



Notes India 1947-1991

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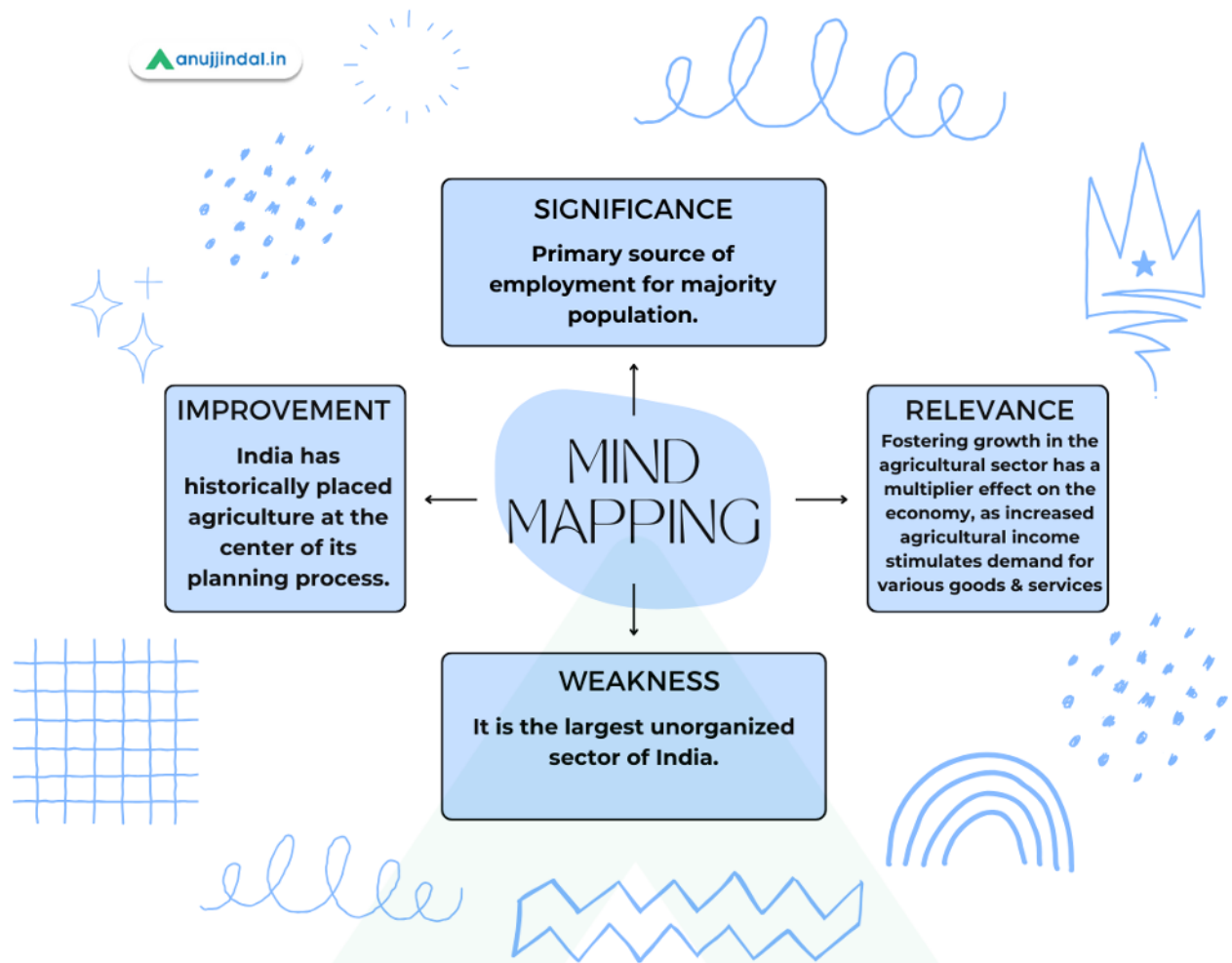
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Note: All the numerical figures in this document are provided to broaden your understanding of the topics. There is no need to memorize them because they are not asked in the exam and these figures are subject to change due to unavailability of authentic data sources.

1.0 Role of Agriculture in Indian Economy

- Agriculture is the **primary source of employment** for a **significant portion** of the Indian population. Despite its reduced contribution to GDP, it remains a **major employer**, supporting the livelihoods of a substantial segment of the population, especially in rural areas.
- It is the **largest unorganized sector** of India.
- It is the most important sector of the Indian economy from the perspective of poverty elimination, employment generation and inclusive growth. Moreover, fostering growth in the agricultural sector has a **multiplier effect on the economy**, as increased agricultural income stimulates demand for various goods and services.
- India has historically placed agriculture at the **center of its planning process**. Various government policies and initiatives have aimed at supporting and enhancing agricultural productivity, ensuring food security, and uplifting the conditions of farmers.



2.0 Nature of Indian Agriculture

2.1 Cropping Pattern in India

- The combination of crops, which farmers opt for cultivation in a particular region, is known as the **cropping pattern** of the region.
- Farmers adopt various cropping patterns based on rainfall, climate, temperature and soil type. Hence, **multiplicity of cropping patterns** has been one of main features of Indian agriculture.
- A **change in cropping pattern** means a change in the **proportion of different crops**.

2.2 Phases of Changes in the Cropping Pattern

- Due to various reasons, the cropping pattern of India has undergone several changes over time. In order to study these changes effectively, the landscape of Indian agriculture has been divided into three phases.

- **Phases of Changes in the Cropping Pattern:**

Pre-Green Revolution Period (before 1965-66)

- Cropping pattern was decided by the **socio-cultural** and economic factors.
- **Mixture of crops** were grown.
- **Food crops** were grown predominantly.

