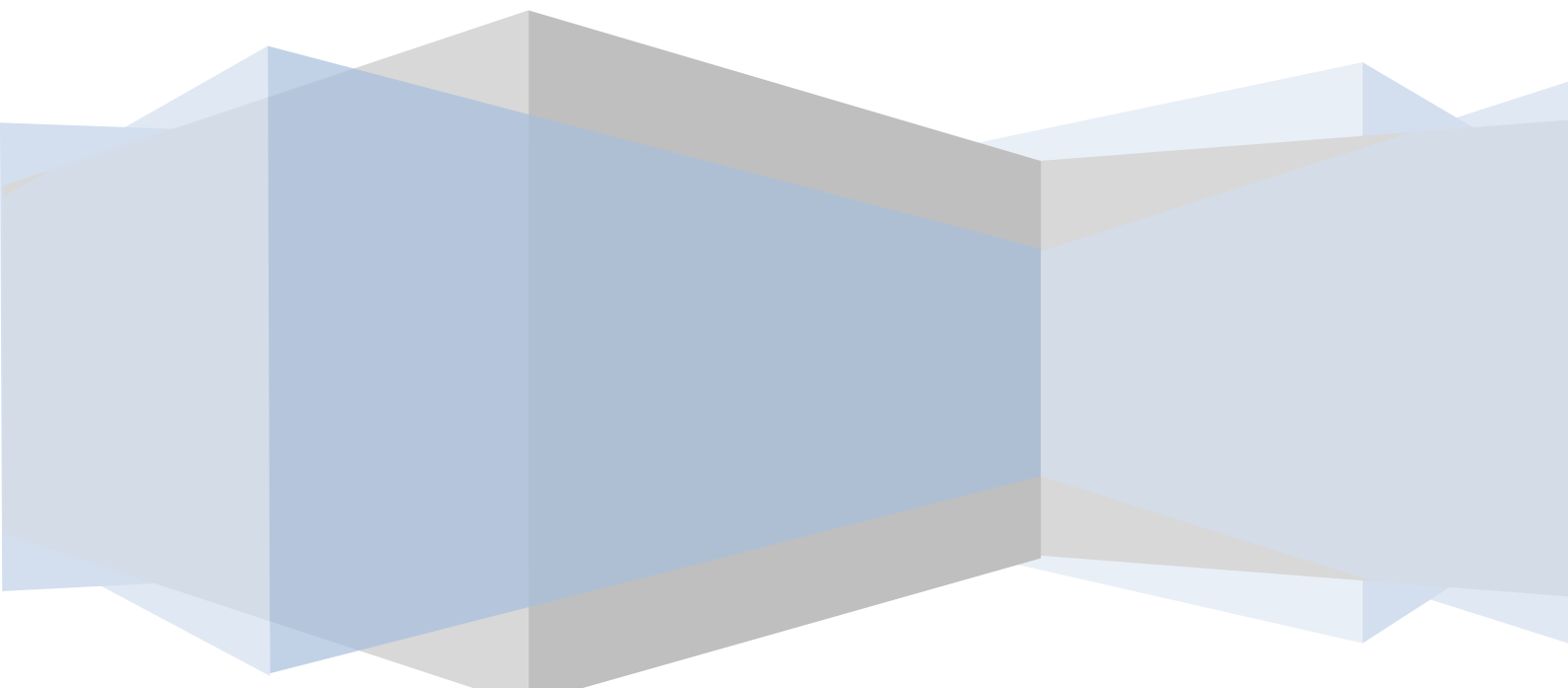


Chapter 4: Procurement Policy and Agriculture Marketing

Short Answers

CSM 05: Agriculture

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This chapter contains:

- Agriculture Status of Agriculture in India
- Area Production and Yield
- Cropping Seasons
- Competitive Advantage & Agriculture Exports
- Employment & Operational Holdings
- Allied Sectors
- Procurement Policy and Issues
- Agriculture Markets in India
- Agriculture Marketing
- WTO and Agriculture

Contents

1. Agriculture.....	1
2. Area Production and Yield.....	3
3. Cropping Seasons	5
4. Competitive Advantage & Agriculture Exports	6
5. Employment & Operational Holdings	7
6. Allied Sectors	8
7. Procurement Policy and Issues.....	10
7.1 Agriculture Pricing Policy.....	23
7.2 Minimum Support Price (MSP)	27
7.3 Public Distribution System (PDS)	32
8. Agriculture Markets in India.....	32
9. Agriculture Marketing	39
9.1 Agricultural Produce Market Committee (APMC)	39
9.2 Agricultural Marketing in India: Challenges	39
9.3 Recent Agricultural Reform Acts	40
9.4 Other Govt. Initiatives	43
10. WTO and Agriculture	47

1. Agriculture

AGRICULTURE: KEY FACTS & TRENDS

SHARE IN GVA, GROWTH RATES, CAPITAL FORMATION

<p>Share in GVA [Agriculture Statistics at a Glance 2020, Ministry of Agriculture]</p>	<ul style="list-style-type: none"> • Share of Agriculture & Allied sectors in Total Gross Value Added (GVA) in 2020-21: 20% <ul style="list-style-type: none"> - Crossed 20% first time in the last 17 years. - Higher than World's average (6.4%). - Last 5 Year Trend (2014-15 to 2019-20) - Share of agriculture and allied sectors in Total GVA has been fluctuating. • Share of Various Allied Activities in Total GVA: Last 5 Year Trend (2014-15 to 2019-20) <ul style="list-style-type: none"> - Share of crops has been fluctuating. - Share of Livestock has been steadily increasing. - Share of Forestry & logging has been fluctuating, - Share of Fishing & aquaculture has increased since 2014-15 (but stagnant since 2017-18). • Share of Agriculture & Allied Activities in Agriculture GVA <ul style="list-style-type: none"> - Crops – 60% - Livestock – 27% - Forestry & Logging – 7% - Fishing & Aquaculture – 6%
<p>Growth Rates [Agriculture Statistics at a Glance 2020, Ministry of Agriculture]</p>	<ul style="list-style-type: none"> • Only sector to have clocked a positive growth of 3.4% in 2020-21 (during COVID lockdown). • Last 5 Year Trend (2014-15 to 2019-20) <ul style="list-style-type: none"> - Overall - Growth rate in GVA of agriculture and allied sectors has been fluctuating. - Allied Sectors – Growth rate in GVA fluctuating for each sub-sector (crops, livestock, forestry & logging, & Fishing).
<p>Gross Capital Formation (GCF) in Agriculture & Allied Sectors (as a % of GVA of economy)</p>	<ul style="list-style-type: none"> • Last 5 Year Trend (2014-15 to 2019-20) <ul style="list-style-type: none"> - GCF in agriculture and allied sector as a proportion to GVA of Economy has been showing a fluctuating trend. - Private Sector investment > Public

	Sector Investment - both showing a fluctuating trend.
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2. Area Production and Yield

Land Use Pattern	<ul style="list-style-type: none"> • Net Sown Area – 45% (140 million hectares) ☞ Total Area Under Cultivation (Food & Non Food crops). • Forest Area – 24% • Pastures & Groves – 4%
	<ul style="list-style-type: none"> • Cultivable Waste – 4% • Fallow Land – 9% • Barren and unculturable land – 5% • Area under non-agricultural uses – 8%
Area under Cultivation	<ul style="list-style-type: none"> • Foodgrains of India <ul style="list-style-type: none"> - Cereals: Rice (23%) > Wheat (15%) ☞ 38% of Net Sown Area - Coarse Cereals/Nutri-cereals: Maize > Bajra > Jowar > Barley > Ragi ☞ 11% - Pulses: Gram/Chickpea/Chana > Tur/Pigeon Pea/Arhar > Masur/Lentil ☞ 15% • Other Crops <ul style="list-style-type: none"> - Oilseeds – Soyabean > Rape & Mustard Seeds > Groundnut etc. ☞ 13% - Sugarcane - 3% - Cotton - 7% - Other – 13% • Last 5 Year Trend (2014-15 to 2019-20) <ul style="list-style-type: none"> - Total Area under foodgrain, Rice, Wheat, Coarse Cereals, Pulses, Oilseeds, Cotton, Sugarcane – Fluctuating trend.
Food grain & Other Crops Production	<ul style="list-style-type: none"> • Foodgrain production increased from 51 million tonnes in 1950-51 to record production of 297 million tonnes in 2019-20. • Rice & Wheat accounted for about 75% of the food grains production. • Ranking of Foodgrains on basis of production – Rice > Wheat > Nutri/Coarse Cereals > Pulses. • Last 5 Year Trend (2014-15 to 2019-20) <ul style="list-style-type: none"> - Except in 2015-16, Food grain production has shown an increasing trend. - Rice – Except in 2015-16, Rice production has shown an increasing trend. - Wheat - shown an increasing trend. - Coarse cereals – Fluctuating Trend (Maize > Bajra > Jowar) - Pulses – Fluctuating Trend (Gram > Tur > Masur). - Oilseeds - shown an increasing trend, except for 2015-16 (Soyabean > Groundnut > Rape & Mustard seeds). - Cotton, Sugarcane – Fluctuating trend.

