaken like Zamindari abolition, tenancy reforms, and Land ceiling
- **JC Kumarappa** Committee was set up to undertake the above task.

The Objective of Land reforms(01:25 PM)

- To ensure distributive justice and create an egalitarian society by eliminating all forms of exploitation.
- To create a system of peasant proprietorship i.e Land to the tiller.
- To increase income in agriculture so that the demand for consumer goods is created.
- To enhance the productivity of land so that farmers and tenants have an interest in improving agriculture.
- A committee under the chairmanship of **JC Kumarappa** was established for the same

Abolition of Zamindari (01:30 PM)

- The rights of Zamindars and other such intermediaries were taken away by the government and the tenant cultivator was brought into a direct relationship with the government
- The laws provided ownership rights to the tenant by paying the states a lump sum amount of 10 times the value of rent they had been paying to the ex-zamindar.
- If he fails to make the payment he would continue to work on the land as a permanent cultivator with the liability to pay to the government the same amount he had been paying as rent to the zamindar.
- There were provisions for compensation to be paid to the ex-zamindar by the state exception J&K.
- The common property resources such as lakes, ponds, forests, and village wastelands were taken away from the control of zamindars and were given to the state govt and village panchayats.

The positive impact of the reform(01:39 PM)

- It put an end to the exploitative system of rent collection.
- with the abolition of zamindari, about 25 million tenants were brought into direct relationships with the states.
- The total area released from the control of zamindars was estimated to be around 63 million hectares.
- **Case study of Bihar**
- 90% of the area of the state i.e 38.7 million acres had been under zamindari in 1947.
- After zamindari's abolition 22 million acres had come into direct contact with the states as 7.1 million tenants got ownership rights.
- Zamindars retained land of approx 1.6 million acres.
- The state also took possession of 7.4 million acres of private forest.
- The zamindari abolition reduced the social and political power of the landed magnets and created a new middle class in the rural areas which got substantial political and social powers in the 1980s and 90s.
- Large areas of forest land and wasteland were taken by the state government out of which 6 million hectares of wasteland were distributed to landless laborers.

Issues in Implementation(02:04 PM)

- State govt took 4-9 years to formulate the proposals and pass the legislation which gave enough time to the zamindars to prepare for its eventual implementation.
- Therefore the zamindar shifted the land to family members and other relatives and in several cases to fictitious persons (Benami transactions)
- Most of the powers were challenged in the court where they were held unconstitutional as they violated the Fundamental right to property.
- The provision of personal cultivation was misused and the zamindars were able to retain the ownership without any ceiling limitation except in west Bengal, Karnataka, and J& K.
- The provision of voluntary surrender was misused as in most cases Force and threat were used to evict the tenants.
- The lack of proper land records contributed to the failure of this reform in many areas.

Tenancy reform (02:27 PM)

- Tenancy laws of several states including Andhra Pradesh (Telangana Region) Bihar, Himachal Pradesh, Karnataka, MP, and UP banned leasing out of Agricultural land except by certain differently abled categories of land owners.
- The states of Kerala, J&k, and Manipur banned agricultural tenancy without any exceptions
- States like Punjab Haryana and Gujarat allowed tenancy and also gave the rights to the tenant to purchase the land they cultivated after continuous possession for certain specific years.
- States like west Bengal Odisha, Tamil Nadu, and the Andhra region of Andhra Pradesh allowed tenancy but sharecroppers were not recognized as tenants.
- West Bengal recognized sharecroppers only in 1979 with the launching of **operation Barga**.

Regulation of Rents:(03:08 PM)

- Under this, the central government passed a model law fixing the upper limit of rent at **20**-**25%** of crop value.
- Various state governments passed legislation to fix the upper ceiling on rent for example Punjab fixed it at 40%, Assam, Kerala, and Odisha at 25%,
  Tamil Nadu 25% for unirrigated, 30 % for semi-irrigated areas, and 35 % for irrigated areas.
- However, the reform could not achieve its desired goals because:
- a. Lack of a legal agreement between the tenant and the landowners. Most of the tenancy was **oral deeds**.
- b. There were no objective parameters to ascertain the crop value hence the rent could not be determined rationally.
- c. Lack of **awareness** among the tenants regarding any such regulations.
- d. The grievance redressal mechanisms such as courts, the local administration, etc. favored the landowners over the tenants.

Reforms for Security of Tenure:(03:17 PM)

- Centre passed a model law the Security of Tenure Act,1951.
- States passed their laws based on the Model Law of the center.
- **Common provisions were:**
- a. Definition of Tenants.
- b. Conditions defined under which tenants could be removed.
- c. Conditions defined under owners could tenants could resume cultivation.
- d. The area was to be left for the tenants(For ensuring tenants' livelihood) in case the owner resumes cultivation.

- e. Provisions for compensation to the tenants in case of eviction.
- f. For voluntary give-ups conditions were given.
- However, the reforms were not successful.
- **Reasons for the failures:**
- Oral deeds- No written legal agreements.
- The definition of Tenants was not comprehensive.
- Forced eviction by misusing voluntary give-up.
- Lack of awareness.
- No fixed formula for deciding compensation and compensation was hardly given to the tenants.

Ownership to the Tenants:(03: 26 PM)

- Central government passed a law that 12 years of continuous cultivation will give the right to buy the land to the tenants.
- Some states passed laws like Gujrat, Punjab, Haryana (they kept 6 years as a condition), Karnataka, West Bengal, Kerala, and J& K. Successful (Mostly in West Bengal, and Kerala).
- **Reasons for failure:**
- a. Lack of adequate resources with the tenants.
- b. Lack of written legal agreements to prove the continuation of cultivation on the land.
- c. A short duration of tenancy was introduced by the owners as they feared the laws. It actually increased the eviction of tenants.
- d. Force was used by the landowners to suppress tenants.

Impact of tenancy reform (03:47 PM)

- According to a 2005 report of the MORD, the total number of beneficiaries of tenancy reform is 124.2 lakhs.
- The total rate over which rights have been protected is 156.3 lakh acres.
- Tenants got ownership over 4% OF THE total operated land as the reform was primarily successful in Kerala, west Bengal, Karnataka, and to some extent in Assam and Maharashtra.
- The negative **implication** of tenancy reforms:
- The period of the lease that used to be more than 4-5 years or in some cases permanent has been reduced significantly and now ranges anywhere between 1-2 years.
- Most of the tenancy has moved underground to avoid the protection given by the law.
- The informal tenancy is still charging very high rents leading to the exploitation of tenants and they are also not recognized by any of the government support programs.
- In many cases due to the fear of tenant occupancy owners are keeping their land fellow.

Land ceiling (3:53 PM)

- The basic idea is to redistribute the land.
- The land ceiling can be defined as fixing an upper limit on ownership of land by individuals or families.
- It is the system of rationing of land so that surplus can be distributed amongst the poor
- **Reasons for Ceiling:**
- Socio-economic welfare as suggested in the DPSP.
- To reduce inequality by providing an income-generated asset to the poor.
- To create opportunities for self-employment.
- Involve the majority of the population in the socio-economic development of the nation i.e participative development.
- According to an economist C Hanumantharao
- Small lands are considered more efficient in the socio-economic Context of India as it generates more employment.

Why land ceiling was a bad idea (04:10 PM)

- a. Small lands have poor efficiency in the usage of resources as they can not achieve economies of scale.
- b. It disincentivizes investments in mechanization and improvement in technology.
- c. Productivity could suffer as the small lands would remain on subsistence lines not having a resource to invest in the land.
- d. Most of the employment generated through this would be disguised unemployment.
- e. Fragmentation of landholdings would lead to more boundary disputes**.**

The topic for the next class: Continuation of Land reforms.

Economics_PG Class 09

A Brief Overview of the Previous Class: (01:06:00 PM)

Implementation of Land Ceilings: (01:12:00 PM)

- It was implemented in two phases:

- *A. From1960s to 1972:*
- 1. Unit of Application: Most states made it on an individual basis, not on a family basis.
- It failed because the land was distributed among the family members so no surplus.
- 2. A very high ceiling was kept.
- 3. Many exemptions like plantations, religious purposes, etc.
- 4. Priority for distribution:
- 5. Compensation to be paid.
- *B. 1972 Onwards:*
- These reforms were a failure so there was a conference of CMs in 1972 that give the *following recommendations:*
- The unit should be a family.
- Rationalize the upper limit. (18 acres for irrigated land and 54 acres for non-irrigated land).
- Reduce exemptions.
- Place these laws in the 9th schedule.
- Retrospective application of these laws.

***Reasons For Failures of Land Ceilings Reforms:*(01:35:00 PM)**

- *Even after these recommendations, the reforms failed because:*
- Land records were incomplete/not updated.
- Still upper limit was high so there was very little surplus.
- Many Benami transactions.
- Many still kept units of application as individuals.
- Corruption at the local level using the exemptions got the land classified under various heads like religious or charitable purposes.
- The quality of *land* distributed was very poor and the resources were limited to the poor who received these lands.
- Though on paper lands were given, on the ground, people could not get the actual possession due to the muscle power of landlords.
- Only 2% of the cultivable land was collected as surplus and redistributed.
- Q: How did the land reforms in some parts of the country help to improve the socioeconomic conditions of small-marginal farmers in India? (10 Marks/150 Words)

***Land Consolidation*:(02:02:00 PM)**

- It means amalgamation and reorganization of the fragmented land to bring all plots into one compact land parcel.
- After independence, almost all states except Tamil Nadu, Kerala, Manipur, Nagaland, Tripura, and parts of Andhra Pradesh enacted laws to consolidate holdings.
- While it was made compulsory in Punjab & Haryana all the other states provided for the consolidation voluntarily (based on the consent of the land owners).
- The idea here was to improve the administration and management of land, increased mechanization, and promote better use of resources.
- *It's positive:*
- a. Economies of scale.
- b. Lesser boundary disputes.
- c. Better management of time and resources for the farmers leads to better efficiency.
- It was to be a voluntary reform and was to be done only if the majority of landholders agreed.
- Only two states (Punjab & Haryana) made it compulsory.
- *Reasons for failure:*
- Lack of correct and updated land records.
- The value and quality of land could not be accounted for objectively.
- Poor motivation amongst the farmers because of the sentimental value attached to the land.
- Local Bureaucracy lacked the necessary skills and motivation to implement the reform.
- Small farmers often lacked motivation due to the threat of land grabbing and getting their good quality land exchanged for inferior quality.

***Co-operative Farming:* (02:14:00 PM)**

- A cooperative is an autonomous association of persons, united voluntarily to meet their common economic, social, and cultural needs and aspirations through a jointly owned and democratically controlled enterprise.
- Cooperative societies were formed by small farmers.
- Cooperative and Farmer Producer Organisations(FPOs) have the followings benefits:
- *1. Input:*
- Buy machinery together and rent among themselves.