Green Revolution Period (1967-68 to 1977-78)

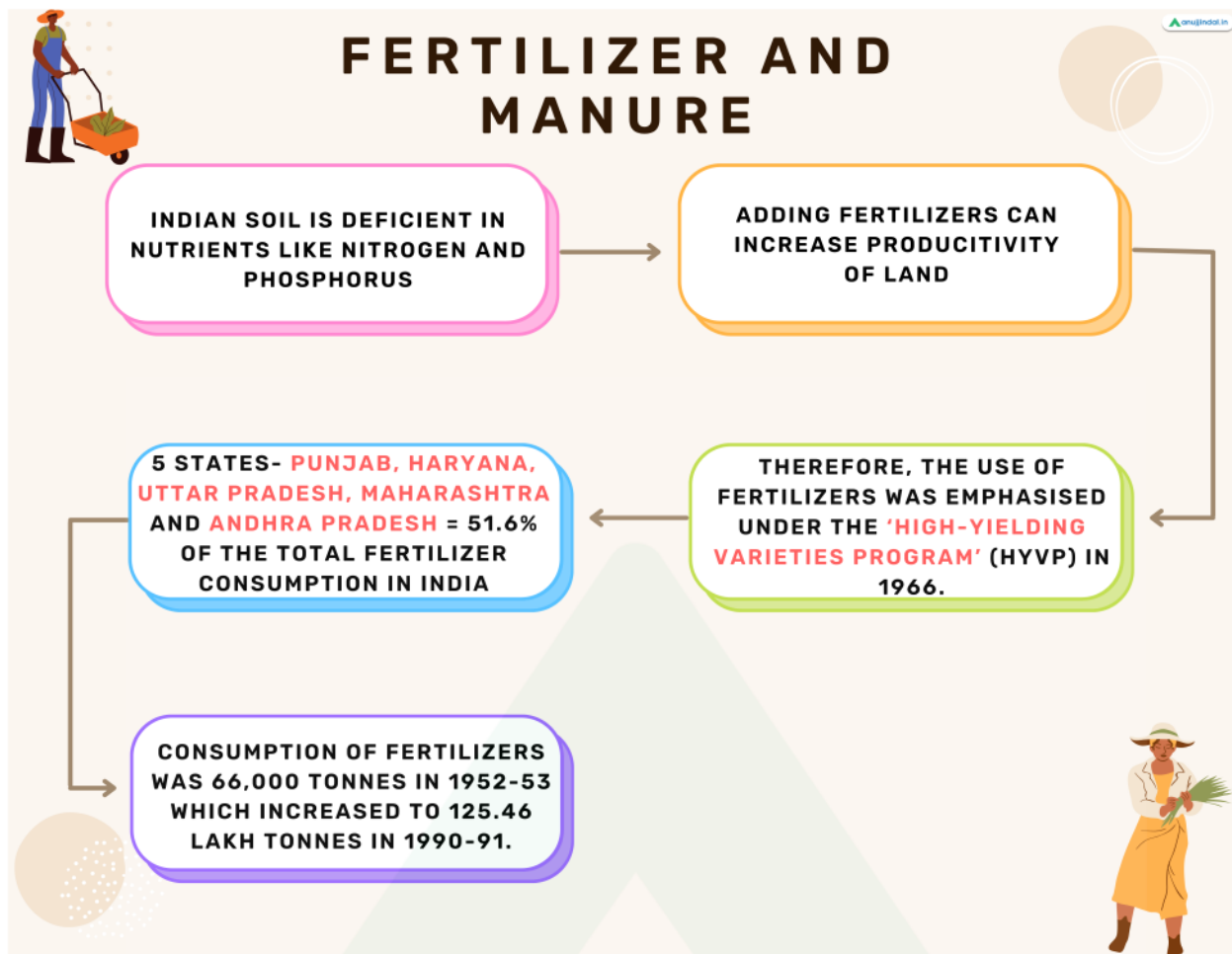
- Focus was on **food crops**.
- Economic, infrastructural and technological changes were done to **improve agriculture**.
- It aimed to achieve **self-sufficiency** in food production.

After Green Revolution (1980-1991)

- Increase in the **non-food crops** production
- **Proportion of area** under cultivation between **food crops and non-food crops** changed in favor of non-food crops due to high prices and high productivity.

2.3 Agricultural Inputs (Fertilizers, Manure, HYV seeds, Pesticides)

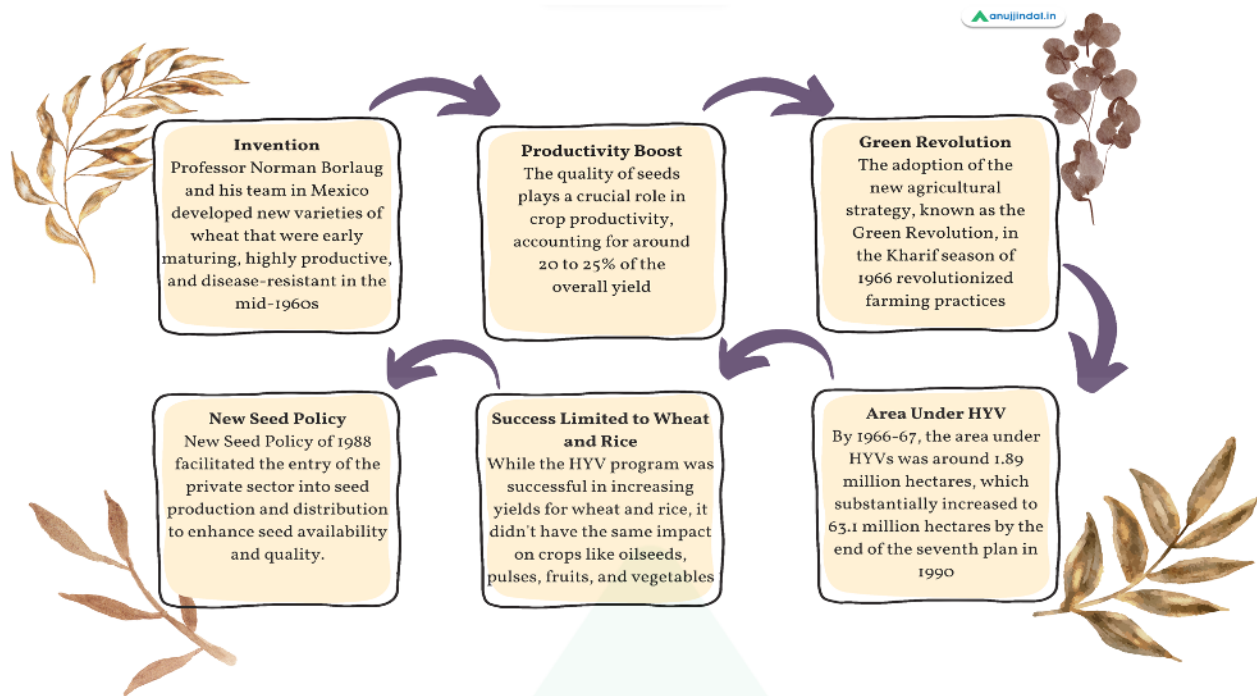
A) Fertilizer and Manure



Indian Farmers Fertilizer Co-operative Limited (IFFCO) is the largest fertilizer producer in India. It was registered as a Multi-unit Co-operative Society on November 3, 1967.