Yield	<ul style="list-style-type: none">• <u>Last 5 Year Trend (2014-15 to 2019-20)</u><ul style="list-style-type: none">- Food grain – increasing trend.- Rice - Increasing trend- Wheat – Increasing trend (except 2019-20)- Coarse Cereals, Pulses, Oilseeds, Cotton, Sugarcane – Fluctuating
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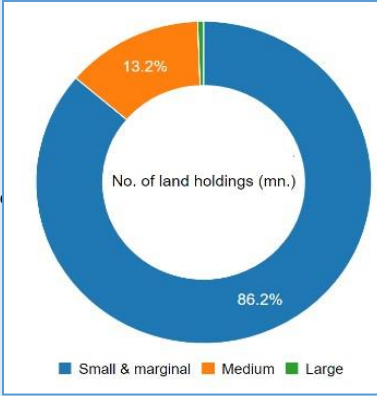
3. Cropping Seasons

Cropping Seasons	Cropping Season	Major Crops Cultivated	
		Northern States	Southern States
	KHARIF (June-Sept)	<ul style="list-style-type: none"> • Cereals – Rice • Coarse Cereals - Bajra, Maize, Jowar* 	Rice, Maize, Ragi, Jowar, Groundnut
	<ul style="list-style-type: none"> • Pulses – Tur/Arhar, Urad (Black Gram)*, Moong (Green Gram) • Oilseeds – Soyabean, Groundnut • Other Crops - Cotton, Sugarcane 		
RABI (Oct-March)	<ul style="list-style-type: none"> • Cereals – Wheat • Coarse Cereals - Barley, Jowar* • Pulses - Gram (Chickpea/ Chana), Peas, Urad (Black Gram)*, Lentil (Masur) • Oilseeds - Rapeseeds, Mustards 	Rice, Maize, Ragi, Jowar, Groundnut	
Zaid (April-June)	Vegetables, Fruits, Fodder	Rice, Vegetables, Fodder	
Key Points to Note	<ul style="list-style-type: none"> • Majority (60%) of Foodgrains are produced in Kharif Season. • Jowar is both Kharif & Rabi, but mostly Kharif. • 70% Oilseeds produced in Kharif season (in Rain-fed Conditions). • Majority of Pulses (>55%) are produced in Rabi Season. 		

4. Competitive Advantage & Agriculture Exports

<p>Competitive Advantage of Indian Agri- sector [15th Finance Commission HLEG on Exports]</p>	<ul style="list-style-type: none"> • Largest arable land resource in the world. • 20 agri-climatic regions, all the 15 major climates in the world exist in India. • India has 46 of the 60 soil types in the world. • India is 2nd highest agriculture producer in the world (After China). • Largest producer of spices, pulses (25%, highest for any one country), milk, tea, cashew, and jute. • 2nd largest producer of wheat, rice (also largest exporter – 30%), fruits and vegetables, sugarcane, cotton (also 2nd highest exporter), and oilseeds.
<p>Agriculture Exports [HLEG on Exports & Economic Survey 2020-21]</p>	<ul style="list-style-type: none"> • India's Agricultural export – About 2.5% of the world agricultural trade, and ranks at 10th position in the world. • Major export destinations - USA, Saudi Arabia, Iran, Nepal and Bangladesh. • Key Categories of export - cereals, fresh fruits and vegetables, processed food, animal products and floriculture.
	<ul style="list-style-type: none"> • Marine products, meat, and rice together constitute ~52% of India's total agri exports. Marine products account for largest share in Agri exports. • Objective of Agri Export Policy – increase the share of agricultural exports from present 30 billion USD to more than 60 billion USD by 2022. • Agri-Imports: Biggest item is edible oil - worth \$10 billion. • TREND - Since economic reforms began in 1991, India has remained a net exporter of agri-products.

5. Employment & Operational Holdings

<p>Share in Total Employment</p>	<ul style="list-style-type: none"> • Share of Agriculture workforce in Total workforce = 44% (Industry - 28%, Services - 31%) [Periodic Labour Force Survey]. • 70% rural households still depend on agriculture for their livelihood. • Share of Landless labourers - 55% of the total agriculture workforce (More than that of farmers (cultivators)). <ul style="list-style-type: none"> - TREND - Share of landless labourers grown more than 5 times since 1951 (Census 2011). • Small & Marginal Farmers - 85% of all farmers.
<p>Operational Holdings [Agriculture Census, 2015-16]</p>	<p>Types of Holding</p> <ul style="list-style-type: none"> • Marginal (<1 hectare) & Small and marginal holdings (<2 hectares) – Form 86% of the total land holdings. • Semi-medium (2-4 hectares) & medium holdings (4-10 hectares) – form 13% of total holdings. • Large holdings (>10 hectares): form just 0.6% • Last 10 Year Trend- Number of small land holdings have increased compared to the previous census, while the number of large land holdings has decreased.  <p>Size of Holdings</p> <ul style="list-style-type: none"> • The average size of operational holding declined to 1.08 hectares (ha) in 2015-16 compared to 1.15 ha in 2010-11. • Trend – Avg. size of landholding consistently declining since 1970 Agri Census, indicating greater fragmentation of land.

6. Allied Sectors

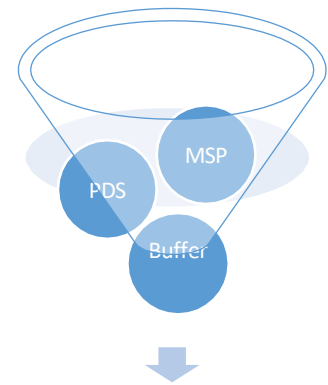
<p>Horticulture</p>	<ul style="list-style-type: none"> • Total Contribution to Agriculture GDP = about 35% (Vegetables, Fruits, Spices, Plantation crops, Flowers & Aromatics). • % of Net Sown Area = 16% • Area under Cultivation <ul style="list-style-type: none"> - Vegetables > Fruits > Spices > Plantation crops - Trend - Significant Expansion in Acreage (18%) Vis A Vis Foodgrains (5%) – (2010 – 2015).
	<ul style="list-style-type: none"> • Production - 320 million metric tonnes (2019-20). <ul style="list-style-type: none"> - Trend - Production of Horticulture crops has outpaced the production of food grain since 2012-13. - Production - Fruits (30%) > Vegetables (60%) > Plantation crops (6%) > Spices (2.5%) > Flowers & Aromatics (1.5%) - 2nd largest producer of fruits and vegetables in the world. - India is 1st in production of Banana, Mango, Lime and Lemon, Papaya and Okra. - Largest Producer, Consumer, & Exporter of Spices. • Growth rate of production – 5.4% p.a (Over the last decade). • India's Contribution in total world production – Fruits (12%), Vegetables (13%) • Share in global exports - Meagre 1.7% in vegetables and 0.5% in fruits. • Employment - supports 20% of the agriculture labour force.
<p>Livestock Sector</p>	<ul style="list-style-type: none"> • Livestock sector contribution to agriculture GDP – 27%. • Livestock contributed 16% to the income of small farm households as against an average of 14% for all rural households. • Livestock provides livelihood to two-third of rural community and employment to about 9% of the population in India. • Growth rate - Nearly 8% over the last five years • India has Largest Livestock Population in World <ul style="list-style-type: none"> - 57% Buffaloes. - 13% Cattles (80% of the cattle are indigenous).
<p>Dairy Sector</p>	<ul style="list-style-type: none"> • Dairy sector contribution to livestock sector (%) - around 65-70% • India ranks First in Milk Production since last 20 years ☑ 19% of World Production • Annual growth rate of Milk production (2014-19) - 6.5% (growth rate of world milk production is 1.2%). • Trend in last 5 years (2014-15 to 2019-20) - Milk production consistently increased. • Per capita availability of milk (2018-19) - 394 grams per day (more than world average). • Nature of Milk distribution industry - Organized sector - 40% (cooperatives & private dairies) & unorganised sector - 60% • Nature of Milk processing Industry - Organized sector - 20% &