- Credit/Finance: These cooperatives can get loans from the formal financial system.
- Lesser cost of Inputs: by bulk purchase.
- Access to the government support program increases.
- Better access to new technology and other extension programs.
- *2. Farming:*
- Better management of land resources.
- Economies of scale by pooling lands together.
- Sharing of best practices and techniques.
- Better Risk management.
- *3. Output Stage:*
- Aggregation of produce.
- Lesser transport cost.
- Better price bargain.
- Exploration of new markets for domestic and foreign markets for exports.
- *Reasons for not success of cooperative societies:*
- Unprofessional management.
- Rich and influential participated only to get benefits from the government, thereby defeating the purpose of the reform.
- Small formers - No motivation and lack of trust.
- The problem of ascertaining the quality of grains and then the distribution of profits among the farmers is difficult.
- They require good administrative and management skills which are lacking in cooperative societies.
- Leadership was absent in agriculture to pool land.

***Land Reforms after 1991**: (03:08:00 PM)*

- Till 1991 was aimed at institutional and structural reforms leading to change in ownership patterns to enhance the productivity in agriculture.
- But after 1991, land became a marketable resource that can be sold, bought, and rented in the market.
- So the objective of these reforms was to make buying, selling, renting, and acquiring land easy.
- The government launched the following reforms:
- Land acquisition Act, 2013 & Digital India Land Records Modernisation Program (DILRMP).

***Land Records Updation:**(03:11:00 PM)*

- *(Dictations form 03:38:00 PM)*
- *Reasons for Incomplete or poor land records:*
- a. Land records in India are old, insufficient, and not dully updated.
- b. The manual system of record keeping is opaque, susceptible to manipulation, and hard to administer.
- c. In the present system, the registration of deeds as provided in the Registration Act is treated as proof of ownership.
- The titles, therefore, are merely presumptive and the state does not give a guarantee for these titles.
- d. Registration fees are very high and because of that people do not get them registered or register only some of them and do not transfer the names for generations.
- While registration of the property the buyer has to pay the registration fee along with the Stamp Duty which is roughly 12-15% of the sale value.
- This raises the cost of property transactions, leading to people avoiding registering them.
- e. Registration of properties is not mandatory for all properties. Since heirship partnerships do not require registration, several property divisions are not recorded and hence do not correctly reflect who is in the possession of the property, this often leads to litigations.
- f. Land records in India are maintained in India in different departments such as the Survey dept(having the maps), registration dept(having details of transactions), and revenue dept(revenue details from the land) this system has a lack of coordination thereby creating inefficiencies in the management of land records.
- g. Due to the poor management of land records, there have been a lot of land title disputes that have not only burdened the courts but also created inefficiencies in the land markets for instance lack of access to formal finance due to poor records.
- *Need for the modernization of land records:*
- In the absence of clear land records farmers are unable to access credits from the formal financial system.
- High litigations- As per a World Bank Study, land-related disputes constitute roughly 2/3rd of the pending cases in the country.

- According to a NITI Ayog report land disputes on average tales 20 years to resolve.
- The creation of new infrastructure is often delayed due to land title disputes obtaining a land record certificate can take up to one year in many states.
- Unclear land records lead to opaqueness in real estate transactions making the whole real estate market inefficient.
- According to a White paper on Balck Money, most of the black money generated in the country gets invested in Benami properties.

<u>Conclusive Land Titling:</u>(03:55:00 PM)

- It is a system where the State gives a guarantee of title ownership.
- It is based on 4 principles:
- 1. A single agency to handle all land records.
- 2. The mirror principle states that at any given moment the land records will mirror the ground reality.
- 3. The curtain principle refers to the fact that the record of the title is a true depiction of ownership status, and there is no need for probing into past title transactions as the title is conclusive proof of ownership, as the mutation is automatic following the registration process.
- 4. Title insurance means the title is guaranteed for its correctness and a party concerned is compensated against any loss because of inaccuracy in this regard.
- NITI Ayog has proposed a Model Law on Conclusive Titling, Act, 2020.
- Rajasthan has accepted it for the urban areas.

<u>Topics for the next class:</u> Land Acquisition Act, 2013.

Economics_PG Class 10

<u>A Brief Overview of the Previous Class</u>:(01:05:00 PM)

<u>Features of Digital India Land Record Modernisation Programm:</u>(01:10:00 PM)

- Computerization of land records:
- Computerization of all land records data including spatial data, mutation data, ownership data, and other land-attributed data shall be updated and computerized.
- Survey, reserve, and update the survey and settlement records using modern technology options such as high-resolution satellite imagery, GPS, etc.
- Computerization of registration: This included modern record rooms and a land record management center at the tehsil level.
- Core GIS village base index map which will integrate 3 layers of data- Spatial data from satellites, Maps from the Survey of India, and Cadastral Maps from the revenue dept.
- Legal changes- This includes amendments to the Registration Act and Model Law for Conclusive Titling.
- The Unique Land Parcel Identification Number (*ULPIN*).
- Recently under a program National Generic Document Registration System - ‘One Nation One Software’ for registration of documents & properties to ‘empower citizens’ - a feature of unique land parcel identification number and national generic documentation registration system has been introduced.

<u>Land Acquisition Act:</u>(01:16:00 PM)

- Article 300A of the Indian Constitution- Right to Property.
- However, the State can acquire the land for a public purpose after paying the compensation under the "Doctrine of Eminent Domain."
- Land acquisition is in the Concurrent List.
- There was a colonial law for land acquisition named the Land Acquisition Act, of 1894.
- It had many issues:
- a. It was biased in favor of the government.
- b. "Public interest" was not defined and land could be acquired on the ground of public interest easily.
- It leads to the exploitation of the poor and tribals.
- c. Compensation was very slow and very low.
- d. Also, there were no provisions for the resettlement of the poor who were displaced by the acquisition of land.
- To address the above issues the government brought The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013(LARR, Act, 2013).
- It has the following major provisions:
- 1. It defines the term "Public interest".
- This includes land acquisition for national security, resettlement of people displaced by natural disasters, defense projects, projects for housing, low-income groups, etc.
- 2. Provision of consent was introduced for:
- For Government Public infrastructure- No consent.

- Private purpose- 80% of the affected families' consent.
- Public-Private Partnership (PPP)- 70% of the affected person's consent.
- 3. Compensation:
- Four times the market value in the Rural areas to the owners of the acquired lands.
- Two times the market value in the Urban areas.
- 4. Social Impact Assessment (SIA) is to be done: It is a comprehensive study on the nature and extent of likely social impacts on the affected families that would be carried out by independent agencies.
- The final report will be placed in the public domain for public hearing and consultation.
- After this, the report will be shared with the government for the final decision.
- This ensures that there is free prior and informed consent(FPIC)of the affected families.
- 5. Resettlement & Rehabilitation Award: Every land acquisition project should have this award.
- 6. Multi-cropped Irrigated land areas can not be acquired.
- In case it is necessary the state government would specify the limits and also an equal amount of wasteland will have to be brought under agriculture.
- 7. LARR Authority: A single person authority for the redressal of grievances and adjudicating matters arising from this law the State government will establish this authority which will have the powers of a civil court.
- The LARR, 2013 gives people a say in land acquisition and makes the process participative, humane, and transparent. It puts an end to forcible acquisitions but at the same time puts a significant cost on the developers of the land.

***Recent Changes:**(01:51:00 PM)*

- However the entire acquisition can take up to 4-5 years to complete and add direct and indirect costs to the developers.
- The direct cost is what the developers pay in compensation and the cost of resettlement and rehabilitation.
- The indirect cost is what the developers pay to carry out the procedures and manage multi-level bureaucracy as well as the revenue forgone due to the time taken to acquire land.
- To make it easier for the industrialist to acquire land amendments were introduced to the Act in 2015.
- Under these amendments, five categories of projects - Rural infrastructure, defense, affordable housing, Infrastructure, and Industrial corridors were exempted from the consent provisions and the provisions of Social Impact Assessments.
- Multi-crop irrigated areas could also be acquired for security and social infrastructure projects.
- However, the amendments could not be passed due to political opposition.
- Various state governments have bypassed this law and implemented their Acts incorporating these amendments.
- Further, a lot of states such as Tamil Nadu, Gujarat, Jharkhand, Telangana, and Andhra Pradesh are using their old Acts for the acquisition of their lands.
- The Central government is using the 13 central laws such as the National Highway Act, the Coal Bearing Atc, the Railways Act, etc. for the acquisition of land bypassing the 2013 Act.
- Therefore the protest against land acquisition continues as the interests of the displaced people are not taken care of thereby making land acquisition very difficult in India.

Indian Industry:(02:21:00 PM)

- Topics to be covered:
- Industry in 1947.
- IPR 1948, and IPR 1956.
- PSUs.
- NIP 1991.
- NMP-2011/Make in India, 2015.
- Atma-Nirbhar Bharat/PLI.
- Why India is not industrialized?
- *Industry:*
- As per the government of India, it includes:
- Manufacturing, Mining & quarrying, Electricity, water, and gas supply.
- Construction. (It is included in the Services, as per RBI Estimates.)

Features of Indian Industry in 1947: (02:48:00 PM)

- De-industrialisation happened during the colonial period and raw materials were exported cheaply and finished goods were imported for the benefit of the British industries.
- Due to World War II & to meet Colonial needs Iron & Steel, Chemicals, and Cement Industries were promoted.

- So at the time of this three industries were there.
- In Consumer goods, we had small-level industries in Cotton, Jute, and Sugarcane.
- In Capital Goods- We had a weak and backward industry.
- At the time of independence, India had a weak and backward industrial structure with the dominance of the consumer goods industry and almost complete absence of the capital goods industry.
- The industrial structure was skewed wrt to the size of the industry.
- Approximately 30% of the workers were employed in the small industries(6-9 people) and 42% of the workers were employed in the large sector.
- This means India had a missing middle in terms of the size of the industry.
- There was a dominance of informal and unorganized sectors wrt to employment generation in the industry.
- Very high capital intensity of Indian industry due to two factors:
- a. Shortage of skilled workforce,
- b. Availability of cheap capital.
- Overall the Indian industry lacked elements of modernity in terms of production technique, managerial expertise, and processing technologies.
- Industry at this time contributed 17% to GDP and employed 10% of the workforce.

Industrial Conference, 1947: (03:28:00 PM)

- *Industrial Policy Resolution(IPR),1948:*
- It introduced a form of the institutional form of network for the development of the industry which is called the Mixed economy model.
- The government was allowed to take an active role in industrialization but even allowed the private sector under strict regulations and directions.
- A system of licenses was introduced under the industrial development and regulation Act 1951.
- Through this policy, the government introduced a threat of nationalization where the existing industries in the private sector are subject to a takeover by the government after a performance review.
- *Industrial Policy Resolution(IPR),1956:*
- It provided a dominant role to the State in speeding the industrialization of the country with a focus on capital goods and basic goods.
- The private sector was made responsible for producing consumer goods using labor-intensive technology.
- All the activities of the private sector were to be controlled through IDR ACt 1951, MRTP Act, 1969, And FERA 1973.
- Along with this the government [passed a range of control orders such as Price control, Movement control, Import control, etc.
- The policy recognized the importance of the small-scale industry and introduced provisions of tax concessions, reservation of products, and quota limitations on the large sector.
- The policy followed the principles of import-substituted industrialization which meant producing goods domestically which are otherwise imported into the country.
- This protection was provided to protect the domestic industry from the foreign competitor(Infant industry argument)
- *Objectives of licensing:*
- a. to direct investments to certain important areas and a certain class of goods.
- b. To correlate the supply and the demand of goods in the economy.
- c. To control the competition and protect consumers from exploitative practices.
- d. To ensure optimum utilization of capital.