B) High-Yield Variety Seeds

- Introduction of HYVs of wheat depends crucially on the availability of fertilizers, adequate water supply, pesticides and insecticides. Therefore, they have to be launched in the form of a 'package program'.

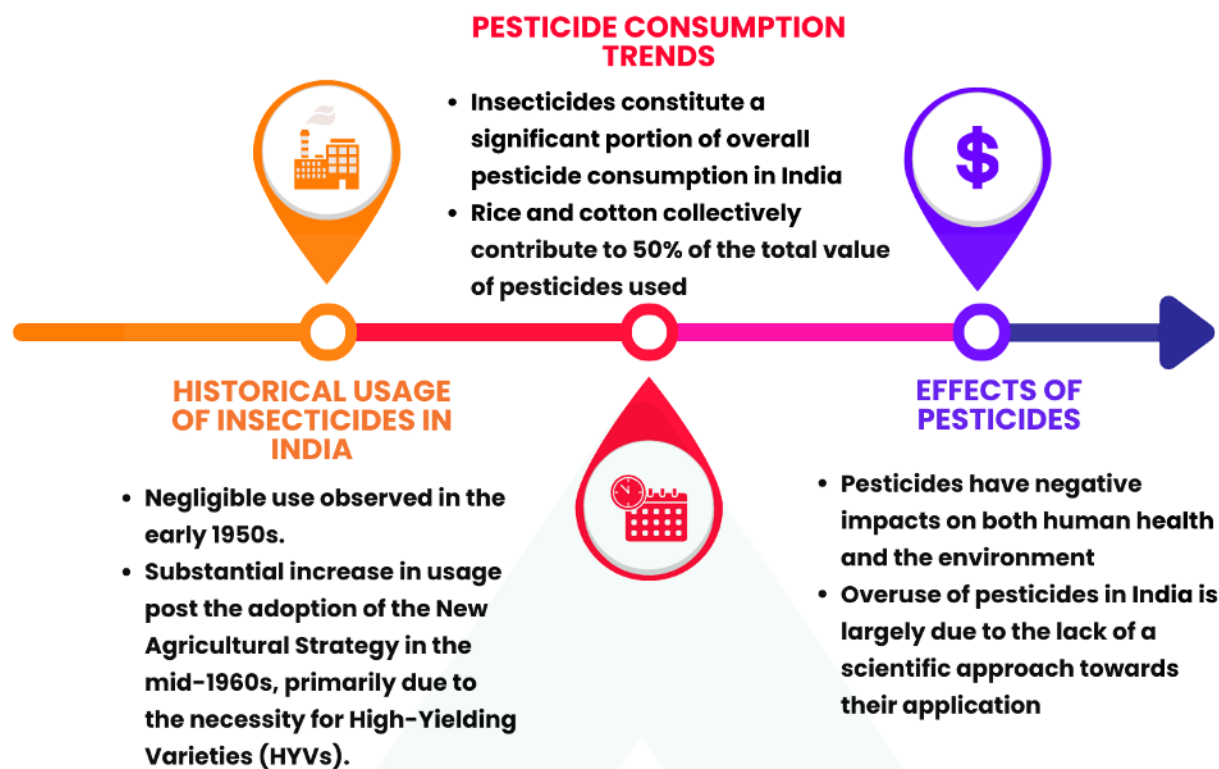


C) Pesticides

- Pesticides is defined as any substance or mixture of substances, intended for preventing, destroying or controlling any pest including vectors of human or animal diseases, unwanted species of plants and animals.
- Pesticides are classified according to their use and kinds of applications as insecticides, fungicides, herbicides and other pesticides.

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USAGE OF PESTICIDES IN INDIA (1947-91)



3.0 Reforms in Indian Agriculture

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AGRICULTURAL REFORMS IN INDIA



3.1 Before 1965

3.1.1 Land Reforms

- After Independence, the land reforms were considered the **most important step** in agricultural reforms. It was widely accepted that land reforms would result in a more productive agriculture system in India.
- Land Reforms had **four** components:
 - a. Abolition of Intermediaries
 - b. Tenancy Reforms
 - c. Ceiling on Landholdings
 - d. Consolidation of Scattered Landholdings

Laws related to agriculture reform were made by the State governments and not by the Central government because

agriculture is a state subject. This brought in many variations and inconsistencies in agriculture policy of states.

A. Abolition of Intermediaries

- **Pre-Independence Scenario:**

- Zamindars (landowners): acted as intermediaries between the British Government and farmers and facilitated revenue collection for the British. They profited by becoming landowners and leasing land to tenants for farming.
- These Zamindars didn't significantly contribute to agricultural improvements.

⚠ The **Permanent Settlement System** was introduced by **Lord Cornwallis**. Under this system, it was agreed that the **landlords (Zamindars)** would have **perpetual and hereditary rights** over the land, so long as they pay the **fixed revenue** to the **British Government**.

- **Exploitation by Zamindars:**

- **Forced Labor (Begari System):** These Zamindars forced laborers to work for the government without any payment. This system was known as the **Begari System**.

⚠ **Begari** was a system of forced labor practiced in the pre-independent India, in which members of populace were compelled to perform **unpaid work for the government**.

- Intermediaries made **no substantial contributions** to **farming** practices.
- Tenants lacked security of **tenure** and faced **high rents** from landowners.

- **Steps taken by the Government:**

- **Land Ceiling:** Zamindars could take land for personal cultivation up to a **ceiling limit** only.
- **Tenants' Rights:** Tenants could acquire permanent rights on land beyond the ceiling limit.
- **Legislative Acts:** State-level Acts were passed to abolish zamindari rights.

B. Tenancy Reforms

- **Definition:**

- Under tenancy, the tenant takes a land on lease from landowner to produce and sell agricultural produce in exchange for some share in the produce or some fixed wages or both.

- **Problems associated with Tenancy:**

- No security of Tenure
- Exploitation of Tenants by Landowner- Low Wages, Long working hours, high rent
- No rights of tenant on the land

- **Reforms:**

Regulation of Rent

- Laws were made to decide the **maximum rent** that can be charged from the tenants.

Law:

- The **first 5-Year Plan (1951-56)** fixed the rent at **1/4th or 1/5th of the total produce**. All states except Punjab, Haryana, Tamil

Security of Tenure

- Land could be taken over from the tenant only for "personal cultivation" by the owner.
- Tenants can only be removed as per the state laws.

