SAMPLE MAINS ECONOMY NOTES

Topics covered below

1) India’s Leapfrog to Methanol Economy (Economic Development)
2) Indian vs Chinese economy (Economic Development)
3) Fertiliser Subsidy reforms (Agriculture)
4) Land reforms in India (Agriculture)

India’s Leapfrog to Methanol Economy

A) Methanol Economy: means the replacement of fossil fuels with methanol as means of energy storage, transportation fuels and feedstocks of chemical products

B) Need for Methanol Economy in India:
- Energy security: India is the 6th highest consumer of petrol and diesel in the world
- Environmental concern: India is third highest energy related CO2 emitter country in the world.
- Current Account Deficit: India’s crude import bill stands at almost 6 lakh crores
- Inflation: The price of fuel has multiplier effect

C) Applications of Methanol in various sectors of Indian Economy:
1) Transportation: Methanol blended with gasoline and diesel or complete substitution + railway engines can run on methanol/DME blends + methanol and DME powered ships → cost cutting and efficiency increase
2) Energy: India → Huge Coal reserves ; Biomass generated ; Stranded & Flared gases → alternate feedstock and fuels → India’s 10% reduction in import dependence of oil and gas by 2022.
3) Manufacturing: methanol compatible engines under Make in India → FDI investments → employment
4) Marine sector: liquid form → no SOx or NOx ; cheaper and cleaner than LNG and Bunker / Heavy Oil. → meeting the stringent emission regulations by the IMO → reduce the costs.
5) **Electricity power generation:** as a turbine fuel
6) **Agriculture:** Biomass like rice straw or Bamboo in North East → feedstock → additional income to the farmers
7) **Telecom Towers:** 2% of diesel consumption → can be replaced
8) Chemicals sector: Methanol → producing various chemicals like formaldehyde, acetic acid and olefins → can be exported
9) **Clean cooking fuels:** Ujjwala Yojana (PMUY) → LPG connections → Methanol or DME blending with LPG or the complete substitution of latter through former can gradually displace LPG imports
10) **Swachh Bharat:** opportunity for India to use its landfills to convert it into methanol and avoid problems such as toxins leaching into the soil and release of GHG emissions etc.

D) **Global Developments**
- Methanol is being actively pursued by China, Italy, Sweden, Israel, US, Australia, Japan and many other European countries.
- 10% of fuel in China in transport Sector is Methanol. China alone produces 65% of world Methanol and it uses its coal to produce Methanol.
- The Technology has acquired commercial maturity and countries like Iceland are producing in meaningful quantities already.
- The United States ran several methanol programs, especially in California from 1980 to 1990 for the conversion of gasoline run cars to methanol blended fuels
- Israel, Italy have adopted the Methanol 15% blending program with Petrol.
- Methanol is seen by the world as the “Enduring Energy Solution known to Mankind”

D) **Status of Methanol in India:**
- Presently at a nascent stage in production and usage but huge potential in both
- Methanol imports is meeting 90% of India’s methanol requirement → because cheaper for India to import vs domestic production → considerable forex outgo
- India imports 99% of its methanol from Iran and Saudi Arabia who produce it from natural gas
- India does not have a commercial coal to methanol plant despite having large coal reserves
- India is producing all of its methanol from imported natural gas
- The Government is likely to go ahead with a target of 15% blending by methanol/DME in gasoline/diesel by 2022
- Recently, Coal India Limited (CIL) planned to set up a coal based methanol plant in West Bengal
- The Namrup-based Assam Petrochemicals Limited (APL) rolled out the country’s first methanol-based cooking fuel project-
  - ‘Green and Clean Fuel Pilot Project on Methanol Cooking Stove’. The project has been promoted by NITI Aayog.