Topics for the next class: Public Sector Undertakings.

Economics_PG Class 11

A Brief Overview of the Previous Class:(01:04:00 PM)

Public Sector Undertakings(PSUs) :(01:17:00 PM)

- PSUs are business units owned and managed by the government.
- Since they run on government money, they are accountable to the government(Parliament).
- Types of PSUs:
- 1. Departmental Company:
- They function under the overall control of the government ministry.
- The finances and management are regulated in the same way as any other government department.
- For example, railways, posts, etc.
- 2. Statutory Corporation:
- It is created by an Act of the parliament or the State legislature.

- The At defines the powers, functions, management structure, rules and regulations, and its relationship with the ministry.
- For example, LIC, ONGC, FCI, etc.
- 3. Government Companies:
- It refers to those companies where the government holds more than 50% of the shares and is registered under the Companies Act.
- It is fully governed but the Company's Act thereby giving more autonomy as compared to the other two.

***Role of PSUs:*(01:53:00 PM)**

- A. Promoting investments by directing them to correct usage and by earning profits and reinvesting those.
- B. To maintain price stability by ensuring a regular supply of goods and also producing them at affordable rates.
- C. To ensure larger industrial diversification including the provision of essential goods and services, If the private sector is given preference there could be relative under-investment in sectors important for the majority.
- D. To provide Balanced Regional Growth: PSUs will open up in the areas where the private sector may not invest.
- E. PSUs are important in strategic areas such as defense, Space, atomic energy, etc. as the control of these areas by private players can create adverse impacts on the economy and national securities.
- F. To promote technological development as the scale of investment in R&D and the risk involved is beyond the capacity of the individual investors.

***Issues with PSUs*:(02:21:00 PM)**

- *(Dictation from 03:26:00 PM)*
- 1. Pricing Strategy:
- Goods and services produced by the PSUs are priced using two approaches:
- a. Public Utility Approach: Where prices were kept equal or lesser than the cost incurred.
- Essential services and welfare goods were t be priced using this approach.
- b. Rate of Return Approach: Where the price is kept more than the cost.
- Most of the consumer goods & services considered non-essentials were to be priced using this approach.
- For example, hotels, Airlines, etc.
- Most of the goods and services were priced using the public utility approach even when they were not performing any welfare function.
- Also, there is a poor realization of user fees from the goods and services provided by the PSUs.
- 2. PSUs have consistent underutilization of capacity due to poor decision making which includes taking no decisions. (Threat of four Cs-
- 3. Vacancies at the top level and political interference.
- 4. Poor Planning and Choice of projects:
- PSUs often invest in projects without evaluating their financial and economic viability.
- Often there are delays and the delivery of projects due to the rigid organizational structure.
- 5. Issues with Personnel Management: Lack of incentives and poor disciplinary control over the workers create a poor work culture in PSUs leading to poor efficiency and productivity.

***Contribution of PSUs*:(03:15:00 PM)**

- PSU investments increased from less than 20% of total investment in 1951 to more than 65% in 1967 and remained upwards of 50% till 1991.
- Creation of infrastructure.
- Larger industrial diversification from roughly 6 industries in 1947 to more than 1000 industries in 1991.
- For example, Basic goods- Coal India Limited.
- Capital Goods, BHEL, BEL, HAL, etc.
- Consumer Goods, Modern Bread, HMT, etc.
- PSUs help in reducing inequalities by paying better to the workers in the lower and middle grades and also preventing the concentration of wealth in the hands of a few private players.
- It prevented the creation of natural monopolies in essential utility sectors such as railways, oil, gas, etc.
- A natural monopoly is a situation where one firm is sufficient to meet all demand requirements because the technology is such that the average cost falls over a very long range of output.
- It helps in saving foreign exchange reserves by producing goods domestically and reducing the demand for imports.

Industrial Growth from 1956 to 1981:(03:38:00 PM)

- Have control of the state in all industries.
- Private sectors were controlled by quotas, licenses, and permits.
- PSUs were doing all the functions, and import substituted industrialization was the dominant strategy.
- To promote Small Scale Industries new benefits were given:
- a. Tax concessions.
- b. Reservations of products- These are the class of goods that could be produced only by the SSIs.
- Initially, there were around 70-90 items were reserved, but by 1991 they reached more than 800 items!
- c. Larger Scale Industries were also restricted from production by quota restriction so that some amount may be produced by the SSIs.
- These two things led to the small size of all firms and industrial growth could not happen and we had the "Missing Middle".
- *(Dictation will be given in the next class)*

Topics for the next class: Continuation of Industrial policy.

Economics_PG Class 12

A Brief Overview of the Previous Class:(09:04:00 AM)

Problemes of Industries from 1956:(09:08:00 AM)

- *(Explained with charts and diagrams)*
- *(Dictation was given from 09:55:00 AM)*
- 1. The poor performance of PSUs created a shortage of raw materials and also imposed a heavy cost on the government which led to poor investments in the PSUs.
- 2. Excessive control of the State on the private sector created a massive shortage of consumer goods.
- Strict license, quota, and permit Raj created a strong barrier for entry and delayed decision making leading to inefficiency in production.
- 3. Since the Indian industry was protected from outside protection the production structure that was established in India was high cost and poor quality.
- 4. Increase in the regional imbalance as most of the industries were set up in those states which are already industrialized.
- Efforts made by the government to counter the imbalance by establishing PSUs did not work as the ecosystem for development was never established.
- 5. Due to the reservation policy of the small sector, there was a missing middle wrt the size of the industry which curtailed the growth of employment and entrepreneurship in India.
- 6. High Industrial sickness due to complex exit laws, also led to a huge waste of resources.

New Industry Policy, 1991:(10:06:00 AM)

- *(Explained with charts and diagrams)*
- It aims to create an environment for a progressive economy making use of the market to foster industrial growth.
- The objective was to dismantle the restrictive regulatory systems and unshackle the industrial economy from the cobweb of unnecessary bureaucratic control.
- The allocation of industry wrt to size, type, nature of products, production process, etc. was to be determined by market forces of competition and not controlled by the government.
- It attempted to limit the role of the public sector to only a few sectors of the economy as a result of this policy, the role of the state transformed from that of a provider to a regulator and facilitator.
- Some of the features of the policy are:
- Delicensing, de-reservation, liberalization of the foreign sector, reforms in PSUs via disinvestments and MoU system, and reforming the MRTP Act which was eventually replaced by the Competition Act, of 2002.

Role of the State:(10:26:00 AM)

- *(Explained with charts and diagrams)*
- *(Dictation was given from 10:52:00 AM)*
- Create the Market
- Regulate the Market.
- Stabilize the Market.
- Legitimize the Market.
- Compliment the market- by either providing essential services and Provider of goods & services.
- *Independent Sector Regulators:*
- Regulatory agencies are quasi-legislative, quasi-executive, and quasi-judicial bodies that are mostly established by the law of the Parliament.

- The role of these bodies are:
- a. To lay down the rules and regulations to create a level playing field among all participants in the sector.
- b. To enable and facilitates investments and growth in the sector by ensuring ease of doing business.
- c. To protect the rights of all stakeholders.
- d. To prevent the exploitation of the consumers. For example, SEBI, TRAI, etc.
- There are a few sectors where the government ministry is the regulator as there has been no independent regulator constituted for that sector.

Dis-Investments:(11:13:00 AM)

- *(Explained with charts and diagrams)*
- *(Dictation was given from 11:23:00 AM)*
- The dilution of the government shareholding in any public sector enterprise is called disinvestment.
- It can be of the following types:
- a. Minority Sale: There the government shareholding remains upwards of 75% even after the disinvestment.
- b. Strategic minority sale: Where the government shareholding is between 50 to 75%.
- Here the government is giving certain decision-making powers, as some of the important decisions of the company have to be taken with 75% of the majority.
- c. Privatization or Strategic dis-investments: The government's shareholdings fall below 50% and the management and the ownership structure are shifted to the private hands.
- d. Strategic sale: Where the government sells the complete company or corporation to one private player.
- It includes the transfer of all assets and liabilities of the company.

The rationale for the Dis-Investments: (11:26:00 AM)

- *(Explained with charts and diagrams)*
- a. Government has no business to be in business.
- The major role of the government is to provide basic law and order, education, health care, etc.
- b. Dis-investment can provide funds that can be used for re-investments in the PSUs or any other productive purposes.
- c. Listing on the stock exchange brings transparency in the management of the PSU, this enforces market discipline on them.
- d. It provides an opportunity for retail investors to generate wealth along with the growth of the PSUs.
- e. It can be used as a policy signal regarding the future decisions of the government.

Issues in Dis-investments:(11:47:00 AM)

- *(Explained with charts and diagrams)*
- a. The Choice of PSUs & the Extent of Dis-investments is not backed by a concrete plan.
- b. The undervaluation of companies to be disinvested can lead to substantial losses to the government.
- c. The proceeds of disinvestment are often used to meet the fiscal deficit targets and not used in any productive activities.
- d. Several PSUs are placed in strategic areas and also provide welfare services, this might be compromised in the case of privatization.
- e. Strategic selling of the government PSUs provides an opportunity to consolidate the market power and can lead to a monopoly-like situation which can be detrimental for the consumers.

Topics for the next class: Infrastructure-PPP Model.

Economics_PG Class 13

INDUSTRY (1:07 PM)

- **Leftover Portions will cover in coming classes**

INFRASTRUCTURE (1:08 PM)

- What/Why
- PPP Models
- Power
- Gas/Oil
- Road
- Rail
- Water Transport
- Smart cities

- Infrastructure is a framework of facilities through which goods and services are provided to the people.
- It is an umbrella term for the activities which are referred to as social overhead capital which means these activities are not produced directly but are necessary for the development of productive activities such as agriculture, industry, and services.
- Physical Infrastructure includes all those activities which directly help in the production process by the creation of tangible assets.
- Examples: Power, Transport, Communication, Etc.
- Social Infrastructure includes all those activities which help in the production in an indirect manner through the creation of intangible services. Example, Education, Health care, etc.
- **Infrastructure can impact economic development in two different ways:**
- Sectoral contribution of Infrastructure to GDP through backward and forward linkages.
- Infrastructure investment produces positive externalities creating immense opportunities for all sections of society.
- Infrastructure lowers the production cost by generating power that allows the factory to mechanize and improves the productivity of factors of production and provides the networks through which information can flow.
- **How Infrastructure helps human development:**
- It impacts human development in 2 ways:
- It supports the processes of growth on which much of poverty reduction depends.
- It helps in accessing the basic services which can improve the quality of life and standard of living.