	<p>unorganised sector - 80%.</p>
Fisheries	<ul style="list-style-type: none"> • Fisheries contribution to agriculture GDP – 6% • India’s Global Position <ul style="list-style-type: none"> - Ranks 2nd in Fisheries, 2nd in Aquaculture. - Share in global fish production - 7.7 % • Fish production (Sub sectors) <ul style="list-style-type: none"> - Fish production (2019-20) - reached an all-time high of 14 million metric tons - Marine fisheries – 35% of total production (includes Coastal & Deep sea fishing) - Inland fisheries – 65% of total production (includes Capture & Aqua- culture fishing) • Average Annual Growth Rate - 10.8% during 2014-15 to 2018-19 • Exports - India is 4th largest fish exporting nation. • Employment in Sector - >15 million people engaged fully, partially or in subsidiary activities.

7. Procurement Policy and Issues

FOOD PROCUREMENT POLICY IN INDIA

- Objectives
 - Procurement of food grains from farmers at remunerative prices → **Minimum Support Price (MSP)**.
 - Distribution of food grains to the consumers, particularly the vulnerable sections of the society, at affordable prices
→ **Public Distribution System (PDS)**.
 - Maintenance of food buffers for food security and price stability → **Buffer Stock**.



Food Procurement
Policy

7.1 Agriculture Pricing Policy

Remunerative and assured prices are essential for increasing agricultural production and productivity along with better markets to farmers.

With a view to evolve a balanced and integrated price structure and resolving the claims of competing crops on limited resources to the perspective of the overall needs of the economy, the Minimum Support Prices (MSP) of certain agricultural crops are fixed for every season in India.

For a particular crop and for a given crop season, it is the same across all geographies of the country.

The Government seeks to fix prices that would fulfil obligations of justice to the consumers and yet provide a surplus and incentive to all efficient farmers.

In a sense, a 'double bind' situation prevails in fixing the prices where the consumers' capacity to pay prices for food and Government's capacity to incentivise farmers for food production beyond a certain point are both limited.

Crops Coverage under MSP

MSP is fixed on the recommendations of the Commission for Agricultural Costs and Prices (CACP), an attached office of the Ministry of Agriculture and Farmers Welfare and announced before the sowing season. As of now, the **MSP is offered on 23 commodities**:

- 7 cereals (paddy, wheat, maize, sorghum, pearl millet, barley, and ragi)
- 5 pulses (gram, tur, moong, urad, and lentil)
- 7 oilseeds (groundnut, rapeseed-mustard, soyabean, sesame, sunflower, safflower and nigerseed)
- 4 commercial crops (copra, sugarcane, cotton, and raw jute)

For sugarcane, the mechanism is a bit different. It requires the sugar mill companies to pay a **Fair and Remunerative Price (FRP)** fixed by the government whereas for other crops, government itself procures at MSP. FRP varies according to the recovery of sucrose percentage. As recovery rates vary from state to state, so do effective FRP. This is in contrast to fixed MSPs across states in case of other 22 crops.

The question arises as to Why Fixing Prices in the first place?

- 🌾 For Large and growing population, food security to be provided;
- 🌾 Two successive droughts in 1965-66 & 1966-67;
- 🌾 With a view to boost production, the Government of India introduced MSP Scheme as an incentive to the farmers.
- 🌾 Demand of more food with limited land and water resources
- 🌾 Inadequate foreign exchange constrained FoC to import key staples from global markets

- ❖ 'Ship to mouth': Heavy dependence on foreign aid (PL-480) often had political strings attached; Institutions Created
 - ❖ It was recognized that mere announcement of MSPs without back up of market intervention in the form of procurements would not be effective.
 - ❖ To advise & implement a remunerative price policy, 'twins' {APC (CACP) & FCI} conceived & borne in Jan, 1965.
 - ❖ Besides setting up of Food Corporation of India (FCI) in 1965 to primarily undertake procurement operations of foodgrains, the Government decided in 1985 to entrust NAFED with the responsibility of price support for pulses and oilseeds.
- What are the Determinants of MSP?

There are 7 main parameters which determine MSPs

- i. demand and supply situation of main product and by-products
- ii. cost of production;
- iii. price trends in the market, both domestic and international,
- iv. inter-crop price parity,
- v. terms of trade between agriculture and non-agriculture sector,
- vi. likely impact of MSP on consumers, producers and overall economy
- vii. rational utilization of natural resources such as land, water resources

In addition to these 7 parameters, another factor has been added recently in determining MSP. And that is a minimum of 50 percent as the margin over cost of production is allowed.

Cost of production is an important factor but certainly not the only factor that determines MSP. Thus, MSP is NOT a cost plus pricing exercise, as many a times, some farmers' organizations and even agriculture Scientists (mis)construe.

The Commission uses crop-wise, State-wise cost data to estimate all-India weighted average cost of production.

In view of wide variations in resource endowments in terms of agro-climatic conditions, soil and productivity profiles, input usage, and cost of production, differential prices at regional levels were advocated by some experts.

In fact, the system of differential support prices for different states had been tried out from 1965 to 1972, but it was later given up due to likely build-up of inefficient structure in production and in pattern of resource use.

A uniform support price across the country has been in vogue since then. This is justified on the ground that it alone could lead to comparatively efficient use of resources.

In addition to this, a uniform price policy encourages crop specialization and optimum use of agrarian crop land and other resources on the basis of comparative advantage.

Various kinds of costs:

There are a number of cost concepts but most widely used are 3 types. These are A_2 , $A_2 + FL$ and C_2 :

- i. Cost A_2 : All actual expenses in cash and kind incurred in production + rent paid for leased-in-land
- ii. Cost $A_2 + FL$: Cost A_2 + imputed value of family labour
- iii. Cost C_2 : Cost $A_2 + FL$ + imputed interest on value of owned capital assets (excluding land) + imputed rental value of owned land (net of land revenue)

It follows that cost C_2 is always more than cost $A_2 + FL$ which in turn is more than A_2 .

Whose Cost to be considered?

Crop-wise, State-wise cost of production (CoP) are considered while formulating price policy. The question arises as to Whose Cost to be considered?

One of the criteria for deciding the level of MSPs is cost of production (CoP). Needless to say, CoP varies a great deal from region to region, state to state, district to district and farm to farm. If these costs were to be normally distributed, about 50 percent of farmers would be those whose CoP would be less than weighted average Cost but there would also be other 50 percent whose costs would be much higher than this weighted average.

In case of cotton, for instance, 51 percent of production is covered at weighted average C_2 Cost. It is, therefore, expected that other 49 percent of cotton growers would often question the reliability of cost estimates. This is a characteristic of any data set and this *per se* is not a reflection on the quality of data. Such a state of affairs would always emerge in all crops, *albeit* with varying magnitudes.