E) **NITI Aayog's Plan for Methanol Production in India:**
- India is producing all of its methanol from imported natural gas since domestic production is not economically viable at present. → it must use abundant domestic high ash coal to make it economically viable → Commercial coal to methanol plants need to be set up wherever necessary.
- It is estimated that a 1600 tons per day of methanol plant will require a capital expenditure of ~INR 1200 Cr which would be able to produce methanol at INR 17-19 per liter which is comparable with the cost of imported methanol. Whereas, presently, the per liter cost of methanol production in India is INR 25-27 or even more depending on the volatility in the price of imported natural gas.
• Biomass/municipal solid waste and flared natural gas can also be used for methanol production, but the continuous availability of latter would be a challenge.

F) Challenges:
• Water Intensive → 20 cubic meters freshwater for 1 ton coal-based methanol → wastewater.
• Leakage and explosion → loss of life and property.
• Vehicle’s damage → rubber or plastic components + corroding metals such as aluminum, magnesium, zinc
• During the process of making methanol from coal, a large amount of CO2 is emitted.
• Technology to co-generate power in methanol plants requires further refinement.
• For blending more than 15% of methanol, internal combustion engines changes in the engine design are required.

G) Way Forward:
1. Create an innovation fund → support the R&D activities → a demonstration coal to methanol production plant.
2. Have sufficient domestic methanol production capacity so that user industries are assured of supply.
3. Simultaneous programs for the development of
   • flexi-fuel vehicles to run on methanol/DME fuel blends
   • Methanol/DME cookstoves
   • Converting diesel powered railway locomotives to methanol/DME based engines.
4. Explore possibility of setting up a manufacturing facility for methanol/DME in Iran or Qatar as these countries can provide the natural gas at very low prices.
5. Import Methanol/DME for its direct application or for further conversion to chemicals like olefins as it is likely to be economically advantageous rather than importing crude.
6. Set up a mega coal based complex for production of power, methanol and fertilizer in an integrated manner.
7. Methanol Blending Program with all possible fossil fuels can be implemented on an early basis.

MAINS QUESTION:
With growing energy needs should India work on exploring methanol production and application? Discuss the facts and fears associated with Methanol economy in India (250 Words, 15 Marks)

India vs China’s Economy
Past to Present
• In 1985, GDP per capital for India and China was around $293 per person.
• In 2017, as a World Bank report, India’s per capita has managed to reach $1,942, while China’s GDP per capita has expanded to $8,827.
In 2017, **India** became the sixth largest economy with a GDP of USD 2.59 trillion while **China** was the second largest with a GDP of USD 12.23 trillion, as per World Bank data.

**Presently**, India and China on an average have:
- same population rates
- identical levels of unemployment
- current GDP rates (highest among the world).

However, China’s economy is five times larger than India’s.

### Reason /factors for Difference in the Size of two Economies today

China went through **Cultural Revolution and the Great Leap Forward** thus adopting an authoritarian and capitalist model, while India followed a socialist economic model with state control. This model difference is one the key reasons China is in a better shape than India. In addition to this several other factors are listed below in detail -

<table>
<thead>
<tr>
<th>Factor</th>
<th>China</th>
<th>India</th>
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<tbody>
<tr>
<td><strong>Politics</strong></td>
<td><strong>Authoritarian political system</strong> with The Chinese Communist Party (CCP) governs with minimum barriers → increases ease of policy implementation → rapid development on a large scale.</td>
<td>India is governed through a complex democracy. It has a federal parliament with regional assemblies → slows down the rate of development due to the delay in decision making process → reducing the ease of implementation of polices</td>
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<td><strong>e.g. The Three Gorges Dam</strong>, which is the world’s largest hydropower project has been building for almost a decade. It has displaced more than 1.2 million population, and flooded 1,350 villages, 140 towns, and 13 cities in total. However, dam provides → Job opportunities → Clean energy</td>
<td>e.g. It took Indian parliament 16 years, to pass a GST bill in 2017</td>
</tr>
<tr>
<td><strong>Industrial Focus</strong></td>
<td>Backyard industrialization → MSME Focus → Labor intensive → Jobs → Balanced regional development</td>
<td>Mahalanobis &amp; Socialistic Model → Heavy Industries in Public Sector focused → Imbalanced regional dev. + Failed PSUs</td>
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<tr>
<td><strong>Economic Reforms</strong></td>
<td>Started in 1980s → Early mover advantage → Private investment from west</td>
<td>Started in 1991 as a result of crises</td>
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<tr>
<td><strong>Political and Governance Reforms</strong></td>
<td>Great Leap Forward 1958 → Capitalistic Model</td>
<td>1950 Constitution of India → Socialistic Pattern</td>
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<td>Culture Revolution 1966</td>
<td>Green and Industrial revolution impacts remain limited</td>
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**Openness of the economy**
- SEZ Model → Export orientation → Foreign exchange earnings
- Economic planning → Self-sufficiency objective → Inward looking strategy → No exports but high imports → 1991 Crises