PPP (1:39 PM)

- It refers to the provision of Public goods and services by a private partner who has been given the right (concession) for this purpose for a specified period on the basis of market revenue streams that allow a commercial return on investment.
- The Private player is expected to bring capital and also infuse new technology so as to generate efficiency gains and also build world-class infrastructure through their management and professional operational skills.
- The role of the public sector is to decide the nature of the project, provide necessary regulatory permissions, and maintains the public nature of the service by deciding the tariffs, the exemption for a few categories, and monitoring and evaluating the projects.

PPP Models

- Kindly refer to the Handouts
- **Hybrid Annuity Project-**
- It is a combination of BOT and EPC where 40% of capital is contributed by the government and 60% of the capital will be brought by the private player.
- The revenue collection will be the responsibility of the government and the private sector will receive annual payments based on the performance.
- This model ensures that there is rational risk allocation between the two partners.

Swiss challenge: (2:14 PM)

- It is a bidding process designed to encourage private sector initiatives with infrastructure projects. The original proponent of the project makes an offer to the government out of its own accord (unsolicited)
- The government can call an auction for the same project to get the best price (challenge)
- The original proponent then gets a chance to match any superior offer given by the third party (right of refusal)
- Due to information asymmetry which creates a lack of transparency and lack of fair and equal treatment of the potential bidders, this is actively discouraged.
- The **Vijay Kelkar committee on PPP** discouraged the use of the Swiss challenge in infrastructure projects due to the absence of strong governance and regulatory frameworks in India.
- However, this is used in insolvency, and bankruptcy projects under the pre-packaged insolvency and resolution process.
- **Viability Gap Funding**
- VGF refers to a one-time capital grant for even a deferred grant provided by the government in certain PPP projects.
- These projects have economic viability but fall short of financial viability due to the long gestation of the project and the inability of the private player to increase the user charges.
- This catalytic grant assistance is available only for infrastructure projects where the private sector sponsors are selected through a process of competitive bidding.
- The government engages a lead financial institution for regular monitoring and periodic evaluation of the project.

- The viability Gap Fund is dispersed only after the private company has utilized the complete equity contribution required for the project.

ISSUES WITH PPP IN INDIA (3:25 PM)

- **Issues with design or agreements:**
- The government has a model concessionaire agreement in all sectors and therefore the project-specific risk is rarely addressed by the government.
- The one size fits all approach has inadequate provisions for legal and contractual issues such as exit clauses, default by parties, change of scope-related events, etc.
- The framework to assess the project risk and allocation between stakeholders has not been effectively developed.
- **Issues with legal and regulatory frameworks:**
- Some sectors have multiple frameworks and there exists a significant overlap in their functions which creates a problem for the private player.
- Some sectors such as urban governance are yet to develop a regulatory framework.
- Dispute resolution mechanisms are slow and not very well developed.
- There are several issues with land acquisition, environmental clearances, and right-of-way issues.
- **Financing issues:**
- Most of the PPP projects are financed by the banks with very less capital infusion by the promoters.
- The underdeveloped debt markets in India are a major issue of lack of long-term financing
- **The issue with the Private sector:**
- Over-aggressive bidding with inadequate due diligence led to unviable offers which failed later.
- Private sector developers were mainly construction experts and did not have an understanding of the long-term operation or maintenance of the assets.

Recommendation of Vijay Kelkar committee:

- Creation of a **National institution called 3PI** (a PPP institute of excellence) to function as the center of excellence that enables research, creates sophisticated models of contracts, and designs dispute resolution mechanisms.
- Setting up **Independent sector regulators** with a unified mandate that encompasses different infrastructural sub-sectors to ensure harmonized performances.
- Rational allocation of risks among various stakeholders and **project-specific risk assessment** should be undertaken
- An **Infrastructure PPP Project Review committee** to re-evaluate the stuck PPP projects and provide the recommendation for reviving them.
- An **Infrastructure PPP adjudication tribunal** with the participation of judicial and technical members to resolve the disputes between government and private players.

TOPIC FOR THE NEXT CLASS: WILL COMPLETE THE INDUSTRY PART IN THE NEXT CLASS

Economics_PG Class 14

***A Brief Overview of the Previous Class & Answered Queries*:(01:06:00 PM)**

***Short Comings of IPR 1991*:(01:15:00 PM)**

- The policy missed out on the employment generation of the industry.
- The comparative advantage of Indian industry(cheap labor) was completely missed out.
- The link between agriculture and industry did not get any support from the government.
- Most of the industries that developed after 1991 were capital-intensive industries that have nothing to do with agriculture.
- For example, petrochemicals.
- The policy relaxed the entry barriers but did not talk about the exit of units from the market.
- An exit policy is important to reduce the strain on weak units and also important for the new players as no rational producer will enter a market it can not exit.
- R&D makes the industry productive in terms of resource use, processes, and products.
- The policy missed out on two key aspects in this domain- The size of the investment and the sources from which it will be financed, and the matter of Intellectual Property Rights protection in the form of Patents, copyrights, etc.
- There were no specific provisions for increasing exports by targeting any specific sector.
- Therefore the industrial growth promoted by this policy was capital-intensive, import-intensive, and energy intensive.

***Clustered Based Development*:(01:44:00 PM)**

- *SEZ- Special Ecomonic Zones:*
- It is specifically delineated, duty-free enclaves, and deemed to be foreign territory for the purpose of trade operations and duties and tariffs.
- This meant that there was no import duty on goods and services coming into the SEZs and their production was meant for exports.

- SEZ is the model for export-led growth.

***National Manufacturing Policy(NMP), 2011*:(02:04:00 PM)**

- *National Investment and Manufacturing Zones(NIMZ):*
- It is a greenfield industrial township that will cluster small and large manufacturers in one place.
- The units will get the shared infrastructure and can foster a collaborative working model across different players along the value chain.
- This clustered-based approach helps reduce cost, and transportation time, achieve economies of scale, exchange technology, and gain expertise.
- The NIMZ would have a minimum area of 5000 hectares and the state governments would be responsible for providing the basic infrastructure and services.

***Make In India, 2015*:(02:18:00 PM)**

- It aims to increase the manufacturing sector growth to 12 -14% per annum and achieve a 25% contribution to GDP by 2025.
- It also aims to 100 million additional jobs in manufacturing by 2022.
- It has four major features:
- *1. New Processes:*
- It recognized Ease of Doing Business (EODB) as the single most important factor to promote entrepreneurship.
- The aim is to improve regulatory policies during the entire life cycle of a business.
- *2. New Infrastructure:*
- Here the government intends to develop high-speed communication and integrated logistics arrangements.
- *3. New Sectors:*
- The govt has identified 25 sectors for targeted and focused development.
- *4. New Mindset:*
- By bringing a paradigm shift in how government interacts with the industry.
- The approach will be that of a facilitator and not a regulator.
- Even foreign investments will be promoted under Make in India.

***Policy of Atma-Nirbhar Bharat:*(02:38:00 PM)**

- 1. Production Linked Incentives(PIL): The incentives given by the government under this scheme are directly linked to the production capacity or incremental turnover.
- It has three major pillars:
- a. Creation of large scale manufacturing capacities(national Champions).
- b. Import Substitution and increase in exports.
- c. Create 60 lac new jobs in the next 5 years.
- The scheme has been announced for 14 sectors including mobile manufacturing, active pharmaceutical ingredients, electronic products, textiles, etc.
- However, there are certain issues and concerns raised regarding the scheme:
- a. The involvement of the government in selecting the firms finalizing the targets and also monitoring the targets means an opportunity for administrative discretion which might lead to corruption.
- b. Most of the sectors selected are capital-intensive sectors, therefore, ignoring employment generation.
- c. Therefore concerns regarding exit from the scheme as there might be scenarios where the industry lobbies for continuous support and might threaten exit from Indian if support is withdrawn.
- Apart from PLI the government has been consistently increasing the import duties for a range of products to increase domestic value addition.
- Also, the government is focussing on strengthening the bilateral trade with various countries and not participating in regional trade agreements such as RCEP and IPEF.

***Pre-Mature De-industrialization/Stagnation in India:*(03:17:00 PM)**

- Not only the number of people employed in industries are very less but also we are de-industrializing/stabilizing at a very low level of income.
- Investments in industries are vow in India beacuse:
- a. Poor logistics- It is 13 to 14% of GDP. So cost is high in transport/movement of goods.
- Road is dominating mean but there are good and congested.
- b. Issues in power availability: Then backups (Diesel generators) add to the cost further.
- c. Factor Market Rigidities:
- Land- Acquisition and Encroachments/By law issues.
- Labor- lack of skilled labor- Because of lack of education-industry linkages, etc.
- Capital- High cost of capital- because of consistent inflationary pressure- So RBI has to increase policy rates.

- Entrepreneurship- Lack of skills and leadership/management skills.
- d. Regulatory Issues:
- Taxation disputes like Vodafone, Cairn India, etc.
- Poor Contract Enforcement- For example, Amazon- Future deal.
- Land Acquisition and Environmental clearance.
- e. Demand- Demand is for either very luxurious(High quality) items or Low quality/very cheap items.
- So there is no demand for middle-level goods- So no one is investing in middle-level industries.
- This is due to very high-income inequalities.
- *(Dictations will be given in the next class)*

Topics for the next class: Continuation of Industry.

Economics_PG Class 15

A Brief Overview of the Previous Class:(01:04:00 PM)

Issues with Industrialisation in India:(01:05:00 PM)

- *Infrastructure Bottlenecks:*
- Lack of availability of quality roads, rails, and port infrastructure, increases the logistics cost(13-14% of GDP) thereby compromising the competitiveness of the products.
- A significant proportion of manufacturing units have to put up to 100% power backup facilities which not only increases their capital cost but also costs more than the cost of electricity supplied by the DISCOMS.
- *Factor Market Rigidities:*
- Caused due to poor availability of land.
- High cost of credit.
- Lack of skils demdned in hte industry.
- *Poor Regulatory Policies:*
- A complex regulatory infrastructure leads to a poor Ease of Doing Business in India.
- For example, contract enforcement, taxation laws, environmental policies, etc.
- *Exchange Rate Fluctuations:*
- An increase in FPIs in India leads to an appreciation in Rupee that results in a decline in revenue and profit for export-oriented industries.
- Since these FPIs are volatile their exit can lead to an increase in the cost of imports.
- *Demand Side Constraints:*
- Lack of Poverty elimination and high inequality has led to market segmentation in India.
- The demand for the top 1% is made via imports and some large-scale industries, whereas the small-sized industry provides goods to the majority of the population.
- The demand of these households is constrained by low purchasing power and therefore the small-sized industry remains trapped in a cycle of poor-quality production, outdated technology, and low levels of profitability.
- Also, the implication of this is that there is no expansion of the industry.
- Q: Discuss the reasons for the growth of the service sector industry in India post-1991 reforms. (10 Marks/150 Words)

Tiger Economies:(01:28:00 PM)

- China-Taiwan, South Korea, Japan, Singapore- All these combined are called the 'Tiger Economies'.
- They have upwards of 30% of GDP contribution by manufacturing.
- Q: Economic growth in the recent past has been led by an increase in labor productivity. Explain. Suggest the growth pattern that will lead to the creation of more jobs without compromising labor productivity. (15 Marks/250 Words)
- Q: Account for the failure of the manufacturing sector in achieving the goal of labor-intensive exports rather than capital-intensive exports. Suggests measures for more labor-intensive exports than capital-intensive exports. (15 Marks/250 Words)
- The brief approach to deal with the above questions was discussed based on all concepts discussed in Industry.