Weighted Average Cost Vs. Bulk line Cost

Though there is no mechanical linkage of MSP with any cost, yet it is important to think of an alternative to the weighted average CoP *viz.* bulk line cost in pricing policy.

In that event, definition of bulk line may have to be crop specific for a specified period depending upon abundance or scarcity of the individual commodity and comparative advantage of growing that crop.

For instance, all-India weighted average cost of production of groundnut cover only 41 percent of production (Gujarat only) which indicate prevalence of high level of efficiency gaps in the production system. This low share of 41 percent has to be ramped up by addressing inefficiency issue through technology transfer and replication of best farming practices on a wider scale across states.

Structure of Comprehensive Cost of Cultivation

- i. Labour cost, the largest single factor of production, is followed by land cost, capital cost, other inputs, fertiliser (5%).
- ii. Though fertilisers play a crucial role in productivity, it constitutes just 5% in total cost of production of crops. In case prices of fertilisers increase by 20%, just as an example, its impact on total cost of production will be 1%.
- iii. Many a times farmers organisations make out a case to increase MSP at least as much as increase in prices of fertilisers. They often demand 20% increase in MSP if there is surge in fertilisers prices by 20%, just as an example. As a Policy maker, one may be conscious of the fallacy in this argument.

Inverse Relationship- Productivity & Cost

- Other things being constant, Empirics show that higher productivity reduces the Real cost of production and have the potential to drive up farm income

Why Productivity is critical?

- Volume of international trade, other things being equal, is greatly influenced by prices
- One way to reduce real prices of commodities is to increase their total factor productivity (TFP) much faster than demand
- land productivity, a partial component of TFP, impacts cost of production

Imperatives of Productivity Augmentation

- Increases potential for Agri-exports to expand
- can trigger rural demand and drive the economy to a higher growth trajectory.
- Precious natural resource (land) can be 'freed up' for the same level of production,
- Equivalently, higher production can be achieved by the same land and other inputs

Drivers of Productivity include

- ❖ Fertilizers
- ❖ Irrigation
- ❖ Seed
- ❖ Management Practices &
- ❖ Extension Services
- ❖ Fertilizers are generally consumed where there is assured irrigation.
- ❖ Irrigation and fertilizers' roles are overlapping in raising returns to farmers, where both represent adoption of technology. Empirics show a high correlation between Fertiliser consumption and gross returns.
- ❖ Fertiliser used is more in irrigated lands, implicitly subsidy goes to irrigation tract.
- ❖ More emphasis needs to be laid on investment in irrigation and rational utilisation of fertilizers.

Returns Augmenting

- Of late, demand from various stakeholders to increase MSP of various agricultural commodities has been intensifying and the main ground on the basis of which this demand is justified is monotonously increasing cost of production year after year.
- MSP is recommended not solely on the basis of costs, though it is duly factored in while recommending price policy.
- The answer to contain increasing cost of production lies in enhancing yield levels as, an inverse relationship exists between real cost of production and yield rates. A way forward is to create structures to enable adoption of modern technology by small and marginal farms who constitute over 85% of holdings. That will lead to productivity augmentation, reduce the cost of production, enhance competitiveness both in domestic and international markets and ultimately lead to farmers' welfare.

Food Corporation of India (FCI)/NAFED **procurement at MSP** is not geographically well spread. Farmers in remote and tribal areas are unable to bring their produce to the procurement centres. A **robust network of procurement agencies** should be available for the farmers from all geographies of the countries.

Government introduced decentralized procurement. **States which adopted decentralized procurement (DCP) include:** A&N Islands, Karnataka, Kerala, Odisha, Tamil Nadu, Andhra Pradesh, Telangana, Maharashtra, and Jharkhand (for **rice**); Gujarat, Punjab, and Rajasthan (for **wheat**); Bihar, Chhattisgarh, Madhya Pradesh, Uttarakhand, and West Bengal (for **rice/wheat**).

7.2 Minimum Support Price (MSP)

A. Meaning

- MSP is a form of market intervention by Central Government to **insure agricultural producers** against any sharp fall in farm prices, by guaranteeing minimum prices for their produce.
- Major objectives of MSP:
 - To support the farmers and prevent them from distress sales.
 - To procure food grains for public distribution.
 - MSP is announced by the Government at the beginning of the sowing season for certain crops on the basis of the recommendations of the **Commission for Agricultural Costs and Prices (CACP)**
 - The MSPs recommended by the CACP are finally approved by **Cabinet Committee on Economic Affairs** (chaired by the Prime Minister).
- Crops covered:**

CACP recommends MSPs of 25 commodities

CEREALS (7)	PULSES (5)	OILSEEDS (8)	COMMERCIAL CROPS (5)
<ul style="list-style-type: none"> ▪ Paddy ▪ Jowar ▪ Bajra ▪ Maize ▪ Ragi ▪ Wheat ▪ Barley 	<ul style="list-style-type: none"> ▪ Arhar ▪ Moong ▪ Urad ▪ Gram ▪ Masur (lentil) 	<ul style="list-style-type: none"> ▪ Groundnut ▪ Soyabean ▪ Sunflower ▪ Sesamum ▪ Nigerseed ▪ Rapeseed/Mustard ▪ Safflower ▪ Toria 	<ul style="list-style-type: none"> ▪ Copra ▪ Coconut ▪ Sugarcane (Fair & remunerative prices) ▪ Cotton ▪ Raw jute

A. Commission for Agricultural Costs and Prices (CACP)

- CACP is an attached office of the **Ministry of Agriculture and Farmers Welfare**.
- It came into existence in January 1965.
- It is mandated to **recommend MSP** to the Central government in form of annual Price Policy Reports.
- In making its recommendations, it takes into account **factors like**: cost of production, changes in input prices, trends in market prices, demand and supply, effect on cost of living, effect on general price level, international price situation etc.
- Current Composition of CACP
 - The Commission comprises a 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.

B. Current MSP & Procurement Mechanism: Challenges

- **Restricted to a few crops** – While the Government announces MSP for 25 crops, the official procurement at the MSP is disproportionately focused on wheat, rice and sugarcane, which has led to:
 - Imbalanced cropping pattern at the expense of other crops such as pulses, oilseed & coarse grains.
 - Depletion of water resources, soil degradation and persistence of monocultures due to focus on input intensive crops (wheat, rice & sugarcane).
 - Distortion of rational/sustainable farm practices as farmers tend to grow more remunerative wheat and rice, irrespective of their agro climatic suitability.
- **Regional imbalance** – Public procurement mainly confined to few states (eg. Punjab, Haryana, Maharashtra, U.P., A.P etc.) and very few farmers ☒ **impacts inclusive growth**.
- Fueling inflation
 - Poor price realization in market + Rising MSPs + open ended procurement by FCI ☒ Increase in buffer stocks of foodgrains above the required norms & decrease in the supply in the open market ☒ diversion of foodgrains from consumption to storage ☒ inflation.
 - MSP forms a **‘floor’** for market prices of crops. A persistent increase in MSP pushes up prices in the market, adversely impacting consumers, including farmers.
 - MSP’s exclusive focus on a few crops reduces the supply of other foodgrains (eg. pulses, oilseeds etc), thereby inducing inflation.
- **Impact on Fiscal Marksmanship** – Rapidly expanding **food subsidy bill** due to rising MSP, foodgrain storage, handling & carrying costs, thus, exerting pressure on fiscal deficit.

- **Lack of awareness among farmers** - Even for paddy and wheat, where active procurement occurs, less than 50% farmers have reported awareness of MSP.

CENTRALIZED PROCUREMENT SYSTEM

- Under Centralized Procurement System, the procurement of foodgrains in Central Pool are undertaken **either by Food Corporation of India (FCI) directly** or State Government agencies procure the foodgrains and handover the stocks to FCI for storage and subsequent issue against GOI allocations in the same State or movement of surplus stocks to other States.
- The cost of the foodgrains procured by State agencies is **reimbursed by FCI** as soon as the stocks are delivered to FCI.