**Geographical reasons**
- Majority land is unproductive → Industrialization preferred over agriculture → high economic growth
- Instability in focus over Agriculture & Industry → Neither could develop properly → Finally in 1991 onwards Service sector dominates → Limited jobs

**Productivity**
- China has a **better railways and roads** system which increases speed of transportation.
- China invested heavily in **universities and skill** development programs. The country also focused on **creating jobs in labor-intensive sectors** for its large population such as in garments, textiles, assembly and light engineering.
- World Economic Forum’s Global Competitiveness Report → India lags behind China in almost all infrastructural category.
- **Lack of investment** in infrastructure is estimated to reduce India’s GDP growth annually by 2 percent.

**Urbanization**
- A high level of urbanization has occurred in China as opposed to India. 58 percent of China resides in the city.
- Today only roughly 37 percent of Indian live in cities.
- There is a strong evidence for the **positive relationship** between urbanization and growth of a nation.
- Both the countries saw a **shift of employment from agricultural sector** to service and other non-farming sectors, as more people moved to cities in search for a higher wage. **This transition happened faster in China** than in India.
### Indian Economy strengths

- Exports and software exports have doubled in the last couple of years, even though export-to-GDP ratio is still low.
- India has seen a huge jump in foreign investment (over $21 billion)
- India’s young population is estimated to contribute to a high rate of personal savings.

### China’s strengths

- Today China is a **$12.5 trillion economy**, the second largest in the world.
- China’s trade is **six times** larger than India’s trade. In 2007 increase in China’s trade levels were around $433 billion where greater than India’s total trade.
- China’s trade is the **second-third largest** in the world, while India lags behind with only 1 percent of world trade.
- China’s **Manufacturing Productivity** is 1.6 times than that of India
- **Inflation** in China is **1/6th** times of Inflation in China

### Weaknesses of Chinese Economy

- Moving in the direction of a more reliable growth strategy which relies less on exports and majorly on **domestic demand**
- **Regarding Entrepreneurship** : China → communist country → State run enterprises are not efficient & not innovative. The Indian industry is based on innovative enterprises. Given the competitive nature of the world economy, the Indian industry stands a better chance at success in the future
- **One Child Policy in China** → a demographic time bomb → there are more people out of the workforce than in it. On an average, every Chinese worker is expected to pay for the costs of at least two Chinese retirees. (India, on the other hand, is facing a demographic dividend)
Brightful future for India

- **Today India is the fastest growing economy in G 20. Based on OECD report of 2019, India’s GDP is said to be around 7.5 percent by 2020, versus being 7.25 percent in 2019**
- **China’s economy** is estimated to witness a cool down due to global trade tensions. China’s economy is estimated to be around 6 percent by the year 2020, according to a Paris based think tank.
- **India’s economy** clocked at a low of 6.6 percent in October-December period in 2018. While **China** according to Global Economics Prospects report 2019, is projected to witness a growth of 6.2 in the years 2019 and 2020, and a 6 percent growth in 2021.
- Based on the assumption that rapid growth eventually slows down, China’s time span of high growth may soon run its course, while India’s experience if more recent.
- **As per former RBI Governor, India will become bigger than China** eventually as China would slow down and India would continue to grow. So India will be in a better position to create the infrastructure in the region which China is promising today.