Deficiency:

- Definition of 'Tenant' was not uniform.

Ownership rights to tenants

- It was envisaged in the **Sixth 5-Year Plan** that legislative measures to confer **ownership right** to the tenants would be **introduced in all states by 1981-82**.

Nadu, J&K and Andhra areas of Andhra Pradesh did not accept this limit.

- They fixed their own rent percentage, which was higher than this.

Deficiency:

- In spite of these legislations, farmers were still exploited. As late as in 1972, farmers were paying over 50% of their produce as rent in Balasore, Odisha, West Bengal and some other areas.

Reason for ineffectiveness:

- Tenants were socio-economically weaker than landowners.
- They had a fear of ejection from land.
- In many areas, leases were oral and informal.
- In 1961, about 82% of the tenancies

Hence, landowners took advantage of it.

- Landowners were evicting the tenants on the pretext of using the land for "personal cultivation".
- Tenants were forced by landowners to give up land voluntarily.
- Land records were incomplete. No name of tenant on land records due to illiteracy and exploitation of tenants.

Government's measures to tackle the deficiencies:

- Several states passed the law requiring the landowners to leave a certain proportion of their lands for tenants, even if they are resuming the land for personal cultivation.
- In the **fourth 5-year plan**, the govt decided that all tenancies should be declared permanent and non-resumable (except in cases of landowners

Deficiency:

- For a long period of time, many tenants did not exercise their rights to purchase ownership of land they cultivated.
- In many cases, landlords pressurized the tenants into submitting that they were not interested in purchasing the land. Once this statement was made, the land reverted to the original landowners.

were insecure in India.

who are defense personnel and/or physically disabled). Penalties were levied for wrongful evictions.

- In the same plan, the govt recommended that all 'voluntary surrenders' will be made in the favor of state only. This means, that even if the tenant voluntarily surrenders his tenancy rights, the land will go to the state for re-allocation.
- Govt started working on updating the land records.

C. Ceiling on Landholdings

- The laws set a limit on how much land an individual or corporation could hold and allowed the government to allocate surplus land to the landless farmers.
- **Objective:**
 - To ensure an egalitarian agricultural system where every farmer has a decent landholding.
 - To Improve the condition of poor in rural areas by providing a decent sized land for farming.

D. Consolidation of Scattered Landholdings

- **Consolidation of land holding** means to bring together different pieces of lands and merge them into one land. It was done by granting one consolidated holding to the landowner, which is equivalent to the total of land in different scattered plots under his possession.

- Farmers with **small holdings** were **encouraged to pool their land** for cultivation. This phenomenon was known as **Cooperative Farming**.
 - Cooperative Farming was declared a failure in fourth 5-year plan and it was stopped.



Consolidation & Ceiling are often confused when put together:

While the purpose of ceiling laws was to safeguard small and marginal farmers and tenants by setting limits on land ownership, consolidation aimed to bring together scattered landholdings for more efficient farming.

3.1.2 Community Development Program

- **Launched** - 1952
- **Purpose** - overall development of rural areas with participation of people
- The program divided districts into **Blocks** and **Villages**.
 - Block Development Officer and Village level Workers will reach out to people and develop entire communities.

3.1.3 Major and Medium Irrigation Projects

- Water is the **main cause of increase** in **agricultural production** and **productivity**.
- Availability of irrigation facilities is highly inadequate.
- **Problems related to irrigation:**
 - Delays in Completion of Projects
 - Inter State Water Disputes
 - Regional Disparity in Irrigation Development
 - Increased Salination
 - Decline in Water Table

- **Types of irrigation projects:**

- **Major irrigation projects** - costing more than Rs. 5 crore each
- **Medium irrigation projects** - costing individually between Rs. 10 lakh and Rs. 5 crore each
- **Minor irrigation projects** - costing less than Rs. 10 lakh each

3.2 1965-1991

3.2.1 New Agricultural Strategy (Green Revolution)

A. What was the need of Green Revolution?

- The food security before green revolution -
 - Food grains production in the pre-green revolution was unable to keep pace with population growth.
 - The droughts of 1965 and 1966 exposed the vulnerable situation of India with respect to food security.
 - The reason for this failure was ignorance of the need for technological advancement in agriculture and reliance on the private sector to invest in agriculture.
 - After twin droughts of 1960s, a major step was taken towards technology. It was named as Green Revolution.

B. Key Facts About Green Revolution



Key Facts

- **Adoption:** Between the Third and the Fourth 5-Year Plans (i.e., 1961-1969)
- **Launch:** Kharif season of 1966
- **Father of (Global) Green Revolution:** Dr Norman E. Borlaug (American)
- **Father of (Indian) Green Revolution:** M S Swaminathan
- **Origination:** The term 'Green Revolution' was first used by William Gaud.
- **First Stage of Launch in India:** Intensive Agricultural District Program (IADP)
- **Later Stage of Launch in India:** The High-Yielding Varieties Program (HYVP) was also added and the strategy was called Green Revolution (1966) in India.

C. Crops Covered Under the HYV Program

- Wheat, Rice, Jowar, Bajra and Maize
- **Growth Rate of Wheat Production:** 4% (1950-1965) to 5.7% (1968-80)
- **1980s:** Green revolution started spreading to more crops
- **Agricultural Growth and Productivity** has been falling since 1991 due to overuse of HYVP (fertilizers, pesticides, HYV seeds and Monoculture).

D. Characteristics of Green Revolution

- **Adoption of High-Yielding Varieties (HYVs):** Introduction and widespread use of high-yielding crop varieties.

HYV seeds have a shorter life cycle. It enabled the farmers to go for **multiple cropping**. HYV seeds need plenty of water and

also chemical fertilizers and pesticides to produce better results.

- **Technological Advancements:** Implementation of modern agricultural techniques like irrigation, fertilizers, pesticides, and mechanization to enhance crop yields.
- **Increased Agricultural Productivity:** Significant boost in crop production, particularly in wheat and rice, leading to improved food security.
- **Expansion of Irrigation:** Greater emphasis on irrigation facilities to ensure consistent water supply for crops.
- **Multiple Cropping:** two or more crops were harvested during the year along with continued expansion of farming areas.
- **Packaged Inputs:** HYV seeds, fertilizers and pesticides were provided in areas where water supply was assured.
- **Role of Public Sector:** Government intervention and support through subsidies, research, and extension services to promote new agricultural practices.
- **Impact on Farming Practices:** Shift from traditional farming methods to modern, high-yield agricultural techniques.
- **Formalization of Credit:** The coverage of institutional credit increased to bring more farmers (including small and marginal farmers) under its ambit. Credit was given by commercial banks, cooperatives banks, and others at nominal interest rates.