DECENTRALIZED PROCUREMENT SYSTEM (DCP)

- The scheme of Decentralized Procurement of foodgrains was introduced by the Government in 1997-98 with a view to **enhancing the efficiency of procurement** and PDS and encouraging local procurement to the maximum extent, thereby extending the benefits of MSP to local farmers, as well as to save on transit costs.
- This also enables procurement of foodgrains more **suited to the local taste**.
- Under this scheme, the **State Government itself undertakes direct purchase** of paddy/rice and wheat and also stores and distributes these foodgrains under National Food Security Act (NFSA) and other welfare schemes.
- The Central Government undertakes to meet the entire expenditure incurred by the State Governments on the procurement operations as per the approved costing.

C. “Pradhan Mantri Annadata Aay Sanrakshana Abhiyan” (PM-AASHA)

- The scheme aims to ensure a **robust procurement mechanism**, in coordination with the State Governments, such that an increase in MSP will be translated to higher farmer’s income.

- The AASHA scheme has three components:

1. Price Support Scheme (PSS)

- Under PSS, **physical procurement** of pulses, oilseeds and Copra will be done by Central Nodal Agencies like NAFED and Food Corporation of India (FCI), at the MSP declared by the government.
- Procurement under PSS is continued till prices stabilize at or above the MSP.
- **Losses**, if any, incurred in undertaking MSP operations are reimbursed by the Central Government.
- **Profit**, if any, earned in undertaking MSP operations is credited to the Central government.
- This scheme is implemented at the request of the concerned **State Government** which agrees to exempt the procured commodities from levy of mandi tax and assist central nodal agencies in logistic arrangements.

2. Price Deficiency Payment Scheme (PDPS)

- Under this, the Centre proposes to cover all **oilseeds** and pay the farmer **directly** into

- his bank account the difference between the MSP and his actual selling/modal price.
- Pre – registered farmers who sell their crops in recognised mandis within the notified period can benefit from it.

This scheme **does not** involve any **physical procurement** of crops.

3. Pilot of Private Procurement & Stockist Scheme (PPSS).
 - In the case of oilseeds, States will have the option to roll out PPSSs in select districts where a private player can procure crops at MSP when market prices drop below MSP.
 - The private player will then be compensated through a service charge that will be up to a maximum of 15 per cent of the MSP of the crop.
 - It involves **physical procurement** of the notified commodity.
 - The AASHA scheme will be **complementing the existing schemes** of the Department of Food and Public Distribution for procurement of paddy, wheat and other cereals and coarse grains where procurement takes place at MSP.

NATIONAL AGRICULTURAL COOPERATIVE MARKETING FEDERATION OF INDIA LTD (NAFED)

- **Established in 1958** and registered under the **Multi State Co-operative Societies Act, 2002**
- **Aim** - to promote Co-operative marketing of Agricultural Produce to benefit the farmers.
- **Members** - Agricultural farmers are the main members of NAFED who have the say, as members of the General Body, in the working of NAFED.
- NAFED is **one of the central Nodal Agencies** for procurement of notified agricultural commodities of **Oilseeds, Pulses** and **Cotton** under Price Support Scheme (PSS).
- It is the **sole central Nodal Agency** for procurement of Milling, Ball Copra and De-husk Copra under Price Support Scheme.

- D. Market Intervention Scheme (MIS)
 - It is for procurement of agricultural and horticultural commodities which are **perishable in nature** and are **not** covered under the Price Support Scheme (PSS)
 - The scheme is implemented at the request of a State/UT Government which is ready to bear 50% of the loss (25% in case of NE States), if any, incurred on its implementation.
 - The extent of **total amount of loss** to be shared (between Centre & State) is restricted to 25% of the total procurement value which includes cost of the commodity procured plus permitted overhead expenses.

BUFFER STOCK

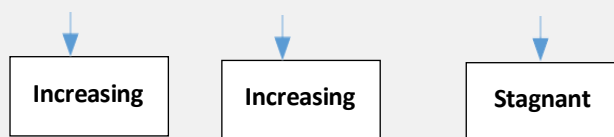
- Objectives
 - Providing food grains under public distribution system.
 - or meeting natural calamities.
 - Price stabilization in case of crop failures and shortfall in production.

- **FCI (Food Corporation of India)** has the prime responsibility of procuring the food grains
 - These food grains are procured at MSP.
 - FCI also sells in the open market to stabilize the prices esp. in case of crop failures.
 - **Issue:** Current buffer stocks hover almost double the prescribed limit.
 - **Cause:** Govt. is mandatorily required to procure whatever comes to FCI. Farmers prefer to sell to FCI because:
 - ✓ MSP is generally higher than market price and
 - ✓ FCI procures in bulk.
 - **Impact:** It leads to an estimated loss of Rs. 50,000 crore on account of increased Transportation costs, Storage costs, Transit losses, Deterioration of quality due to inefficient storage etc.
 - **Solution: “Price Deficiency Payment”** (as recommended by NITI Action Agenda).
 - ✓ While MSP may still be used for need-based procurement, under the deficiency payments system, a subsidy would be provided on other targeted produce in case the price falls below an MSP-linked threshold. This approach would not require procurement and thereby prevent accumulation of unwanted stocks.

CENTRAL ISSUE PRICE (CIP)

- Wheat and rice are sold by the central government at uniform **central issues prices (CIP)** to states and union territories for distribution under **Targeted PDS (TPDS)**.
- **Central Issue Price under NFSA:** Foodgrains under National Food Security Act (NFSA) are made available at subsidized prices of Rs.3/2/1 per kg for rice, wheat and coarse grains respectively.
- The CIP of wheat and rice for NFSA beneficiaries has not been revised since the introduction of the Act in 2013. But through these years, the **MSP has been increasing**.
- The difference between the MSP (higher than market price) and the lower CIP has led to increasing **food subsidy per kg of food grain**.
- Thus, the total **food subsidy bill** of the centre govt. is increasing, estimated to be **Rs. 1.1 lakh crore in 2020-21**.

Food Subsidy = Economic Cost – Central Issue Price (CIP)



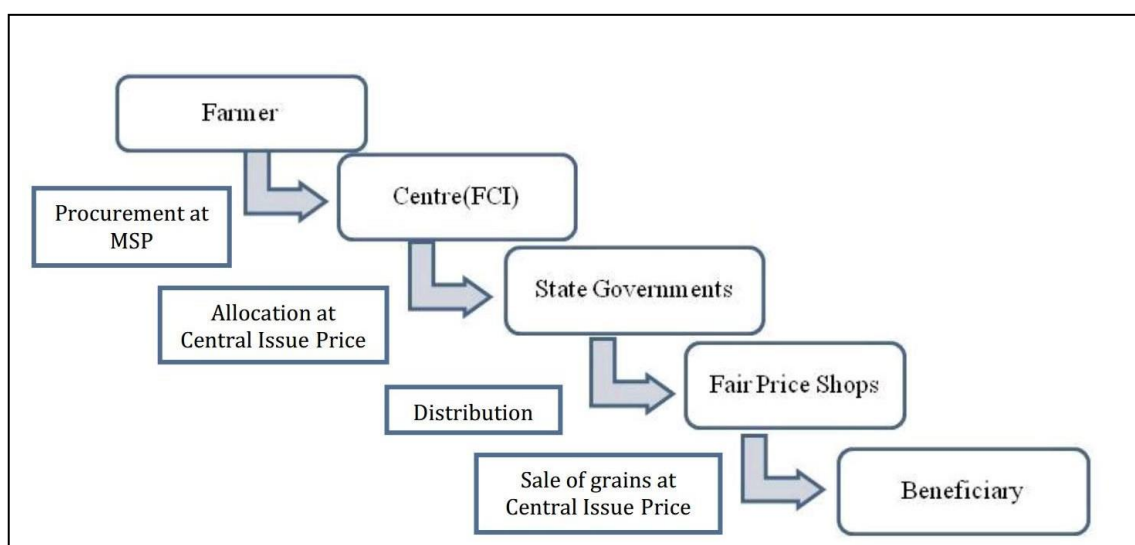
Economic Cost = Actual Cost borne by FCI from Time of Procurement Till Distribution

1. Procurement Cost (MSP) → increasing
2. Procurement Incidentals (Mandi Tax, Storage, Transport) → inefficient procurement/Storage methods
3. Cost of Distribution → inefficient distribution

7.3 Public Distribution System (PDS)

- Public distribution system is a **government-sponsored chain of shops** entrusted with the work of distributing **basic food and non-food commodities** to the needy sections of society at very cheap prices.
- PDS is operated under the **joint responsibility** of the Central and the State Governments.
- The **Central Government, through Food Corporation of India (FCI)**, has the responsibility for procurement, storage, transportation and bulk allocation of food grains to the state governments.