Growth lessons India can learn from China

- An **increased investments and incentives in labor-intensive industries** to create more job opportunities. In the past 25 years, labor-intensive industries have suffered in the form of excessive regulations and tax. → In order to increase job-creating, removal of restrictive labor regulations → India Brought Shramev Jayate Reforms
- **Increase investment in infrastructure** to account for 6.5 percent of the total GDP and release investment tools by divesting in infrastructure assets which are state owned.
- **Enhance productivity** of ports, improve conditions of railways and highways, and reduce power theft
- Allow **private sector** investment in education in order to improve skills and human resources.
- Invest in new cities, to **promote urbanization** which will ease the delivery of civil services to raise the standard to living for the population.
- De-reserving goods for medium and small enterprises to make them grow bigger and faster

**The Way Forward**

**India**  India’s economy will continue to grow if economic reforms continue to grow and are stretched to large-scale structures. **Factors** that will help in India’s potential growth

- High domestic demand
- India’s demographic dividend is considerably larger than China’s
- India’s 60-year-old history of democracy provided it a solid foundation for adaptability and stability.
**India vs. China: Is There Even a Comparison ?**

China’s Economy is Four Times Larger Than India’s Economy: The GDP of India is close to $1.5 trillion. At the same time, the GDP of China is close to $7 trillion. The economy of China is at least four times as big as the economy of India. This means that even if China grows at the rate of a meagre 1.5% and India grows at a rate of 7%, the Chinese economy would have added the same amount in output as the Indian economy would have!

Comparing the GDP growth rates of India and China is therefore a pointless exercise. China’s growth rate has been consistently higher than India’s growth rate over the past three decades or so. India has barely overtaken the Chinese growth rate for a couple of quarters. Only if India can continue to beat the Chinese growth rate by a huge margin for the next two to three decades, does India stand a chance of overtaking the Chinese economy.

**RECENT NEWS AND ITS ANALYSIS**

In 2016, NITI Aayog Chairman Amitabh Kant projected that India would become a $10-trillion economy by 2032.

‘The World in 2030’ report by HSBC has stated India’s economy would grow to $5.9 trillion by 2030 from an estimated $2.8 trillion at present.

**Firstly**, Despite India clocking a higher economic growth rate than China, the gap between the size of the two economies will further increase by 2030. China will overtake the US as the world’s largest economy, and India will jump four notches to become the world’s third-largest.

Secondly, India will be outperformed by neighbor Bangladesh, which is expected to be the top-performing economy in terms of growth rate by 2030.

Thirdly, despite decent economic growth, India’s citizens will not get rich at the same pace as those of some neighbouring and other lower-middle-income countries. (At present, an average Chinese citizen earns almost $7,900 more than an Indian. But by 2030, the per-capita income gap between the two nations could widen to $13,000)

**Fertilizer Subsidy – Issues & Reforms**

**Introduction**

Fertiliser use has seen rapid expansion and intensification in India and in other parts of the world with the spread of the Green Revolution technology. With the scope for raising production through the expansion of cultivable land exhausted, fertiliser will continue to play a key role in meeting the future requirement of food, feed and fibre. Therefore it is important that fertiliser is used judiciously and optimally.
Fertilizer subsidy is the difference between the holding price of fertilizers and the price at which fertilizers are made available to consumers.

For sustained agricultural growth and to promote balanced nutrient application, the fertilizers are made available to farmers at affordable prices.

Financial support is also given on both indigenous and imported urea.