E. Phases of Green Revolution

1. First phase (1966-72)

- Spread of HYVP was supported by **public investment** in fertilizers, power, irrigation and credit.
- There was an emphasis on **wheat**.
- **States in focus:** Punjab, Haryana and Western Uttar Pradesh

- **Total amount of food grains** harvested increased from 74 million tons (MT) in 1966-67 to 105 MT in 1971-72.
 - In 1971-72, **India became self-sufficient** in food production and grain imports declined to nearly zero.

2. Second Phase (1973-80)

- **Nationalization of Banks (1969 and 1980):** Government nationalized banks to improve credit accessibility for farmers, facilitating access to funds for agricultural development.
- **Government Control of Wheat Trade (1973-74):** The government took control of wholesale wheat trade to stabilize and regulate the wheat market.
- **Drought Impact and Food Grain Imports:** Severe droughts in 1972-73 led to a decrease in food grain production by 7.7%, causing India to resort to importing food grains due to limited supply.
- **Subsidies and Irrigation:** Increased subsidies for fertilizers and inputs, particularly subsidizing power for water pumping, aimed at boosting agricultural production. Additionally, there was a significant increase in groundwater irrigation.
- **Retention Price Scheme for Urea (1977):** Introduction of the retention price scheme for urea, a predominant fertilizer used in Indian agriculture, to ensure stability in urea prices and encourage its use.
- **Expansion of High-Yielding Variety (HYV) Technology:** Extension of the high-yielding variety technology from wheat to rice cultivation, promoting improved yields in rice production.
- **Domestic Production and Productivity:** Emphasis on expanding domestic production and increasing productivity across various crops to achieve self-sufficiency in food grain production and reduce dependency on imports.

3. Third phase (1981-90)

- In 1980, India consolidated its status as a **self-sufficient country in food production**.
- India had a buffer stock of 25.4 MT for the first time.

- In 1987, India faced the worst drought of the century.
- The pace of rice and wheat yield growth decelerated in the mid-1980s due to the waning impact of High-Yielding Variety (HYV) technology.
- It led to a steady increase in input subsidies.

F. Positive and Negative Impacts of Green Revolution

Positive Impacts

- Manifold increase in agricultural production and productivity
- Food production rates tripled as compared to increase in land conversion increase by 10%
- Increased employment opportunities due to establishment of forward and backward linkages.
- Rural roads were built largely and electrification started at a good pace.
- Higher and consistent production and supply help to curtail food inflation.
- India has become self-sufficient in the production of food-grains.

Negative Impacts

- Salination enhanced due to continuous exploitation of groundwater.
- Higher toxic levels due to increased use of pesticides and chemical fertilizer.
- Skewed development caused inter-regional disparities.
- Pesticide resistance of insects increased and, depleted soil nutrients.
- Inappropriate application and handling of pesticides started causing health issues.
- Transformed a large number of tenants and sharecroppers into agricultural laborers.

G. Challenges Caused by Green Revolution

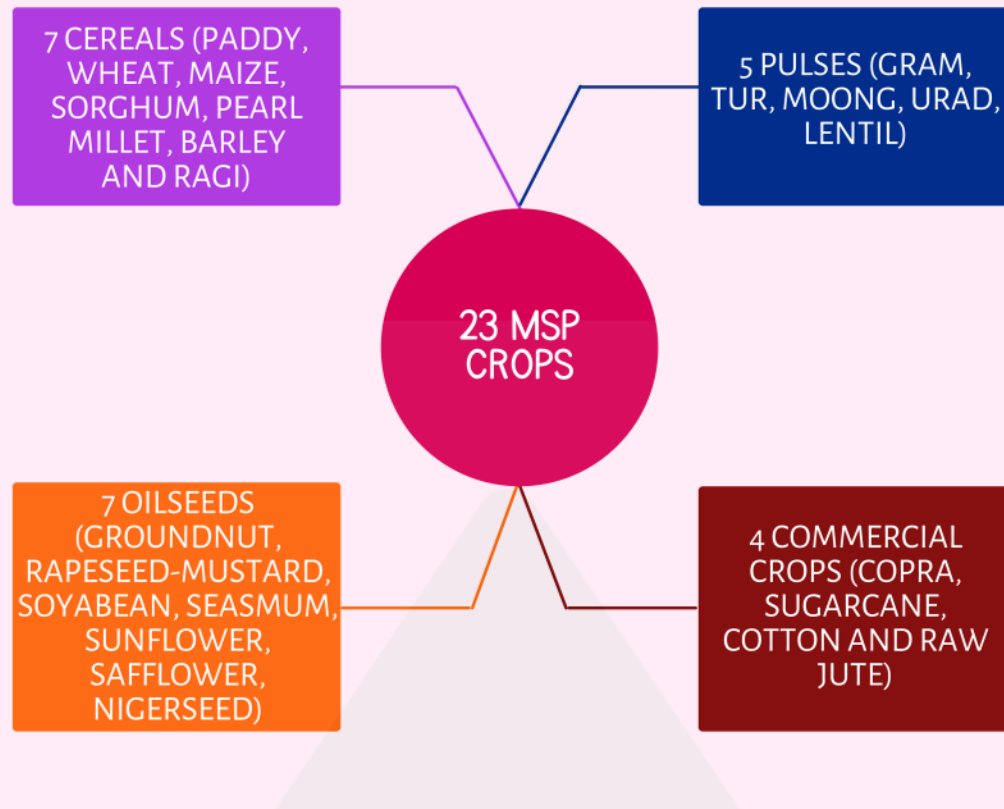
- **Focus on only select food crops:** Revolutionary rise in productivity was restricted to limited number of food grains only. There has been no rise in production in pulses and commercial crops.
- **Regional disparities:** Revolution did not spread uniformly in all the regions. Only few states like Punjab, Haryana, Uttar Pradesh, Maharashtra and Tamil Nadu were benefitted.

- **Expensive technology:** Seeds produced under HVY technology were too expensive to the reach of small and marginal farmers.
- **Income inequality:** The gap between rich and poor farmers substantially rose over time, and it became a serious challenge for the Indian rural economy.