Under the PDS, the commodities like wheat, rice, sugar and kerosene are being allocated to the States/UTs for distribution. Some States/UTs also distribute additional items of mass consumption through the PDS outlets such as pulses, edible oils, iodized salt, spices, etc.



**EVOLUTION OF
PDS SYSTEM IN
INDIA**

• **Early Public Distribution System**

- Was a general entitlement for all the citizens.
- A fixed amount of food grains, sugar and edible oil were distributed through dedicated govt. outlets called Fair Price Shops (FPS),
- At a price lower than the market rate.

• **Revamped PDS**

- Was launched in 1992 in 1775 blocks (mostly backward and remote areas).
- To focus PDS towards economically backward families.

• **Targeted PDS**

- Was launched in 1997
- Under TPDS, beneficiaries were divided into two categories
 - ✓ Households below the poverty line or BPL
 - ✓ Households above the poverty line or APL

• **Antyodaya Anna Yojana (AAY)**

- The scheme was launched in December 2000 for the poorest among the BPL families.
- These families get 35 kg of food grains: Rs. 3/kg Rice and Rs. 2/kg wheat.

**NATIONAL FOOD
SECURITY ACT, 2013**

- **Coverage** – Approx. 67% of India's population with 75% in rural areas and 50% in urban areas.
- **Entitlement** ☑ “Legally guaranteed” (Right based approach)
 - Uniform entitlement of 5 kg per person per month.
 - Entitlement of **AAY beneficiaries** protected at 35 kg of food grains per family.
- **Subsidized foodgrains** - Rs. 3/2/1 per kg for rice, wheat and coarse grains.
- **Nutritional Support to women and children**
 - Pregnant women and lactating mothers (under ICDS).
 - Children in the age group of 6 months to 14 years (under Mid Day Meal).
 - Higher nutritional norms prescribed for malnourished children upto 6 years of age.
- **Transparency & Accountability** - disclosure of records relating to PDS, social audits & setting up of Vigilance Committees.

Table 16: Comparison of existing TPDS with the National Food Security Act

Provision	Current TPDS	National Food Security Act 2013
Implication for 'right to food'	Set up under administrative order; no legal backing	Provides statutory backing for right to food
Coverage	90.2 crore beneficiaries = 18.04 crore families x 5 (average no. of members in a family)	Up to 75% of rural and up to 50% of urban population, about 81.34 crore beneficiaries ³²
Categories	AAY, BPL, and APL	AAY, priority, and excluded
Entitlements per category	<u>BPL and AAY</u> : 35 kg/family/month <u>APL</u> : 15 – 35 kg/family/month	<u>Priority</u> : 5 kg/person/month <u>AAY</u> : 35 kg/family/month
Prices of food- grains	<u>AAY</u> : Rs 3/kg for rice, Rs 2/kg for wheat, and Re 1/kg for coarse grains <u>Other categories</u> : differs across states	<u>All categories</u> : Rs 3/kg for rice, Rs 2/kg for wheat, and Re 1/kg for coarse grains
Identification of beneficiaries	<u>Centre</u> : <ul style="list-style-type: none"> ▪ releases state-wise estimates of population to be covered under TPDS ▪ creates criteria for identification <u>States</u> : Identify eligible households	<u>Centre</u> : releases state-wise estimates of population to be covered under Act <u>States</u> : <ul style="list-style-type: none"> ▪ create criteria for identification ▪ identify eligible households
Centre-state responsibility	<u>Centre</u> : procurement; state-wise allocation; transport of grains up to state depots; storage <u>States</u> : delivery of grains from state depots to ration shop to beneficiary	Same as current system with some additions <u>Centre</u> : provides food security allowance to states to pass on to beneficiaries <u>Centre and states</u> : not responsible for failure to supply food grains during force majeure conditions, e.g., war, flood, drought
Grievance redressal mechanism	State governments responsible for ensuring monitoring; vigilance committees to be set up at state, district, block and ration shop levels	Appoints district grievance redressal officers; establishes State Food Commissions; and vigilance committees at state, district, block and ration shop levels

Sources: PDS (Control) Order, 2001; National Food Security Act, 2013; PRS.

PDS vs. Cash Transfers – a comparison

Table 15: Advantages and disadvantages of PDS and other delivery mechanisms³¹

Mechanism	Advantages	Disadvantages
PDS	<ul style="list-style-type: none"> Insulates beneficiaries from inflation and price volatility Ensures entitlement is used for food grains only Well-developed network of FPS ensures access to food grains even in remote areas 	<ul style="list-style-type: none"> Low offtake of food grains from each household High leakage and diversion of subsidised food grain Adulteration of food grain Lack of viability of FPS due to low margins
Cash transfers	<ul style="list-style-type: none"> Cash in the hands of poor increases their choices Cash may relieve financial constraints faced by the poor, make it possible to form thrift societies and access credit Administrative costs of cash transfer programmes may be significantly lesser than that of other schemes Potential for making electronic transfer 	<ul style="list-style-type: none"> Cash can be used to buy non-food items May expose recipients to price volatility and inflation There is poor access to banks and post offices in some areas
Food coupons	<ul style="list-style-type: none"> Household is given the freedom to choose where it buys food Increases incentive for competitive prices and assured quality of food grains among PDS stores Ration shops get full price for food grains from the poor; no incentive to turn the poor away 	<ul style="list-style-type: none"> Food coupons are not indexed for inflation; may expose recipients to inflation Difficult to administer; there have known to be delays in issuing food coupons and reimbursing shops

Sources: See Endnote 31; PRS.

Table 14: Technology-based reforms to TPDS undertaken by some states

Type of reform	Benefits of reform	States implementing reforms
Digitisation of ration cards	<ul style="list-style-type: none"> Allows for online entry and verification of beneficiary data Online storing of monthly entitlement of beneficiaries, number of dependants, offtake of food grains by beneficiaries from FPS, etc. 	Andhra Pradesh, Chhattisgarh, Tamil Nadu, Madhya Pradesh, Karnataka, Gujarat, etc.
Computerised allocation to FPS	<ul style="list-style-type: none"> Computerises FPS allocation, declaration of stock balance, web-based truck challans, etc. Allows for quick and efficient tracking of transactions 	Chhattisgarh, Delhi, Madhya Pradesh, Tamil Nadu, etc.
Issue of smart cards in place of ration cards	<ul style="list-style-type: none"> Secure electronic devices used to store beneficiary data Stores data such as name, address, biometrics, BPL/APL category and monthly entitlement of beneficiaries and family members Prevents counterfeiting 	Haryana, Andhra Pradesh, Orissa, etc.
Use of GPS technology	<ul style="list-style-type: none"> Use of Global Positioning System (GPS) technology to track movement of trucks carrying food grains from state depots to FPS 	Chhattisgarh, Tamil Nadu
SMS based monitoring	<ul style="list-style-type: none"> Allows monitoring by citizens so they can register their mobile numbers and send/receive SMS alerts during dispatch and arrival of TPDS commodities 	Chhattisgarh, Uttar Pradesh, Tamil Nadu
Use of web-based citizens' portal	<ul style="list-style-type: none"> Publicises grievance redressal machinery, such as toll free number for call centres to register complaints or suggestions 	Chhattisgarh

Sources: Justice Wadhwa Committee Report on Computerisation of PDS Operations, 2009; PRS.