Need

- In India per hectare Consumption around (around 146 Kg) is far lower than developed countries.
- Indian Soils are deficient in Nitrogen and Phosphorus.
- Fertilizer can most effectively be used with ample water. So rainfed areas (deprived of irrigation) constitute 70% of agricultural land and still they use only 20% of national Fertilizers consumption. On other hand Rabi crops are dominantly produced in Irrigated areas, so they consume about 66% of fertilizers while their share of total agri output is 33%.
- India meets its 80% requirement of Urea (N), while it is heavily dependent on Imports for its potassium (K) and phosphorus (P) fertilizer requirements.
- As per Eco Survey 2019 → For the small and marginal farmers, the costs of fertilizers are key determinants of profitability of farming.

Present status

- Fertiliser accounts for large fiscal subsidies (about 0.73 lakh crore or 0.5% of GDP), the second-highest after food, according to Budget 2019-20.
- There are 3 basic types of fertilizer used- Urea, Diammonium Phosphate (DAP), and Muriate of Potash (MOP).
- Of all the fertilisers, urea is the most produced (86%), the most consumed (74%), and the most imported (52%).
- Urea is the most physically controlled fertilizer, with 50% under the Fertiliser Ministry’s movement control order compared with 20% for DAP and MOP.
- Urea also receives the largest subsidies, in outlay terms (accounting for nearly 70% of total fertilizers subsidy).
- Per kg subsidies on DAP and MOP fertiliser are fixed- they do not vary with market prices.
- Imports of DAP and MOP are also not controlled.

How fertiliser subsidy is followed in India

- A PoS machine is installed in every fertiliser godowns. It capture the buyer’s identity based on Aadhaar biometric authentication, with the quantities purchased.

TWO PROPOSED MODELS Two models of DBT are being considered to make fertiliser subsidy disbursal more targeted.

- Under the first, a ‘wallet’ will be created for each farmer where the subsidy amount will be deposited for release to the manufacturer or trader (in case of imported fertilisers) at the time of actual purchase.
The other option is the farmer will pay the market price upfront and promptly receive the subsidy amount in his/her Aadhaar-linked bank account.

**Govt policies**

- **Nutrient Based Subsidy scheme 2010**: applicable to 22 fertilisers (other than Urea) for which MRP will be decided taking into account the international and domestic prices of P&K fertilisers, exchange rate, and inventory level in the country. It aims to
  - ensure that adequate quantity of P&K is made available to the farmers at statutory controlled price.
  - ensure balanced use of fertilisers, improve agriculture productivity, promote growth of indigenous fertiliser industry and to reduce the burden of subsidy.
- **New Urea Policy 2015**: focusses on making the domestic urea energy efficient and reducing the subsidy burden.
- **Neem Coated Urea (NCU)**: mandatory 100% production of NCU. **Benefit includes**
  - Slow down the dissolution of Urea into soil, resulting into less urea requirement.
  - Stop the illegal diversion of urea for non-agricultural usages such as ingredients in chemical industry, explosives, etc.
- **Gas Pooling**: pooling of Domestic Gas with Re-Gasified LNG which is imported. This would help provide natural gas at uniform delivered price to all natural gas grid connected Urea manufacturing plants.
- **Removal of minimum production criteria** for manufacturers of Single Super Phosphate (SSP) making them eligible for subsidy irrespective of quantity of SSP produced and selling for agriculture purposes.
- **Soil Health Card**: Farmers can get their own customised requirement of fertiliser in order to avoid irrational use of it.

**RECENT REFORM** - Cabinet Committee on Economic Affairs has raised the subsidised prices of sulphur-based fertilizers.

The move is aimed at discouraging rampant use of NPK fertilisers, which impacts soil quality.