3.2.2 Minimum Support Price

Origin: MSP was first announced for WHEAT in 1966-67.

- It is the **price** at **which government purchases crops** from the **farmers**. If there is a bumper harvest, then the fall in the price cannot go below the MSP.
- It acts as a **guarantee price** to **protect farmers** from **distress sale**.
- MSP is usually **fixed** by the **government**, at the beginning of the sowing season, on the basis of the recommendations of **Commission for Agricultural Costs and Prices (CACP)**.
- **Commission for Agricultural Costs & Prices** 📌
 - **Established** - 1965
 - **Earlier Name** - Agricultural Prices Commission
 - **Name Change to CACP** - 1985
 - **Composition** - Chairman, Member Secretary, one Member (Official) and two Members (Non-Official)
 - The non-official members are representatives of the farming community and usually have an active association with the farming community.
 - **Mandate** - To advice the government on the MSP of 23 commodities



◦ **Determinants of MSP -**

1. demand and supply;
2. cost of production;
3. price trends in the market, both domestic and international;
4. inter-crop price parity;
5. terms of trade between agriculture and non-agriculture;
6. a minimum of 50% as the margin over cost of production; and
7. likely implications of MSP on consumers of that product.

- **Approval of MSP -** The **Cabinet Committee on Economic Affairs (CCEA)**, chaired by the Prime Minister, approves the increase in the Minimum Support Prices (MSP).

- In the **Union Budget 2018-19**, the announcement of **fixing the MSP** at a level of at **least 1.5 times** of the **All-India Weighted Average Cost of Production**

was made to provide fair remuneration to the farmers.

3.2.3 Agriculture Subsidy

- **Meaning** - It is the **financial support** given to farmers to **increase their income** with **less input expenditure**.
 - It is given on **fertilizers, farm equipment, seeds, power, irrigation, credit** etc.
- **Types of Subsidies:**

▲ Direct Subsidy

- In this form of subsidy, the benefit is given **directly to the farmers** in the form of **Direct Benefit Transfer (DBT)**, now.

Indirect Subsidy

- In this form of subsidy, the benefit is given **indirectly to the farmers**.
- For ex. subsidizing companies to provide cheap farm inputs like fertilizers etc.

- **Origination of Agricultural Subsidy (1960)**

- **Origin:** Began in **1960s** during the Green Revolution
- **Purpose:** Subsidies intended to reduce the cost of production for farmers and to check food price inflation and protect consumers.

- **Retention Price Scheme (1977)**

- The **Retention Price Scheme (RPS)** for **fertilizer industry** introduced in **1977** and remained in force till **2003**.
- Under the scheme, the government set a **specific price** (known as the Retention Price) **for urea**, determining the cost at which urea should ideally be sold.
- The subsidy was then calculated as the variance between this government-fixed Retention Price and the maximum retail price at which urea was sold to consumers.
- Essentially, this subsidy was a financial support mechanism implemented to bridge the gap between the actual retail price and the price set by the

government (Retention Price).

- **Negative Aspect of Subsidies**

- Subsidies benefitted big farmers more than the small farmers.
- Subsidized power from state government results in **inappropriate use of water**.
- Overuse of subsidized fertilizers has **deteriorated the fertility** and **productivity of the soil**.
- Full benefit of subsidy would not reach to the farmers due to the **presence of corruption**.
- **Credit subsidies** like loan waivers have **weakened the Indian banking system** (due to increased NPAs), having negative spill-over effects on the economy.

- **Burden of Subsidies**

- Since the early 1980s, the costs of the subsidies have increased notably rising to between 15% and 25% of the government budget, more than is spent on education.
- Subsidies on fertilizer, electricity and irrigation account for a major proportion of the subsidies burden on the Government of India.
- In addition to this, agricultural income is not taxable in India. This is an intangible and uncounted form of financial support given by the Government of India.
- As per the **15th Finance Commission's report**, the burden of subsidies on the government is mentioned below:

Table 3.12: Subsidies Relative to Union Government's Net Revenue Receipts

(per cent of net revenue receipts)

Year	Food	Fertiliser	Petroleum	Others	Total
2011-12	9.7 (0.8)	9.3 (0.8)	9.1 (0.8)	0.9 (0.1)	29.0 (2.5)
2012-13	9.7 (0.9)	7.5 (0.7)	11.0 (1.0)	1.1 (0.1)	29.2 (2.6)
2013-14	9.1 (0.8)	6.6 (0.6)	8.4 (0.8)	1.0 (0.1)	25.1 (2.3)
2014-15	10.7 (0.9)	6.5 (0.6)	5.5 (0.5)	0.8 (0.1)	23.4 (2.1)
2015-16	11.7 (1.0)	6.1 (0.5)	2.5 (0.2)	1.9 (0.2)	22.1 (1.9)
2016-17	8.0 (0.7)	4.8 (0.4)	2.0 (0.2)	2.2 (0.2)	17.1 (1.5)
2017-18	7.0 (0.6)	4.6 (0.4)	1.7 (0.1)	2.3 (0.2)	15.6 (1.3)
2018-19	6.5 (0.5)	4.5 (0.4)	1.6 (0.1)	1.7 (0.1)	14.4 (1.2)
2019-20 (RE)	5.9 (0.5)	4.3 (0.4)	2.1 (0.2)	2.0 (0.2)	14.2 (1.3)
2020-21 (BE)	5.7 (0.5)	3.5 (0.3)	2.0 (0.2)	1.7 (0.2)	13.0 (1.2)

Source: Union Budget for various years and GDP from NSO

Note: Figures in brackets show explicit subsidies as ratio of GDP

4.0 Trends in Agriculture Sector

4.1 Agriculture Production



Difference between Agricultural Productivity and Production

- **Agricultural productivity:** It refers to the average yield per hectare of land.
- **Agricultural production:** It refers to the total agricultural output of food grains and non-food grains.

India used to be one of the largest growers and producer of the agricultural crops but ranks very low in terms of yield.

- It has **two components:** i) Food grains ii) Non-Food grains
- During 1947-91, **total food grain and non-food grain production** have increased.

4.2 Agricultural Productivity

- Agricultural productivity has been increasing but the speed is slow.
- Over the period 1950-51 to 1990-91, **yield per hectare of all food grains** has increased by **2.5 times**.
- Most significant increase has been recorded by wheat.
- The **average yield per hectare of pulses** has grown by less than 1% annually, on an average, since the 1950s.