Case study: Chhattisgarh Food Security Act

On December 1, 2012, the Chhattisgarh Assembly passed the Chhattisgarh Food Security Act, 2012, preceding the National Food Security Act. The Act provides statutory backing to TPDS and the reforms implemented by the state to improve TPDS. Key features of the Act are:²⁴

Provision	Detail
Beneficiaries	AAY, priority and general households; state government shall prescribe guidelines for their identification including guidelines for excluded households
Entitlements/month	AAY and priority households - 35 kg of food grain, 2 kg each of iodised salt, black gram and pulses (subsidised) General households - 15 kg of food grains (subsidised)
Special groups	Pregnant women and lactating mothers, children up to 14 years, students in hostels and ashrams, destitute, homeless, migrants, emergency or disaster affected persons
Implementing authorities	Local authorities shall be responsible for: (i) identification of eligible households, (ii) issuing ration cards, (iii) monitoring and supervision of fair price shops, and (iv) conducting social audits of fair price shops.
Grievance Redressal Mechanism	Internal mechanism including call centres, nodal officers, etc. Provision of entitlements to eligible households shall be notified as services to be provided under the Chhattisgarh Public Service Guarantee Act, 2011
Reforms to TPDS	Includes doorstep delivery of grains to ration shops, leveraging Aadhaar for targeting of beneficiaries, and maintenance of adequate buffer stocks of food items
Force Majeure	The state government shall not be held liable for a lack of supply due to war, flood, drought, fire, etc

8. Agriculture Markets in India

Gold is gold when it is sold. What farmers produce is no less precious than gold, yet their income levels have not augmented commensurately. Clearly something is missing. What is that? All that is required is to ensure just two things namely 'get the prices right' and 'get the markets right'. Just getting the 'prices right' may be a necessary condition but not sufficient. Imagine a situation when farmers get most lucrative prices but half of their marketable surplus remains unsold, they would still be left high and dry.

'Market' and 'marketing' are inter-connected. Market is a place which facilitates exchange of goods and services. When it is in physical form, it is referred to as a market place, and when it is digital in nature, it is market space. On the other hand, marketing system helps to direct and crystallize demand, develop capacity to ensure operational and pricing efficiencies. Marketing efficiency is to be achieved by reducing dispersion between prices paid by consumers and those received by farmers.

Until 1960s, agriculture was largely a subsistent economy; one-third of India's agricultural production was non-monetised. There was a low marketable surpluses, leading to stunted exchange function of marketing.

In Post Green Revolution, non-monetised situation of the 1960s changed. Agriculture markets, policies and institutes developed to facilitate sale of farm produce. Agriculture Markets geared up to play an exchange function – to make Agriculture a profit oriented commercial activity

With a view to improve the functioning of markets and liberalising agriculture trade, the Union Ministry of Agriculture proposed a **Model Agricultural Produce Market Committee (APMC) Act 2003** on agricultural marketing in consultation with State governments for adoption by the States. It was expected to increase private sector participation in marketing and processing. However, this this did not happen.

The farmers should be able to evacuate the entire surpluses from their farm gates to demand Centres. So far, the focus of marketing has been only on price discovery. At best 45% to 50% of marketable surplus in India get integrated with marketing. Even if we ensure the best prices for this much production, remaining more than half of the marketable surplus still fail to get monetized. We should aim at evacuating all the surpluses of all the commodities from all the corners of the country to demand centres. Here, we are to look beyond APMC and see how to meet the demand in consumption centres or export demand. Else, farmers would continue to suffer from distress sales.

According to one study, Rs 93,000 crores worth of agriculture produce in India was wasted in a year only because farmers were not able to channelize this in the marketing system. If we had good logistics, good warehouses and could identify the demand centres in time, this amount would have gone to farmers hands, thereby their income would have been augmented by that much amount. Due to gaps in the storage and marketing infrastructure, and absence of post-harvest protocols, the country suffers huge post-harvest losses.

Agriculture production system or agriculture supply system has changed over time and the marketing functions as a response system has also changed slowly and steadily. The State is divided into several market areas, each of which is administered by a separate APMCs. This imposes its own marketing regulation. Therefore, reforms in agriculture markets are called for to facilitate farmers to have greater access to markets.

While several states have amended the APMC Act to allow farmers to sell to non-APMC licencees, a central law is being brought in to enable farmers to have the freedom of choice to sell their produce without going through the existing markets administered by APMCs.

The entire focus of agri-reforms upto 2014 was on improving production and productivity. The post-2014 reforms in agriculture is the period of robustness of agri-reforms. The emphasis shifted to Direct Benefit Transfer (DBT) and e-NAM (electronic National Agriculture market). E-NAM sought to integrate mandis and address information asymmetry so as to ensure price realisation by farmers. In the first phase of e-NAM, 585 mandis were covered under it, 415 more mandis have been integrated to e-NAM. There are now 1000 mandis under this platform and consequently volume of trade has also augmented.

The Government has made pioneering efforts towards aggregation and economic inclusion of small and marginal farmers in agribusiness activities by enhancing access to credit and creating strong marketing linkages. Over 10,000 Farmers Produce Organisation (FPOs) have been formed.

The Essential Commodities Act (ECA) 1955, was born in a scarcity economy 65-year ago. This Act came into being at the time of food deficit when it was imperative to have such an act in place. Notwithstanding the fact that this Act is out of sync with the current ground reality of marketed surplus production of food in the Indian agrarian economy, it was allowed to continue to be in vogue against the interests of farmers at large. Only in 2002, EC Act was tinkered with for the first time and merely 14 commodities were taken out of the Act. Now in 2020, it has been defanged and will go a long way in augmenting the farmers income levels.

If the Government enables farmers to have direct marketing system whereby they can connect to ultimate purchaser without routing through APMCs, farmers would be able to realize full value of their produce. This would be a game changer as it would ensure that exporters, wholesalers start going to the farm gates rather than farmers going to mandis and it would also facilitate capturing value of every grain, every ounce.

Adapting to Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017 APLM Act 2017 will be a game changer in agricultural marketing. Promotion of direct interface between farmers and processors, exporters, bulk-buyers and end users will reduce the price spread between producers and consumers. This will bring advantage to both the producers and the consumers.

Farmers are now having more information about price trends, demand and now realise better prices of their produce. They are more empowered now than ever before. Farmers Produce Organisations (FPOs) /Farmer Producer Companies (FPCs) play a pivotal role in facilitating marketing. They are promoted to mobilize small and marginal farmers and can be a contracting party if so authorized by the farmers.

Way Ahead

Agriculture marketing need to move from 'farm to fork' to 'fork to farm', implying that production decision should not be independent of demand but demand should emit signals to farmers to what to produce. This will facilitate them calibrating and designing their production in tune with the demand. Only then, farmers as entrepreneurs can benefit from marketing, wastage can be minimised and the value of every grain can be monetized.

There are several post harvesting technology which needs to be adopted. The focus should not only be on production infrastructure but also on post production infrastructure. Robust supply chain is necessary from production to consumption. Rs 100,000 crores allocated for infrastructure recently (May 2020) will go a long way in improving the cause of farmers.

NITI AYOJ has identified agriculture as an area where high tech emerging technology, artificial intelligence block chain could be used. The country is committed to digital India and one of its important pillars is agriculture. India has adapted well to the tech in the last few years.

When farmers are enabled to move crops across the borders, they would get the right price. The new law will also free farmers to take their produce to the most lucrative market.

Equally important, the government will create a 'legal framework' to allow farmers to enter into contracts with processors, exporters, aggregators, and large retailers so that farmers have some certainty **over prices they will** receive.

Now, the farmers welfare has been brought to the centre of development agenda. Just as examples, defanging of the Essential Commodities Act (ECA), 1955, enabling farmers to move crops across the borders by bringing in new central law and creating a legal framework for contract farming will empower them to realise the 'prices right'. There is a credible hope that Indian agrarian Society may find renewed global predominance.