**Issues and challenges**

- Subsidy is paid to the companies only after the purchase of fertiliser by the farmer. In other words, the subsidy is still getting credited to the company and not the farmer. In that sense, it isn’t direct benefit transfer (DBT).
- Fertiliser subsidy has become a game of only three chemicals- NPK (nitrogen, phosphorus and potassium).
- There are huge discrepancies in the usage of fertiliser. In states like Punjab, the ratio of NPK usage is 61:19:1 against ideal 4:2:1
- In 1950, with the use of less NPK, the yield was more. Now, with the use of more NPK, lesser yield is being produced.
• Government is selling compost at a particular price and same is the rate for urea so this would not push the farmers towards organic farming.
• These subsidies will only help fertiliser companies to sustain their business but in the long run farmer input costs will continuously increase with inversely proportional output rates.
• Different inputs – urea, phosphatic and potassic fertilisers – have different rates of subsidies.
• It would be premature to accept that all the farmers would be able to buy their requirements of fertilisers at market rate and wait for 15 days or a month to get the subsidies.
• Fertilisers encourage urea overuse, which damages the soil, undermining rural incomes, agricultural productivity, and thereby economic growth.
• Fertiliser subsidies are generally criticised because they are perceived to be far from universally distributed and concentrated on relatively few producers, mainly large farmers.
• As per Economic Survey 2015-16: Distortions in urea are the result of multiple regulations. These distortions feed upon each other, and together create an environment that leads to a series of adverse outcomes.
  ◦ Firstly, urea is only subsidised for agricultural uses. Subsidies like this violate the One Product- One Price principle. Black market effects are aggravated by further regulation-canalisation.
  ◦ Secondly, the black market hurts small and marginal farmers more than large farmers since a higher percentage of them are forced to buy urea from the black market.
  ◦ Thirdly, some of the urea subsidy goes to sustaining inefficient domestic production instead of going to the small farmer.

As per Economic Survey 2018-19 Fertiliser response ratio is showing a declining trend.
• This is an indicator of declining responsiveness of soil fertility to fertiliser application.
• Declining Response Ratio is due to,
  ◦ Inadequacy and imbalance in fertiliser use
  ◦ Increasing multi-nutrient deficiency
  ◦ Lack of farmers awareness
  ◦ Balanced plant nutrition and poor crop management

Way Forward & Suggestions
• Subsidy should be linked to productivity which will remove fertilizer companies from the game.
• The momentum for these changes has to be created through robust policies.
• State Governments and Central Government need to work in tandem to encourage farmers for ecological farming.
  Particularly in western UP and Punjab, the farmers need to move away from wheat and rice because the ground water has depleted.
• Farmers have to be educated and taught to change their cropping pattern and move to multiple cropping.
• To secure long term fertiliser supplies from locations where energy prices are cheap, it might be worth encouraging Indian firms to locate plants in countries such as Iran, following the example of the Fertiliser Ministry’s joint venture in Oman, which allowed India to import fertiliser at prices almost 50% cheaper than the world price.

• Fertiliser is a good sector to pursue JAM because of a key similarity with the successful LPG experience: the centre controls the fertiliser supply chain.

• In order to address the distortions in urea-
  - Decnilising Urea imports which would increase the number of importers and allow greater freedom in import decision- would allow fertiliser supply to respond flexibly and quickly to changes in demand.
  - Bringing urea under the Nutrient Based Subsidy program currently in place for DAP and MOP would allow domestic producers to continue receiving fixed subsidies based on the nutritional content of their fertiliser.

Suggestions-based on NITI Aayog Strategy
• Strengthen the SHC scheme to ensure SHC based fertiliser distribution at the ground level.
• Seed SHCs with the integrated fertiliser management system.
• Ensure proper functioning of the SHC labs.
• Link SHCs with Kisan credit cards and make SHCs mandatory for subsidies.
• Reorient fertiliser subsidy policy to bring secondary and micronutrients on the same nutrient based subsidy (NBS) platform as phosphorus (P) and potash (K).
• Subsidies on liquid fertilisers to encourage fertigation with micro-irrigation.
• Fertiliser sector should procure compost produced out of organic waste.
• Upfront subsidy per acre of land through Direct Benefit Transfer instead of providing separate subsidies for fertilisers, electricity, crop insurance etc.