Power Sector:(02:19:00 PM)

- The power sector has the following major domains:
- *1. Generation:*
- It is the process of producing power using different fuels and is done in generating plants.
- Many different energy sources are used to generate power.
- These include coal, natural gas, hydro, nuclear, and renewables (Solar, wind, small hydro, and biomass).
- It is done by State PSUs, Centre PSUs, and Private(IPP).
- *2. Transmission:*

- Transmission utilities carry bulk power from the generation plants to the distribution substations through the grid at high voltages.
- It is carried out mostly by central and state companies.
- CTU-PGCIL, State Transmission Units, and Private transmission lines.
- *3. Distribution:*
- Distribution utilities supply electricity from the substations to the consumers through distribution networks. Distribution is the selling stage and operates at lower voltages.
- State Discoms, Private Discoms.

***Sources of Power Generation*:(02:58:00 PM)**

- Total generation capacity in India- 409 GW.
- 1. Fossil Fuel:
- Coal- 204 GW.
- Natural Gas- 24.89 GW.
- Lignite- 6.620 GW.
- Diesel- 0.510 GW.
- 2. Non-Fossil:
- a. Renewable:
- b. Non-renewable-
- Sectorwise generation of power in India:
-

Sector	MW	% of Total
Central Sector	99,005	24.2%
State Sector	1,04,918	25.6%
Private Sector	2,05,238	50.2%
Total	**4,09,161**	

CATEGORY	INSTALLED GENERATION CAPACITY(MW)	% of SHARE IN Total
Fossil Fuel		
Coal	203,985	49.9%
Lignite	6,620	1.6%
Gas	24,824	6.1%

CATEGORY	INSTALLED GENERATION CAPACITY(MW)	% of SHARE IN Total
Diesel	589	0.1%
Total Fossil Fuel	**2,36,019**	**57.9%**
Non-Fossil Fuel		
RES (Incl. Hydro)	**166,362**	40.7%
Hydro	**46,850**	**11.5 %**
Wind, Solar & Other RE	119,512	29.2 %
Wind	41,895	10.2 %
Solar	61,966	15.1 %
BM Power/Cogen	10,206	2.5 %
Waste to Energy	520	0.1 %
Small Hydro Power	4,925	1.2 %
Nuclear	6,780	1.7%
Total Non-Fossil Fuel	**173,142**	42.3%

- Renewable Energy Sources:
- These are the on-grid or off-grid systems.
- Offgrid systems are stand-alone projects mostly in remote locations example rooftops solar, waste-to-energy projects, etc.
- Renewable energy can be priced using two approaches:
- *a. Feed and Tariffs:* Where the government decides the tariff at which the DISCOMs will buy the electricity from the supplier.
- *b. Reverse Auction:* The price of electricity is decided by an auction where the suppliers bid for distribution.
- This introduces competition as it is an open bid mechanism where the supplier can revise its bid.
- This system pushes the price towards the production cost as the suppliers are better informed of their cost and therefore in a better position to estimate what a tariff should be.

Power Purchase Agreement(PPA):(03:22:00 PM)

- *Shakti*(Scheme for harnessing and allocation of Koyala Tranparenctly in India):
- Under this policy, freedom is given to independent power producers to source their coal(fuel supply arrangements) via transparent auctions in the market.
- Independent power producers without a PPA Purchase Power Agreement enter the auction on the base price set by the coal company.
- *Power Purchase Agreement:*
- It is an agreement between the generator and the distribution companies.
- Each PPA includes the price at which electricity would b purchased, a mechanism for adjustment of price for select events, and other rights and obligations of both parties.
- These agreements are long-term in nature(roughly around 20-25 years).
- The transmission of electricity is largely a government-controlled function primarily controlled by the center and State companies.
- The transmission segment was separated from Central Generation Agency in 1989 when the Power Grid Corporation Of India was set up.
- Power Grid is responsible for the planning, implementation, operation, and maintenance of interstate transmission systems, and the operation of National and regional power grids.
- Open Access(OA): The Electricity Act, of 2003 allows for the OA, which enables consumers to buy power from any power generating plant through non-discriminatory access to transmission and distribution lines in a manner specified by the state regulator.

- The Nodal Dispatch Agency is the National Load Dispatch Centre(NLDC) which manages the scheduling and dispatch of electricity over interregional links and monitors the National Transmission Grid.
- It also provides transmission access to the power exchanges.
- The Regional Load Dispatch Centres manage the operation of power system grids in the respective regions.

Topics for the next Class: Continuation of the Power sector.

Economics_PG Class 16

[9:03 AM] Brief Recap and Doubts session

Power Generation, Transmission, and Distribution:

- Structure: Generation (central PSUs, State PSUs, private) ->Transmission (CTU, State, private) -> Distribution (state discoms and private discoms) -> consumers
- Open access - non-discriminatory access to transmission and distribution
- Renewable energy pricing - feed-in tariff and reverse auctioning
- Coal linkage - open bids, SHAKTI,
- Off-grid system and on-grid system - Net metering will be in on-grid metering only
- Electricity Act 2003 - multiple licenses - state discoms and private discoms - supply and distribution-network infrastructure - ensure optimum competition
- Central electricity authority - deals with the technical parameters for generation, transmission, and distribution
- State electricity regulatory commission and central electricity regulatory commission (CERC/SERC) - deal with the tariffs - thus no autonomy of tariffs with the discoms.
- Appellate tribunal for electricity in India (APTEL) - deals with the dispute with CERC and SERC, also deals with the disputes of PNGRB (petroleum and natural gas regulatory body)

[9:26 AM] Ditribution:

- Includes the maintenance of the distribution network and retail supply of electricity to the consumers.
- It is mostly carried out by state-owned distribution companies, however, **Electricity Act 2003** allows for private discoms but with their own distribution network.
- Private discoms are operational in multiple cities such as Delhi, Ahmedabad, Kolkata, Mumbai, etc.

Regulation in Electricity:

- The **Electricity Act 2003** is the primary law regulating the sector
- the various regulator present in the sector are -
- ***1. Central Electricity Authority (CEA)*** - it is a statutory organization that was constituted under the Electricity Supply Act of 1948 and continued under EA 2003. Some of its functions are -
- i) advice the central govt on matters relating to national electricity policy.
- ii) specifying technical standards and safety requirements for the construction and maintenance of electricity plants, lines, and connectivity to the grid.
- iii) specify the grid standards for the operation and maintenance of transmission lines.
- iv) specify the conditions for the installation of meters, and transmission and supply of electricity
- ***2. Central Electricity Regulatory Commission -*** it was established under the Electricity Regulatory Commission Act 1998 and continued under EA 2003, Functions -
- i) regulate tariffs for generating companies owned by the central govt
- ii) regulate inter-state transmission including decisions on tariffs on the same.
- iii) to issue a license for inter-state transmission and electricity trading.
- iv) to adjudicate disputes involving generating companies and transmission licensees.
- v) they also advise the central govt on the national electricity policy
- ***3. State Electricity Regulatory Commission -*** constituted by the state govts for determination of tariffs and grant of license at the state level.
- Their major functions include -
- i) determining the tariff for the generation, supply, and transmission of electricity within the state.
- ii) issue license for intra-state transmission, distribution, and trading
- ***4. APTEL - Appellate Tribunal for Electricity -*** set up under EA 2003. It hears and disposes of appeals against orders of CERC, SERC, and JERC.
- ***5. Joint Electricity Regulatory Commission -*** it is constituted for all UTs, (except for Delhi) and the state of Goa
- **Power Exchange:**
- There are three PE in India that is - India Energy Exchange, Power Exchange of India Limited, and Hindustan Power Exchange Limited.
- They Facilitate an automated online platform for the physical delivery of electricity.

- They deal in various product segments such as - day-ahead contracts, term-ahead contracts, renewable energy certificates, energy-saving certificates, etc.

[9:51 AM] Issues:
- **Distribution:**
- Cost of supply, and Revenue Generated (ACS - ARR gap = -0.3 rs per unit)
- The cost of supply is decided by the **Power Purchase Agreement** - fixed component and variable cost, after 1991 the electricity generating capacity was very low so the govt wanted a lot of private producers and state producers to increase their generation capacity.
- **Fixed component** - capital cost return, operation, and maintenance + 16% return on equity
- **Variable component** - on supply of electricity.
- Discoms have to purchase as per the PPA and a certain portion from renewable energy under the renewable energy obligation
- Renewable energy generation must-run plants, which means plants have to run these plants and discoms have to buy electricity from them
- PPAs are for 20 years - which will not be renegotiated on the decrease in the tariffs of renewable energy and the cost of coal (volatile in the international market)
- Cross Subsidy - Agriculture and domestic consumption and Industrial consumption
- High AT&C losses

[10:26 AM] Issues with Power Sector:
- **1. High cost of electricity** - due to fixed-term power purchase agreement and renewable purchase obligations
- 2. A **differential tariff structure and the high incidence of cross-subsidy** lead to poor revenue realization since the tariff does not reflect the true cost of supply, Discoms in India have an ACS-ARR gap (Avg cost of supply - avg revenue realized) of -0.3 per unit, that is 30 paise per unit negative.
- 3. Discoms in India have a very **high aggregate technical and commercial loss** (more than 20%). The AT&C loss reflects the ratio of power for which the Discoms did not receive any money to the total electricity procured by the utility.
- **The reasons for this loss are** - less investment in the distribution network which results in overloaded systems leading to high technical losses, **Theft, and pilferage of power** along with poor metering and bill collection are reasons for high commercial losses, billing efficiency is roughly 85% and collection is 92%.
- 4. India does not have one market of power as the state levy a huge surcharge on powers bought from other states which reduces the overall efficiency of the system

[10:45 AM] Issues With Transmission:
- Bottlenecks in transmission networks due to poor Infrastructure lead to a loss of power
- The intermittency and the lack of scientific techniques to predict the availability of renewable energy creates a problem in maintaining grid discipline.