Reasons for Low Crop Productivity

- Small and dwelling size of agricultural land holdings
- Grossly insufficient irrigation facility
- Lack of remunerative and secure marketing policy
- Lack of financial inclusion
- Quality of soil

4.3 Trend of Agriculture Prices and Price Policy

- **Agricultural prices** witnessed an **upward trend** during 1955-56 to 2014-15, except in 1961-62, 1968-69, 1975-76, 1978-79 and 1985-86.
- In order to safeguard the interests of both producers and consumers, the government has set up the **Commission for Agricultural Costs and Prices** for setting up the Minimum Support Price (MSP), Procurement Price, and Issue Price.
 - **Minimum Support Price (MSP)**: It is the minimum price set by the government at which it procures crops directly from farmers to ensure they get a fair price for their produce
 - **Procurement Price (PP)**: It is a price higher than the MSP and is specifically intended for procurement of food grains for the Public Distribution System (PDS). PP is announced before harvesting and is

usually higher than the MSP to ensure an adequate supply of grains for the PDS.

- **Issue Price:** This is the price at which commodities procured through government channels, like the PDS, are sold to consumers at fair price shops or ration depots
- Since 1968-69, the government announced only the MSP, which is considered the effective procurement price.

4.3.1 Steps Taken for Agricultural Price Stability

- **Organization of Food Zones:**
 - Organized in March 1964
 - The entire country was divided into food zones based on their crop production.
 - The Government took upon itself the task of procuring food-grains from the surplus States and distributing them to the deficit-States through the public distribution system.
- **Fixation of Minimum Support Prices and Procurement Prices by the Government:**
 - At the time of surplus production, government procures at MSP so that farmers are not penalized for producing more.
 - During scarcity, the government releases the buffer stock to protect the consumer against inflation in agriculture.
- **Rationing and Sale through Fair Price Shops:**
 - The **public distribution system** in our country operates through a network of **ration shops** and **fair price shops**.
 - They offer food at a subsidized rates to the vulnerable sections of society for consumption.
- **Other Steps:**
 - Building up of buffer stocks
 - State trading

- Nationalization of wholesale trade in wheat and rice
- Procurement from wholesalers
- Import of food-grains, etc.

5.0 Agriculture Revolutions

Revolution	Product	Father of Revolution
Green Revolution	Wheat, Rice, Bajra, Jowar, Maize	MS Swaminathan
White Revolution (Operation Flood)	Milk	Vergheze Kurien
Blue Revolution	Fish	Hiralal Chaudhary and Arun Krishnan
Brown Revolution	Food Processing	Hiralal Chaudhary
Grey Revolution	Fertilizer	-
Yellow Revolution	Oilseeds	Sam Pitroda
Red Revolution	Tomato and Meat	-
Pink Revolution	Prawn and Onion	Durgesh Patel
Golden Revolution	Fruit and Honey	Nirpakh Tutaj
Golden Fiber Revolution	Jute	-
Round Revolution	Potato	-
Silver Revolution	Egg and poultry	Indira Gandhi
Black Revolution	Biofuel and Jatropa	-
Prabhani Revolution	Okra	-
Rainbow Revolution	All sectors of agriculture	-
Evergreen Revolution	Sustainable agriculture	MS Swaminathan

6.0 Agricultural Organizations in India (Before 1991)

6.1 Food Corporation of India

- **Established** - 14 January 1965 under the Food Corporations Act of 1964
- **Nature** - Statutory Organization
- **Headquarter** - Delhi (initially Chennai)
- **Ministry** - Ministry of Consumer Affairs, Food and Public Distribution
- **Purpose** - To implement the objectives outlined in the **National Food Policy**:
 - Effective price support operations for safeguarding the interests of the poor farmers
 - Distribution of food grains throughout the country for Public Distribution System (PDS)
 - Maintaining a satisfactory level of operational and buffer stocks of food grains to ensure National Food Security
 - Regulate market price to provide food grains to consumers at a reliable price

6.2 Indian Council and Agricultural Research

- **Established** - 1929 under the Societies Registration Act of 1860
- **Nature** - Autonomous Organization
- **Earlier Name** - Imperial Council of Agricultural Research
- **Headquarters** - New Delhi
- **Ministry** - Department of Agricultural Research and Education (DARE), Ministry of Agriculture and Farmers Welfare
- **Purpose** - To plan, undertake, aid, promote and coordinate education, research and its application in agriculture, agroforestry, animal husbandry, fisheries, home science and allied sciences

Father of Green Revolution in India, MS Swaminathan, was the Director-General of the ICAR from 1972 to 1979.

6.3 Directorate of Marketing and Inspection

- **Established** - 1935
- **Nature** - An attached Office of the Department of Agriculture, Cooperation and Farmers Welfare under Ministry of Agriculture & Farmers Welfare
- **Purpose** - to implement the agricultural marketing policies and programs for the integrated development of marketing of agricultural and other allied produce in the country with a view to safeguard the interests of farmers as well as the consumers

6.4 National Dairy Development Board

- **Established** - 1965
- **Headquarters** - Anand, Gujarat
- **Ministry** - Ministry of Fisheries, Animal Husbandry and Dairying
- **Founder** - Dr Verghese Kurien
- **Purpose** - to promote, plan and organize programs for development of dairy and other agriculture and allied industries and to extend the success of the **Kaira Cooperative Milk Producers' Union (Amul)** to other parts of India

6.5 Agriculture Universities

- **First Agriculture University** - G.B. Pant University of Agriculture and Technology in Pantnagar (then in Uttar Pradesh, now in Uttarakhand) in 1960
- **Total Agriculture Universities** - As of January 2024, there are **3 Central Agricultural Universities**, **4 Deemed Universities** and **63 State Agricultural Universities**

6.6 National Bank for Agriculture and Rural Development (NABARD)

- **Established** - 12 July 1982 on the recommendations of B. Sivaramman Committee
- **Legislation** - National Bank for Agriculture and Rural Development Act of 1981

- **Nature** - Statutory Organization
- **Purpose** - to promote sustainable and equitable agriculture and rural development
- **Vision** - Development Bank of the Nation for Fostering Rural Prosperity
- **Mission** - Promote sustainable and equitable agriculture and rural development through participative financial and non-financial interventions, innovations, technology and institutional development for securing prosperity
- **Functions** - Financial, Developmental, and Supervisory

- **Financial Function**

- It lends to various organizations through direct financing and re-financing.