As per Economic Survey 2019 Suggested Measures are,
  - Use of optimal dose based on soil health status
  - Promotion of neem-coated urea
  - Promotion of micronutrients
  - Promotion of organic fertilizers
  - Promotion of water-soluble fertilizer
  - Paramparagat Krishi Vikas Yojana (PKVY) and Rashtriya Krishi Vikas Yojana (RKVY) scheme
  - Models like Natural Farming, Vedic Farming, Cow Farming, Homa Farming, Zero Budget Natural Farming (ZBNF)

LAND REFORMS IN INDIA – Complete Analysis

What is Land Reform?

• Land reform is a broad term. It refers to an institutional measure directed towards altering the existing pattern of ownership, tenancy and management of land.

• Land reforms in India usually refer to redistribution of land from the rich to the poor.
Land reforms are often connected with re-distribution of agricultural land and hence it is related to agrarian reforms too.

Objectives of Land Reform

1. Distributive Justice
2. To create a system of peasantry proprietorship (land to the tiller)
3. Enhance land productivity
4. Transfer the income of few to many so that the demand for consumer goods is created

Tenancy Land Systems – BRITISH ERA

At the time of independence, four land tenures existed in India

| Ryotwari   | Under this system, the responsibility of paying land revenue to the Government was of the **cultivator** himself and there was no intermediary between him and the state. |
|           | The Ryot had full right regarding sale, transfer and leasing of land and could not be evicted from the land as long as he pays the land revenue. |
| Mahalwari | Under this system, the village communities held the village **lands** commonly and it was **joint responsibility** of these **communities** to make payments of the land revenue. |
|           | The land ownership is held as **joint ownership** with the village body. The land can be cultivated by tenants who can pay cash/kind/share. |
| Zamindari | Under this system the **whole village** was under **one landlord** who was responsible for the payment of land revenue. |
|           | The **persons interested** can work in the Zamindar's land as **tenant/labourer** based on the agreement with the zamindar. |
| Jagirdari | It is **similar** to Zamindari system. |
|           | The jagirdar is powered to control the unproductive masses of village by engaging them in agricultural activities |

Need for Land Reforms

- Presence of multiplicity of intermediaries between the Government and cultivator
- Lack of adequate security of tenure,
- Fixation of high rent and lack of incentive
- Large scale sub-division and fragmentation of holdings
- Unequal distribution of land
Low productivity per hectare of land

4 phases of Land Reform Measures
1) 1950-72: Land re-distribution
2) 1972-85 Bring uncultivated land under cultivation
3) 1985-19995 Water & Soil conservation
4) 1995-Till Now

LAND POLICY FORMULATION THROUGH PLANNING PERIOD had been determined to redistribute land and to bring equity in rural population. This land policy was set through a number of five-year plans by the Government after independence for proper land management.

Several Five-Year Plans:

Through the first five-year plan (1951-1956) the Government decided that The Community Development Network will be looking after the common peasants. More areas will be taken for cultivation.

The second plan focused on land productivity which was very low in the British period.

The third five-year plan focussed on the problem of food security. Many land had been abandoned at that time which was cultivable. Those lands were taken under the scope of cultivation again. This attention on food security had been continued in the fourth five-year plan as well.

In the fifth five-year plan more focus was given on the drought prone areas.

In the sixth five-year plan extra attention had been given on the utilization of the agricultural resources, mainly land. According to this plan more neglected lands were taken under cultivation.

Land degradation and soil erosion were the two main issues in the seventh five-year plan. So this plan attempted to stop this by the introduction of "Evergreeen Green Revolution".

Eighth five-year plan focused on the rain affected areas whereas in the

Ninth five-year plan several watershed development program had been forecasted for proper water management.

Land Reform Measures in Phase 1:
### Abolition of intermediaries between the State and tenants

**Pros** - (i) **eliminated** the middlemen and bought the cultivator into direct relationship with the government.

(ii) **improvement** in the administrative **machinery** and social services.