[11:18 AM] Issues in Generation:
- The thermal power plants in India have a low capacity utilization. It was 78% in 2009-10 and it is roughly 60% in 2020-21.
- A low **plant load factor** (PLF) implies that the thermal plants are lying idle thereby incurring huge fixed costs.
- **Reasons for Low PLF:**
- Poor financial conditions of DISCOMs are resulting in suppressed demand for power and delayed payments.
- Substantive fall in renewable energy tariffs and its low gestation period is posing a threat to the economic viability of thermal power plants.
- High cost of imported coal.
- The declining share of hydropower which has reduced from 25% in 2007-08 to 13% in 2018-19 to 11% in 2020-21 is leading to a deteriorating power situation in the NE and Hilly states.
- the generation of electricity from natural gas is very low because of the poor availability of natural gas. (In India natural gas allocation happens as per govt policy)

[11:31 AM] Solutions:
- **Smart Metering** - a smart meter is a two-way communication digital device, it is a part of the advanced metering infrastructure which also has data collection systems at DISCOMs and communication networks to ensure better collection efficiency.
- **Feeder Separation -** separating the distribution units for different categories of consumers.
- **Green Energy Corridor** and renewable energy management centers to ensure better integration of renewable energy into the transmission networks.
- **Market-Based Economic Dispatch** - presently the DISCOM contracts capacity in long-term PPAs but schedules the power in a day-ahead time horizon, this system has a lot of inefficiencies -

- i) self-scheduling restricts the visibility of low-cost generation available with other generators
- ii) costlier generation is used despite the availability of cheaper generation
- iii) since every DISCOM is scheduling its own power the true cost of generation in the country will not be known.
- iv) self-scheduling constraints optimum utilization of renewable sources as the visibility of DISCOM is limited to its own territory, and surplus renewable energy in the state is curtailed.
- In the market-based economic dispatch system, the sellers would be required to submit the price at which they are willing to supply and the buyers bid good indicates the quantum of electricity they are willing to buy at a particular price. Therefore there would be a uniform price for electricity.

Next Class Topics - General Network Access
Economics_PG Class 17

The electricity amendment bill, 2022 [05:11 PM]

- **i) Multiple DISCOMS in the same area: T**he bill provides for multiple distribution licensees without having to bring their own distribution network.
- A DISCOM must provide non-discriminatory open access to its network to all other DISCOMS operating in the area.
- ii) Upon grant of multiple licenses the power and associated cost as per the existing PPAs will be shared between all DISCOMS.
- iii) The SERC will prescribe the maximum and the minimum tariff in the state.
- iv) **Cross-subsidy balancing fund** - Any surplus with the distribution licensee on account of cross-subsidy will be deposited in the fund which will be used to finance deficits and cross-subsidy for other DISCOMS.
- v) **CERC** will grant licenses for the distribution of electricity in more than one state.
- vi) **Payment security** - No electricity will be dispatched to the DISCOMS if adequate payment security is not provided. The central govt will prescribe the rules for the same.
- viii) Central govt will prescribe a minimum **renewable purchase obligation (RPO).** Failure to meet the RPO will be punishable by a penalty.

General network access [05:45 PM]

- Presently the power producers have to declare their point of supply and accordingly the transmission is built.
- Most states change their plans for sourcing power and generators usually end up selling on nonplanned networks. This leads to a surplus on one network and a deficit on another leading to congestion in the whole transmission network.
- Under general network access all units will be allowed to have transmission access and the transmission capacity will be added based on projections made by all states.

Oil and Gas [05:50 PM]

- **Pricing of crude, Petrol, and Diesel in India:**
- **pricing of petrol and diesel**
- Petrol and diesel prices are deregulated in India.
- The refined price is based on the trade parity price which is 80% import parity price(IPP) and 20% of the export parity price(EPP).
- The **IPP** includes free-on-board (FOB) price, Custom charges, insurance costs, trade charges, etc.
- The **EPP** includes the FOB price from India.
- The trade parity price is converted into rupees and taxes, inland freight, dealer margin, and marketing cost are added to arrive at the final price of Petrol and Diesel.
- **LPG** in India is priced on IPP where the FOB price is the price of Saudi Arabia's Aramco.
- This IPP is converted into rupees and inland freight, marketing cost, bottling charges, dealer's margin, and taxes are added to arrive at the final price.
- **Domestic Crude**
- Till October 2022, the marketing of domestic crude is determined by the govt thereby giving very less freedom to the domestic producers to decide the price, and therefore the price was decided on the international benchmark.
- IPP was the final price given to the domestic refiners.
- After October 2022, all producer companies are free to sell their crude at whatever price they deem fit.
- They can also conduct auctions for the same.
- **Shale Oil and Gas**
- **Shale Oil** is found in shale source rock that has not been exposed to heat or pressure long enough to convert trapped hydrocarbons into crude oil.
- It is estimated that a number of sedimentary basins (**Gangetic plain, Gujarat, Rajasthan, Andhra Pradesh, and other coastal areas**) in India, including the hydrocarbon-bearing ones **– Cambay,**

Assam-Arakan and Damodar estimates of shale gas and oil are prospective from shale oil and gas point of view in the Indian sedimentary basins.

- ONGC in August 2013 estimated Shale Gas resources of 187.5 TCF for 5 basins **namely Cambay, Krishna Godavari, Cauvery, Ganga, and Assam**
- **Gas Hydrates:**
- **Gas hydrates** are **naturally occurring, crystalline, ice-like substances** composed of **gas molecules** (methane, ethane, propane, etc.) held in a **cage-like ice structure**. (clathrate). Hydrates are a concentrated form of natural gas compared with compressed gas, but less concentrated than liquefied natural gas.
- They are found abundantly worldwide in the **top few hundred meters of sediment beneath continental margins** at water depths between a few hundred and a few thousand feet and **mainly in permafrost areas**.
- In India, Gas hydrate research and exploratory activities are being steered by the **Ministry of Petroleum & Natural Gas under National Gas Hydrate Program (NGHP).**
- The presence of Gas Hydrate is established **in Krishna Godavari, Mahanadi, Gulf of Mannar, and Andaman Basin.**

Next Class: Government policy in the gas sector
Economics_PG Class 18

Gas sector:(1:13:35 PM):

- The regulator of production and exploration activities is the directorate general of hydrocarbon which was established under the administrative control of the ministry of petroleum and Natural gas by a government resolution in 1993.
- **Policy regime for gas exploration and production:**
- **The nominated regime and Pre NELP regime**
- Blocks awarded prior to NELP are covered under these 2 regimes.
- Under a Nomination regime, blocks were awarded only to NOCs.
- Under the exploration rounds of pre-NELP, blocks were awarded to private companies and the NOCs have the right to participate after the discoveries were made.
- Under the development round of Pre NELP, mining licenses were given to private players for small and medium-sized recovery(those which had already been discovered by NOCs)
- **New Exploration Licensing Policy:**
- Blocks were awarded under international competitive bidding to both NOCs and private players with no preferential treatment to national oil companies.
- 100 percent FDI is allowed.
- Covered only conventional resources.
- For unconventional resources, there were separate policies.
- The blocks were awarded under a production string contract where the government share was determined from Proft petroleum after the deduction of the cost.
- **Profit petroleum** is a type of non-tax revenue received by the central government out of the profit generated on account of the production of oil and gas from the fields awarded by the government under a production-sharing contract.

Pricing of Natural Gas:(1:46:01 PM):

- The price of natural gas coming from nominated blocks, preNELP, and NELP blocks is decided by the government based on international benchmarks.
- Volume weighted average of 4 international benchmarks i.e. Henry Hub, Alberta Gas-Canada, National balancing point-Uk, and EU and Russian gas.
- **Domestic gas price= Vhh*Phh +Vac*Pac + Vnbp*Pnbp+ Vr*Pr upon Vhh+Vac+Vnbp+Vr.**
- This price is revised every 6 months based on last year's data applicable with a lag of 1 quarter.
- The marketing of the gas coming from these 3 types of blocks is decided by the government through its gas allocation policy.
- Gas in India is used for 3 major purposes i.e. fertilizer, power, and city gas distribution network.
- **Issues with NELP:**
- Separate policies and licenses for different hydrocarbons create inefficiency because by exploring 1 type of hydrocarbon if a different one is found, a separate license would be required.
- Since production sharing requires the profit to be measured, it becomes necessary to account for the cost to prevent any loss of government revenue.
- Therefore there are requirements for government approvals at various stages and activities which cannot be done until they are approved.
- This leads to delays and disputes.
- Exploration is confined to the blocks which have been put on tender by the government.
- The companies have no freedom to decide the areas they may like to pursue exploration.

- No pricing and marketing freedom.
- While fixing the royalties the policy doesn't distinguish between the shallow fields, whose cost is lower, and Deep and ultra-deep fields where cost is much higher.

HELP (2:19:26 PM):

- Single licensing for the production, exploration, and marketing of hydrocarbons.
- Open Acreage licensing policy.
- Option for a hydrocarbon company to select the apt exploration blocks without waiting for the formal bid from the government.
- **Revenue sharing model:**
- Where the government will not be concerned with the cost incurred and will receive a share of gross revenue.
- Bidders will be required revenue share which will be the key parameter for selecting the winning bid.
- Marketing and pricing freedom to the gas production starting from 1st Jan 2016.
- There will be a ceiling price limit for gas from deep water, ultra-deep and high temperature, and high-pressure areas.
- **The ceiling price will be revised every 6 months and shall be the lowest of the:**
- Fuel oil import landed price.
- Weighted average import landed price of substitute fuels.(0.3 into the price of imported coal + 0.4 into the price of imported fuel oil + 0.3 into imported Naptha)
- LNG imported landed price.
- A concessional royalty regime for difficult fields.
- An auction of a Reconnaissance contract to undertake exploration activities and seismic surveys and exploratory drilling. (3 years).

Planning in India:(2:50:26 PM):

- **History of Planning:**
- **National Planning committee** under the chairmanship of JN Nehru.
- Under Nehru, The committee produced a series of reports related to economic development.
- **Some of its recommendations were:**
- The state should control our own key industries.
- Special focus on agriculture.
- Planning should aim at doubling the standard of living of people in 10 years.
- **Bombay Plan:**
- Some of the industrialists conceived a plan of economic development that aimed to triple India's GDP in 15 years.
- The plan argued for a mixed economy model where the private sector would be in charge of a few consumer goods and the state would take responsibility for all basic and capital goods industries.
- The plan argued for heavy government control in all aspects of economic activity.
- It even argued for the nationalization of various industries.
- **Gandhian plan:1944-45:**
- Formulated by SN Aggarwal and based on the ideas of Gandhi.
- Economic vision>>Rejuvenated villages, investment in agriculture, and growth of cottage industries.
- Favored tight control of the state.
- **Peoples plan:**
- Favored nationalization of all means of production.
- Given by MN Roy.

Socio-economic profile of India-1947:(3:47:59 PM):

- Overwhelmingly rural with almost 85 percent of the population living in villages and deriving their livelihood from agriculture and related pursuits.
- Even with a large percentage of people in agriculture, the country was not self-sufficient in food or raw material for the industries.
- Illiteracy was as high as 84 percent.
- The majority of children (60 percent) in the age group 6 to 11 did not attend school.
- Mass communicable diseases were rampant and in the absence of a good public health system, mortality rates were as high as 27 per thousand.
- Issues with the private sector;>> market failure:
- The tragedy of commons.
- Positive and negative externality.
- Information asymmetry.
- Professional services monopolies like Doctors, etc.
- Services like Education and health are impacted if Private dominate.