- **Developmental Function**

- It provides funding and participates actively in the development of the rural areas

- **Supervisory Function**

- Section 35(6) of the Banking Regulation Act, 1949, empowers NABARD to conduct inspection of State Cooperative Banks (StCBs), District Central Cooperative Banks (DCCBs) and Regional Rural Banks (RRBs).
- In addition, NABARD has also been conducting periodic inspections of state level cooperative institutions such as State Cooperative Agriculture and Rural Development Banks (SCARDBs), Apex Weavers Societies, Marketing Federations etc., on a voluntary basis.
- NABARD acts as a supervisor only and not as a regulator for RRBs.

- It provides **training** and **research facilities** for banks, cooperatives and other organizations who work towards **rural development**.

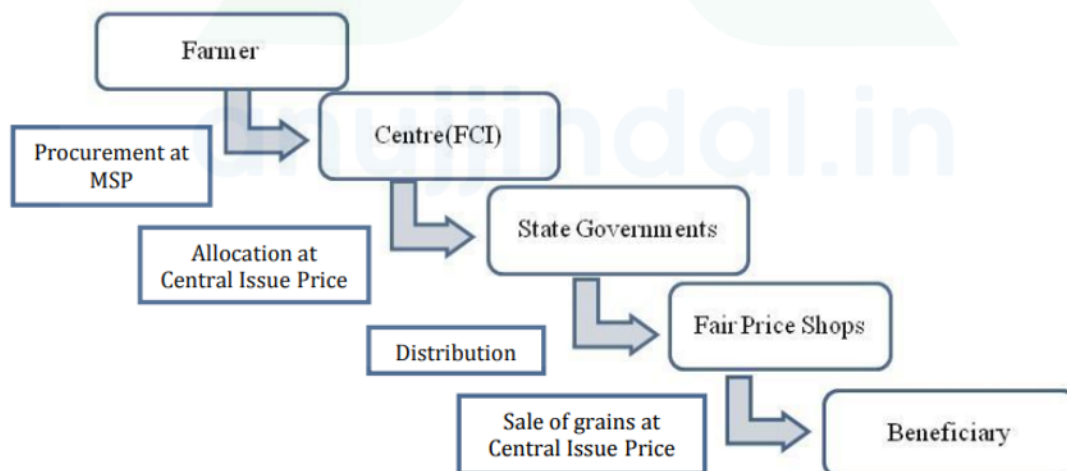
7.0 Other Key Concepts Related to Agriculture

7.1 Agriculture and Food Security

- **Meaning** - Food security is the measure of the availability of food and individuals' ability to access. It entails ensuring adequate food supply to people, especially those who are deprived of basic nutrition. Food security is still a major concern in India.

7.1.1 Public Distribution system (PDS)

- **Public Distribution System** is the most important channel for ensuring the food security in India.
- **Introduced** - 1945 (during the Second World War). Thereafter, FCI launched PDS in 1965.
- **Management** - Jointly by States and Central Government
 - **Centre's Responsibility** - storage, procurement of grains (through FCI), transportation and bulk allocation of food grains to states
 - **States' Responsibility** - distribution of the food grains to beneficiaries, supervision of fair price shops in the states, identification of the below poverty line (BPL) households, issue of ration cards etc.



- **Purpose** - providing essential consumer goods at cheap and subsidised prices to the consumers and maintain the minimum nutritional status of our population

- **Revamped Public Distribution System (RPDS)** - Launched in 1992 to streamline and strengthen the PDS
- **Targeted Public Distribution System (TPDS)** - Launched in 1997 with focus on poor in all areas, making this scheme a pro-poor scheme

PDS is highly subsidized and has put a severe fiscal burden on the government. The burden is caused by the difference between the issue price and the cost of operating the FCI.

7.2 Agricultural Finance

- After Independence, agriculture remained largely dependent on moneylenders for its financial needs due to its **unorganized nature**. Banking Industry was not willing to lend to agriculture sector due to its unorganized nature and dependence on climatic factors for its success.

7.2.1 Sources of Agricultural Finance

A) Institutional Sources

- It includes -
 - i. Scheduled Commercial Banks
 - ii. Regional Rural Banks
 - iii. NABARD
 - iv. Cooperative Credit Societies
- The **share of institutional credit** has been **increasing** significantly. It increased from 7.3% in 1951 to 66.3% in 1991 due to government's intervention.

B) Non-Institutional Sources

- It includes -
 - i. Money lenders
 - ii. Relatives

- iii. Traders
- iv. Commission agents
- v. Landlords
- The **share of non-institutional sources** has **decreased** significantly since independence. It declined from 92.7% in 1951 to 30.6% in 1991.

7.3 Agricultural Marketing

Government measures to improve agricultural marketing system in India.

- **Agricultural Produce Markets Regulation (APMR) Act:**
 - During the 1960s and 1970s, most of the states enacted and enforced Agricultural Produce Markets Regulation (APMR) Acts.
 - For each market area, an **Agricultural Produce Market Committee (APMC)** was constituted to frame the rules and enforce them.
- **Agricultural Produce (Grading and Marketing) Act (1937):**
 - To facilitate grading and quality standards for 182 agricultural commodities
 - Physical and chemical properties are analyzed in laboratories, then, **AGMARK seals** (abbreviation for Agricultural Marketing) are issued.
- **Essential Commodities Act (1955):**
 - It aims to regulate the production, supply and distribution of commodities, listed in the Act, to make them available to consumers at fair prices
 - It also works for developing the cold storage industry in a planned manner.
- **The Standard Weights and Measures Act (1958):**
 - As per this Act, only Government weights and measures can be used for transactions.
- **Godown and Storage facilities:**
 - **Central Warehousing Corporation:** Set up in 1957, followed by establishment of State Warehousing Corporations

- **Food Corporation of India:** Set up in 1965 for purchase, storage, movement, transport, distribution and sale of food grains and other foodstuff
- **Ch Charan Singh National Institute of Agricultural Marketing (NIAM)**
 - **Established** - 1988
 - **Purpose** - to augment the agricultural marketing infrastructure
- **Cooperatives**
 - Government encouraged **small and marginal farmers** to form cooperatives to obtain **fair prices** for their produce.
 - Individual farmers organize themselves into a cooperative society. They pool their produce together and market it collectively.
 - It was initiated in the second 5-year plan.
 - The National Cooperative Department and Warehousing Board was set up in 1956. This board was subsequently replaced by the **National Cooperative Development Corporation (NCDC)** in **1963**.

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