**Cons** - (i) It led to large-scale **ejectment** of poor **tenants** from land.

(ii) Landlordism was **abolished**, absentee landlordism **flourished**.

### Tenancy reforms that provide
(a) security to tenants
(b) rationalisation and regulation of rent
(c) conferment of ownership rights on tenants

**Pros** - It gave **security** about the **source of livelihood** and **tenure** from eviction

**Cons** - (i) **Large inter-state variations** in the fixation of **land rent** rates

(ii) **Tenancy reforms** undertaken varied **varied** from state to state.

(iii) **Escape clauses misused** against the interest of tenants.

### Fixation of ceiling on landholdings

**Pros** - (i) helped remove inequalities in land ownership

(ii) redistribution of this surplus land

**Cons** - (i) Manipulation of land records to circumvent the law

### Consolidation of holdings

**Pros** - (i) Reduced **fragemenation** led to increase productivity

(ii) **Helped** during the period of **Green Revolution**

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**Critical Analysis**

**Reasons of success**

1. Freedom struggle leaders- High political will
2. Demand from low levels also
3. Democratic structure
4. Constitutional obligation
5. Necessities of Green revolution
6. Planned development

Positive Impact of Land Reforms

- The inverse relationship between land size and efficiency – the smaller the land, the better will be the productivity and efficiency.
- Owner-cultivation more efficient than share-cropping.
- Abolition of the exploitative land tenure system
- Land was redistributed among the landless and the weaker sections of the society
- Provided security of tenure to the tenants
- Investments in agriculture became more common because tiller was now the owner
- Land reforms made a big dent on poverty
- Lower castes and classes got greater rights and were able to mobilise themselves

Negatives

- Fragmentation of land increased as a result of land ceilings and reforms.
- Evidence suggests that land reforms had a negative effect on poverty
- Many of the steps taken under land reforms such as land ceilings, tenancy reforms, land consolidation etc. were not implemented properly due to legal loopholes.

Reasons for failure

- State subject
- Advanced publicity and delayed implementation
- Loose definition of personal cultivation
- Ownership transfer was not automatic
- Lack of social consciousness among tenants and unorganized tenants
- Green revolution favored big farmers
- Lack of political will.
- Apathetic attitude of the bureaucracy.
- Absence of up-to-date land records.
- Legal hurdles in the way of implementation of land reforms.
- Transfer of lands to family members to avoid tenancy reforms.
- Lack of uniformity in Land Reform Laws.
- Limits for retention of land for personal cultivation.
SUGGESTIONS

- Wasteland revival
- Residential qualification for land holding
- Easier loans for buying lands
- Legal aid
- Peasant organisation
- Forest rights Act 2006
- Seriously implement RECENT REFORMS
  1) Farmer Producer organizations (FPOs)
  2) Computerization of land records
  3) Cooperative farming
  4) Land bank
  5) Land leasing law
  6) Land title reforms
  7) Land acquisition law

IMPORTANT FACTS FROM ECONOMIC SURVEY 2019

Pattern of Agricultural Land Holdings In India

- Agriculture Census 2015-16 show that the number of operational holdings, has increased to 14.6 crore in 2015-16 from 13.8 crore in 2010-11. (Increase of 5.3%).
- Share of marginal holdings (less than 1 ha) in total operational holdings increased.
- Share of small holdings (1 ha to 2 ha) decreased.
- Large holdings (above 4 ha) decreased from 6.5% to 4.3%.
- Area operated by the marginal and small holdings increased from 38.9% in 2000-01 to 47.4% in 2015-16 while areas that of the large holdings decreased from 37.2% to 20 %
- Operational Holdings - Land put to agricultural use

Previous Year Questions

Discuss the role of land reforms in agricultural development. Identify the factors that were responsible for the success of land reforms in India. (2016)

Establish the relationship between land reform, agriculture productivity and elimination of poverty in Indian Economy. Discussion the difficulty in designing and implementation of the agriculture friendly land reforms in India. (2013)