Next class-Need for Planning, the process of Planning.
Economics_PG Class 19

A Brief Overview of the Previous Class:(01:02:00 PM)
Rationale for Planning:(01:04:00 PM)

- *(Explained with diagrams & charts)*
- *(Dictation from 01:41:00 PM)*
- There was a need for the equitable distribution of resources and the prevention of the concentration of wealth.
- The basic constraint on the development was the acute deficiency of capital which prevented the introduction of productive technology in the economy.
- The state via central allocation would provide for this.
- There was a need for infrastructural development and a diversified industrial base to ensure equitable regional growth.
- Planning was required to counter the various instances of market failure. The various market failures include:
- a. Market control or monopoly- the dominant role of one or two suppliers can lead to an opaque price setting leading to the exploitation of consumers.
- b. Provision of public goods- Public goods are characterized by the features of nonrivalrous and nonexcludable consumption.
- Non-rival consumption means the goods/service do not get reduced if consumed by one individual.
- Non-excludable means nobody can be excluded from the consumption of that good or service.
- Note- Non-rival but excludable are called Club Goods. For example, cinema halls.
- Non-excludable but rivals are called Common goods. For example, fish in a river.
- Information Asymmetry- It exists when one party has more information about the good or service than the other party.
- In this scenario, the correct price can not be determined by the forces of supply and demand.
- Externalities- There are some costs and benefits in the provision of goods and services that can not be taken into account by the market system.
- For example, primary education and health care have positive externalities, whereas pollution-creating industries and recreational drugs have negative externalities.
- The market can not be relied upon for the provision of goods having positive externalities.
- The tragedy of Commons: Given a free hand private players may neglect the well-being of society and the environment in the pursuit of profits.
- The pursuit can lead to overconsumption depletion of resources and destruction of biodiversity which impacts the whole human species.
- Ideological influence- National leaders at the time of independence were influenced by the socialist ideology of the USSR and Harold Joseph Laski.

Process of Planning:(02:00:00 PM)

- *(Explained with diagrams & charts)*
- *(Dictation from 02:28:00 PM)*
- Planning Commission was established in 1950 by an executive resolution under the chairmanship of the Prime Minster.
- Objectives of the Planning Commission:
- a. To assess the material, capital, and human resources of the country, and investigate the possibilities of augmenting these resources.
- b. Formulate a plan for balanced and effective utilization of resources the PC formulated a five-year and a 20-year perspective plan for the same.
- c. To determine the priority and the stages in which the plan should be carried out and allocate resources for the same.
- d. An appraisal from time to time of the progress achieved in the implementation of the plan and recommend adjustments for any course correction.
- e. It was also responsible for evaluating the implementation of the 5-year plan.
- f. Perform the role of a think tank by suggesting ideas and solutions for various matters referred to them by the center and the state governments.
- ***NDC: The National Development Council:***
- It was established in 1952 through an executive resolution with the PM as its ex-officio chairman.
- The body consisted of Chief ministers of all states, members of the PC, and certain union Ministers.
- The body was to give the inputs to the draft stage and also approve the final plan before it is placed in the Parliament.

Implementation of Planning:(03:02:00 PM)

- The planning in India is an indicative exercise where the 5-year plans contained the growth target for the economy as a whole and various sectors.
- The allocation to the plan was done through the Annual Plans which were in line with the Annual Budgets, therefore the f year plan was implemented through Annual Plans which are a part of the respective Annual Budgets.
- There is only one national plan and all states were to be a part of it.
- While state budgets are independent states' plans are not.
- There was a provision for the formula-based transfer of resources(Gadgil-Mukherjee Fromula) instead of scheme-based transfers from the union for the state plans.
- Later on, even discretionary grants in the form of centrally sponsored schemes were given to the center through the Planning commission.
- To complement the nonplan revenue deficit grants coming from ht finance commission, the panning commission used to provide similar funds to the states.

Five Year Plans(FYP):(03:12:00 PM)

- *(Explained with diagrams & charts)*
- *(Dictation from 03:31:00 PM)*
- ***1st FYP (1951-56):***
- it was based on the Harrod-Domar model of growth, according to which the national income growth is determined by the rate of savings and the per capita output ratio.
- The plan focussed on the infrastructure, and development in agriculture such as irrigation facilities, roads, storage facilities, etc.
- The plan did not have any detailed strategy for growth, it was merely a plan of intentions.
- The targeted growth rate of the plan was 2.1% and it achieved 3.6%.
- *Reasons for high growth:*
- a. Low base effect.
- b. The rise in pent-up demand that was earlier restricted due to policies of the British.
- c. High government expenditure on infrastructure resulted in the growth of the transportation and power sectors at more than 7% per annum.
- d. Steady growth in agriculture at 3% per annum.
- ***2nd FYP (1956-61):***
- It is also known as the Nehru-Mahalnobis plan.
- The features of the pan were:
- a. The public sector would be at the commanding heights of the economy, which means the state was controlling all the sectors, either through direct production or through regulations.
- The State would invest in the capital goods and the basic goods sectors, and the private sector was made responsible for consumer goods.
- c. The model of industrial growth was import substituted industrialization which meant producing goods domestically which were otherwise imported into the country.
- d. The targeted growth rate was 4.5% and the achieved was 4.3%.
- ***3rd FYP (1961-66):***
- It recognized foreign exchange reserves as a constraint to growth and therefore advocated for an export-led growth strategy.
- It followed the 2nd FYP's idea of capital goods development in the industry.
- The target growth rate was 5.6% and the achieved was 2.7%.
- *Reasons for its failure:*
- a. Two wars in 1962, and 1965, meant the resources were directed towards defense.
- b. failure of monsoon in 1965-66 led to poor performance in agriculture.
- c. balance o payment issue due to lack of dollars to pay for imports
- d. The slowdown in the industry was caused by the poor performance of PSUs and strict control of the private sector.

Achievements of 1951-1965:(03:45:00 PM)

- 1. Creation of infrastructure at a very fast pace.
- The electricity generation capacity increased from 2300 MW to more than 25K MWs in 1966.
- 2. The larger diversification of industry increased from 6 industries to more than 500 classes of goods industry.
- 3. Stable growth meant that there were more resources for development.
- *Problems of this period:*
- 1. No significant decline in poverty as the trickle-down approach followed by the government failed to generate employment or raise the income of the people.
- The government had no targeted programs for poverty alleviation due to a lack of resources.

- 2. Significant shortages of food because of lack of development in agriculture.
- 3. Crisis on the BoP accounts because of the closed economy.

Topics for the next class: Next FYPs like 4th, 5th, etc.

Economics_PG Class 20

A Brief Overview of the Previous Class:(01:07:00 PM)

The Period from 19661 to 1980:(01:08:00 PM)

- *Plan Holiday(1966-69):*
- The period from 1966-69 is known as the period of plan holiday.
- The focus was only on agriculture and the government introduced the New Agricultural Strategy for High Yielding Variety Programme was taken up during this period.
- Due to the political instability, there were no FYPs only annual plans were made where resources were made through the annual budget.
- *4th FYP(1969-74):*
- It talked about the prevention of the concentration of wealth, and environmental sustainability became an important focal point.
- Agriculture witnessed Green Revolution during this period.
- Population control measures were also started during this period.
- Target growth- 5.7%; Achieved- 3.3%
- *Reasons for failure:*
- The 1971 Indo-Pak war resulted in a huge influx of refugees.
- Failure of agriculture- Agriculture was still Monsoon dependent and there were droughts.
- 1973- The oil crisis led to inflation in the economy.
- *5th FYP(1974-78):*
- The focus of the plan was on focusing on employment generation, poverty alleviation, and social justice.
- This was the first FYP where the government acknowledged that the trickle-down effect was not working in India.
- Directed anti-poverty programs were launched focusing on employment generation, poverty alleviation, and social justice.
- The first time Minimum Needs Programme was the first program launched under Directed Anti-Poverty programs.
- An emergency was proclaimed during this period.
- 5th FYP was neglected in favor of 20 point program of the government.
- Target growth- 4.4%; Achieved- 4.8%
- *Rolling Plan:*
- It consists of the annual plan for the present year, a mid-term plan for the next 3-5 years, and a perspective plan carrying a long-term economic vision for 15-20 years.
- The plan focussed on employment and reducing inequality.
- A midterm and a perspective plan were also planned, but they didn't materialize.
- Due to the lack of a coherent economic strategy, this period witnessed negative growth.
- *Analysis of planning from 1966 to 1980:*
- This period from 1966 to 80 is known as *structural retrogression*.
- This period is also referred to as the *Hindu rate of growth* by an economist as the overall rate of growth was low.
- The population was growing at the rate of 2-3% while the growth rate was near 3-4%.

Reasons for low Growth:(02:04:00 PM)

- *a. Licensing system:*
- The very stringent licensing policy followed by the government created a strong entry barrier leading to low competition, thereby creating poor quality high-cost goods.
- Further, the licensing system delayed decision-making that discourages investment creating an artificial scarcity leading to inflation.
- *b. Poor performance of the public sector:*
- In 1966 all public sector undertakings earned a profit at 3% of capital invested, in 1978 it earned a loss of 2.6% of capital invested.
- *c. Rigid trade policies and restrictions on foreign investments like:*
- *Foreign exchange regulation Act, 1973:*
- Foreign firms were not allowed to invest more than 40% in an Indian company.
- No permission was given for external commercial borrowings.
- Restriction on firms and individuals to transfer foreign exchange abroad.
- *Restriction of imports:*

- Very high import tariffs. The average import duty was 250% and the highest import duty was more than 1000%.
- Quantitative restrictions on imports.
- Canalization of imports, that is, imports were only allowed to the license players.
- *c. Irrational taxation policy:*
- Very high tax rates discouraged economic activities. For example, in 1976 Corporate tax was as high as 84%, and the highest slab for income tax including the surcharge was 97.7%.
- Complex taxation with several slabs for direct taxes and several exemptions.
- Numerous indirect taxes.
- *d. Restriction on operational decisions of firms:*
- There was no pricing freedom, restriction on the source of raw material, poor exit laws, etc.
- Rigid rules like MRTP discouraged investments as the firms had to take permission from the MRTP commission for any business decision.
- This not only restricted the growth of firms but promoted rent-seeking and corruption.

6th FYP(1980-1985):(02:18:00 PM)

- The focus areas were:
- 1. Increase in National Income.
- 2. Modernize Technology.
- 3. Social Justice through programs focusing on employment generation(both self and wage employment) like:
- Training to Rural Youth for Self Employment(*TRYSEM*),
- Integrated Rural Development Programme(*IRDP*),
- The National Rural Employment Programme(*NREP*),
- The plan acknowledged the success of the Mahalanobis Strategy in improving savings in the country.
- The issue now was the capacity utilization of heavy industries for which the government started focussing on the infrastructure.
- Domestic energy resources such as renewable energy resources.
- Targeted growth rate -5.2% and achieved 5.7%.

7th FYP(1985-1990):(02:30:00 PM)

- The focus was on growth through Infrastructure.
- Reversal of Import substitution Industrialisation----> Liberalised imports & Encouraged exports.
- Technological growth---->Many technological Missions like Super Computers, Telecom---->Growth in the service sector----->Outward orientation
- Agriculture---> Production has increased--->Yellow Revolution---->Oilseeds production.
- Targetted growth rate--->5.0% and Achieved--->6.0%.
- ***Reasons for High Growth were:***
- 1. Very high public expenditure capital assets.
- 2. High growth in agriculture was due to the spread of the Green Revolution, Yellow Revolution, and white revolution.
- This induced income growth amounts large section of the people thereby increasing the demand for industrial goods.
- 3. Improved worker productivity due to the availability of highly skilled individuals coming from specialized tertiary institutes.
- 4. Business-friendly policies and regulations were introduced by the industrial policy resolution 1980 and IPR 1985.
- They introduced various measures including raising capital limits regarding exemptions from licensing, reducing restrictions on imports, relaxation on MRTP limits, etc.

Reasons behind the Economic Crisis in1991:(02:48:00PM)

- *(Dictations from 03:14 PM)*
- 1. Very high fiscal deficit & debt of the government.
- In 1981-82 it was 5.1% while in 1991 it was 8.4%.
- The internal debt increased from 33.7% to 49.7%.
- 2. Very high inflation:
- The wholesale Price Index from 6.7% in 1980 to 10.3% in 1990.
- The CPI was 11% in 1990.
- *The reasons for high inflation were:*
- Direct monetization of deficits by the RBI,
- Supply-side shortages and
- 3. High Current Account Deficit(CAD):

- It increased from form1.35% in 1980 to 3.69% in 1990.
- The reasons were the liberalization of imports and no significant improvements in exports.
- The high amount of foreign loans especially short-term loans.
- The external debt increased from 12% in 1980 to 23% in 1990 to finance high CAD which was mostly in the form of short-term loans.
- 4. Immediate reasons were External factors including the Gulf war which led to an increase in the price of crude oil(increasing import bill), further the disintegration of the Soviet Union hampered the exports thereby worsening the foreign exchange reserves of India.
- In 1991, India was left with $ 1.2 Billion in reserves(covering 1 week of imports).
- The government had to pledge gold to earn foreign exchange and tide over the emergency.
- The Indian government was on the verge of bankruptcy.

The Reforms Introduced in 1991:(03:40:00 PM)

- *Liberalization*:
- It means the simplification of the policies to ensure that there is larger participation by different players in various sectors of the economy and a better understanding of rules and regulations to improve efficiency.
- The liberalization reforms included:
- a. Industrial reforms: Delicensing, de-reservation for the public sector, pricing freedom, freedom in deciding the production method, supply of raw materials, etc.
- b. Reforms in MRTP and FERA: They were gradually replaced by the Competition Act, 2002, and Foreign Exchange Management Act, 1999.
- c. Liberalization in the external sectors included a reduction in import duties, liberalizing FDI, relaxing controls over the number of imports, moving to a liberalizing exchange rate management system, and finally a unified market-determined exchange rate.
- d. Financial Sector reforms included a reduction in CRR, SLR allowing private sector banks to expand, giving licenses to foreign sector banks, etc.
- e. Taxation reforms included the reduction of personal income tax, rationalizing tax slabs, and bringing services under the tax rates.
- Three services that were taxed were telephone services, Non-life insurance, and Stock brokerage.

Topics for the next class: Continuation of the reforms taken and their analysis.

Economics_PG Class 21

A Brief Overview of the Previous Class:(01:02:00 PM)

Globalisation:(01:07:00 PM)

- It is the growing interdependence and integration of the world economy, cultures, and populations that bring about cross-border trades in Goods and Services, technology, and flows of investment, people, and Ideas/information.
- ***Benefits of globalization:***
- It Improves resource allocation whereby the country will focus on the sector where it has a competitive/comparative advantage.
- Exposure to global competition can help improve efficiency and productivity in the economy.
- Cross-border exchange of information, people, and technology can provide better access to productivity-enhancing techniques and skill sets across economies.
- Access to the global market can help achieve economies of scale and thereby enhance the profits of the companies.
- Increased choice of products and services to the consumer.
- Investment from outside can help fill in the saving-investment gap and also generate employment in the economy.

Problems/ Issues of Globalisation:(01:31:00 PM)

- a. It exposes the domestic economy to the volatility and fluctuations of different economies.
- Examples are the Asian Financial Crisis of 1997-98, and the 2008 financial crisis.
- b. The control of international institutions such as WTO, World Bank, and IMF by the developed world can lead to a loss of sovereignty and compromise the decision-making of developing and poor economies. Thereby negatively impacting domestic interests.
- c. Foreign investments can often lead to the creation of asset bubbles which can destabilize or lead to volatility in the domestic economy.
- d. It can negatively impact the domestic production capacity and make the economy import-dependent.
- e. It can restrict the innovation capacity of the domestic economy by increasing the dependence on imports and lack of technology transfer.
- **Question:** How has globalization led to a decrease in formal employment? Is informal employment detrimental to the development of an economy?

***The 1991 Reforms - A Paradigm Shift:* (02:27:00 PM)**

- The changes introduced in 1991 are considered a paradigm shift in economic policy and governance because:
- 1. The essential objective of Economic growth was now combined with economic efficiency, the earlier concerns about equity were subsumed in the pursuit of growth on the premise that it would reduce poverty.
- 2. There was a conscious decision to reduce the role of the state and rely on the development market.
- The government would no longer guide the allocation of scarce investable resources.
- 3. The degree of openness of the economy in trade, investment, and technology was sought to be increased significantly and rapidly.
- The idea was to enforce cost discipline on the supply side.

***Analysis of the 1991 Reforms:* (02:54:00 PM)**

- ***External sector- Positives:***
- Increased exports- merchandise, agriculture, and services.
- Abundant foreign exchange reserves. This has given a lot of resilience to the Indian economy to handle any shocks.
- Huge foreign investments to plug the Saving-Investment gap: Capital inflow; FDI and FII increased.
- Entry of new technologies, and management practices with FDI.
- Huge Remittances- Ease of labor movement, and remittances from countries of the middle east, Canada, Australia, etc.
- Consumer Goods- Cheap imports- manufacturing, goods provision, raw materials, also luxury goods.
- Opportunity to invest outside for the Indian business as overseas Direct Investments.
- ***Challenges:***
- Imports are impacting the domestic industry, MSME due to high import intensity.
- Exposed to external shocks- 1997 (Asian financial crisis), 2008 (global financial crisis), Russia-Ukraine crisis- FIIs are pulling back their money.
- Enclave economy- FDI in certain sectors and certain regions. (Bengaluru, Hyd, Pune, Gurugram, Cochin- these cities get maximum FDI)
- ***Domestic sector- Positives:***
- High growth rate- 7% average.
- Product boom- the easy availability of a range of goods and services.
- Poverty alleviation- in 1993-94: 45% of the population was poor whereas, in 2011, 21% of the population was in poverty. It also benefitted marginal castes.
- Revenue from the government has increased.
- Improved standard of living of the people.
- ***Problems:***
- Poor employment generation- the jobs generated required a set of skills.
- The biggest problem of the market is heightened inequality and increased vulnerability to poverty.
- The growth happened for 10% of people.
- Poor state capacity- in education, healthcare, sanitation, electricity, etc. It has created regional inequality- For example, Kerela vs Bihar.
- India has created islands of prosperity in an ocean of poverty.
- Sustainability issue- The exploitation of resources.
- Crony capitalism- Corruption by nexus between private players and the Political parties/individuals in power.
- The first for generation reforms (related to the entry-level) was not followed by the 2nd generation reforms of regulations.

***8th FYP(1992-97):* (03:43:00 PM)**

- It was initiated against the backdrop of the LPG reforms. It was the first plan for a market-oriented economy and is truly an indicative plan under which the government acts as a facilitator by laying down broad policies while the private sector plays an active economic role.
- Target was 5.6%
- Achieved- 6.8%
- The GDP growth increased during the 8th FYP due to an increase in exports under robust industrial growth.
- The active role of the private players in the economy.
- LPG- active role of private players
- ***Issues**:*
- Jobless growth due to capital-intensive industry.

- The growth did not create a lot of jobs and also the government neglected the social welfare and poverty alleviation programs.

9th FYP(1997-2002):

- Continuation of LPG reforms
- The financial market/ sector became part of the planning framework for the first time.
- It had recognized that demand is a constraint in growth.
- There was talk of Fiscal policy becoming part of the planning process but rejected by the Finance ministry.
- Target was 6.5% and a growth rate of 5.4% was achieved.
- ***Reasons for failure:***
- 1997- Asian financial crisis-
- Trade exports went down and there were investment outflows.
- Very high fiscal deficit due to 5th pay commission. It led to inflation, private investment went down.
- Kargil's war also caused a reduction of government resources.
- Agriculture- Monsoon failure, the GDP went down.

10th FYP (2002-07):(03:48:00 PM)

- Employment- the regional question has to be considered.
- There was a separate volume on states.
- Creation of infrastructure
- The growth came mainly from the service sector- service-led growth(despite a substandard industrial sector).
- Target was 8% and we had achieved a 7.6% growth rate.
- The savings rate increased and the Investment rate increased
- High growth in the service sector- The service sector led growth.

11th FYP(2007-2012):

- Employment and infrastructure were the focus.
- Skill was the major focus- education, and healthcare- Inclusive growth.
- Target growth rate- 9% and growth achieved 8%
- ***Issues:***
- 2008 financial crisis: Outflows, FDI stopped, imports became expensive.
- The slowdown in the industry: major supply shortages, Price fluctuations due to volatility in the market.
- There was an increase in inflation due to which the RBI had to follow a contractionary monetary policy, which negatively impacted private sector investments.

12th FYP(2007-2012):

- It was introduced against the backdrop of a slow recovery from the external crisis and the slowing momentum of the Indian Economy.
- The private sector investments which led to high growth and investment in the 10th and 11th FYP slowed down during this FYP.
- There was very high inflation and an environment of policy paralysis.
- The theme was: Faster, Sustainable, and more inclusive growth.
- Inclusive growth meant poverty reduction, group equality, regional balance/equality, empowerment, and focus on reducing income inequality.
- It set 25 monitorable targets for achieving these objectives.
- 12th FYP was the first time when scenario planning was introduced, where plans were made for different circumstances or scenarios.
- The target growth was 8%, and the achieved was 6.9%.
- NITI Aayog has been set up to overcome the problems of the planning commission, in 2014.
- NITI Ayog has been developed as a state of art resource center with the necessary knowledge and skills that will enable it to act with speed, promote research, provide strategic policy vision, and deal with the contingent issues in the economy.

The Syllabus of Economics is completed in this Batch.