- 🌱 Geographical Indication (GI) is a sign used on products, that have a specific geographical origin and possess qualities or a reputation that are due to that origin.
- 🌱 to function as a GI, a sign must identify a product as originating in a given place.
- 🌱 In addition, the qualities, characteristics or reputation of the product should be essentially due to the place of origin.
- 🌱 Since the qualities depend on the geographical place of production, there is a clear link between the product and its original place of production.
- 🌱 Agri-entrepreneurs are emerging to fulfil a vital role, to compress lengthy supply chains and provide primary processing services closer to rural communities. Such partnerships can be promoted.

Significance of agricultural marketing:

1. It is aimed at providing remunerative prices to the farmers.
2. It ensures supply of food of required quality at reasonable prices to the consumers.
3. An efficient marketing system minimizes costs and maximizes benefits to all sections of the society.

AGRICULTURE PRODUCE MARKETING COMMITTEES (APMC)

APMC is a statutory market committee constituted by the state government in respect of trade in certified notified agricultural or livestock or horticultural products, under the APMC Act issued by that state government. APMC law states that first sale of agricultural produce can occur only at the mandis of Agricultural Produce Market Committees.

APMC Act was enacted with the following intentions:

1. Providing market-led extension services to the farmers.
2. Ensuring transparency in the pricing systems and transactions taking place in the market area.
3. Ensuring that farmers are not exploited by the money lenders who compel farmers to sell their produce at the farm gate for an extremely low price.
4. Ensuring payment for agricultural produce sold by the farmer on the same day.
5. Promoting agricultural processing activities.

However, there are some major issues with the functioning of APMCs:

1. APMCs suffer from **poor infrastructure** like lack of cold-storage and transport facilities. As a result, much of the perishable commodities gets wasted.
2. APMC mandis charge **multiple entry and exit fees** as well as licensing fees.
3. Markets are **over-regulated** leading to a lot of corruption and exploitation of farmers.

4. **Rise of intermediaries** in the APMC mandis who often form cartels, manipulate prices and deprive the farmers of remunerative prices.
5. **Hoarding of agricultural produce** by the APMC middlemen leads to an artificial shortage of food supply in the open market, thereby driving up the food inflation.
6. Under APMC regulation, no exporter or processor can directly buy agricultural produce from the farmers. This **discourages processing and agri-exports**.
7. Since only the state governments can set up APMC market as provided under the legislation, it **prevents the private sector from setting up markets** and investing in marketing infrastructure.
8. APMC office bearers also **lack corporate skills** for vertical integration with food processing industries.

Model APMC Act, 2003

Some of the **salient features of the Model APMC Act, 2003** include:

1. Facilitating contract farming model.
2. Special market for perishables.
3. Allowing farmers and private persons to set up their own markets.
4. Relaxation of licensing norms.
5. Single market fee.
6. APMC revenues to be used for improving market infrastructure.

Model Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017

Major provisions of the Draft Model Act are:

1. It specifies a single license for trading within the State and at the National level.
2. Traders will be allowed to sell perishables outside existing mandis.
3. Farmers can directly sell their produce to the bulk buyers.
4. The greatest extent of a market fee is not more than 2% (of sale price) for foodgrains and 1% for fruits and vegetables.
5. Warehouses, private market yards, and cold storages would be permitted to act as regulated markets.
6. All regulatory powers will lie with the office of the director of agricultural marketing in the state, who will also issue licenses to traders and new private players.

INTEGRATED SCHEME FOR AGRICULTURAL MARKETING (ISAM)

The Integrated Scheme for Agricultural Marketing has six sub-schemes namely

- i. Agricultural Marketing Infrastructure (AMI),
- ii. Marketing Research and Information Network (MRIN),
- iii. Strengthening of Agmark Grading Facilities (SAGF),

- iv. Training, Research and Consultancy through National Institute of Agricultural Marketing (NIAM),
- v. Agri-business Development through Venture Capital Assistance (VCA) Project Development Facility and
- vi. National Agriculture Market (e-NAM).

e-NAM (ELECTRONIC NATIONAL AGRICULTURAL MARKETS)

e-NAM is a pan-India electronic trading portal which networks the existing APMC mandis to create a unified national market for agricultural commodities. **Small Farmers Agribusiness Consortium (SFAC)** is the lead agency for implementing e-NAM under the aegis of **Ministry of Agriculture and Farmers' Welfare, Government of India**.

GRAMIN AGRICULTURAL MARKETS (GrAMs)

GrAM is a village level market in India. There are 22,000 such rural agricultural markets which helps farmers in selling their produce locally. Farmers can directly sell from GrAMs instead of transporting their produce to the APMC mandis. These local markets, GrAMs, will be linked with the electronic farmer marketplace, e-NAMs (electronic National Agricultural Markets) to sell their produce nationally.

AGRI-EXPORTS

Since 1991 LPG reforms, India has constantly remained a net exporter of agricultural products. **Rice** has the greatest share in our export basket, followed by oil meals and sugar.

Agricultural exports bring crucial forex earning for India. Also, farmers are able to reap the benefits of higher prices of agricultural products in the international markets, thereby raising their farm incomes. Through export of agricultural commodities, Indian farmers get an opportunity to take part in the global supply chains. Further, exports also promote value addition to agricultural products due to a huge demand of processed foods in the international market. Forward and backward linkages are also created in the agricultural sector.

To tap the huge international market for our agricultural produce, the Commerce Ministry released the **Agri Export Policy, 2018**. Some of the targets to be achieved under the policy are as follows:

1. To double the agricultural exports from \$30 billion in 2018 to \$60 billion by 2022 and reach \$100 billion in the next few years.
2. To diversify our export basket by including items like wild herbs, aromatic oils, confectionary and processed foods, etc.
3. To diversify our export destinations by including more countries in our export list.
4. To boost agricultural value-added exports like jams etc.
5. To focus on branding and marketing of Indian ethnic products in overseas market.
6. Encourage private investment in areas like cold chain storage.

7. To help exporters with Sanitary and Phyto-Sanitary (SPS) issues so that their products are not banned in countries like U.S.A on allegations of not meeting their health safety standards.

Problems facing agricultural marketing in India and its solutions

Some of the problems being faced by the agricultural marketing sector in India in general includes:

1. Warehousing facilities for storage of agricultural produce is inadequate.
2. **Poor transportation facilities** like unusable roads and lack of connectivity makes it difficult to take agriculture produce to the markets.
3. In the absence of proper agricultural markets, most farmers are forced to sell their output to local moneylenders at a much cheaper price.
4. In the **absence of market intelligence**, farmers are unable to assess the correct price of their produce based on the demand-supply equations.
5. APMC mandis face their own set of challenges like poor storage facilities, intermediaries charge their own commissions from farmers, and corruption.
6. There is a complete lack of awareness amongst the farming communities regarding the **commodity trading**.

To solve these above stated problems, government is implementing steps like e-NAM, and contract farming. Government of India also drafted a Model law- Agricultural Produce and Livestock Marketing (Promotion and Facilitating) Act, 2017. Apart from these, **NITI Aayog also recommended certain reforms** like:

1. Take fruits and vegetables out of the APMC Act.
2. Set up markets in the private sector (private mandis) and direct marketing to reduce the dependence of farmers on the intermediaries.
3. Adopt e-trading, single trading license and a single point of levy of market fee.

Government also needs to focus on strengthening the storage and transport infrastructure to reduce the costs associated with agricultural marketing. Information asymmetry needs to be addressed by promoting agricultural marketing research and disseminating market intelligence to the farmers so that they could appropriately price their produce based on the market demands.

9. Agriculture Marketing

9.1 Agricultural Produce Market Committee (APMC)

- Agricultural Produce Market Committee (APMC) is a **statutory market committee** constituted by a **State Government** in respect of trade in certain notified agricultural or horticultural or livestock products, under the **Agricultural Produce Market Committee Act** issued by that state government.
- Functions of APMCs:
 - Ensuring Transparency in pricing system and transactions taking place in market area.
 - Providing market-led extension services to farmers.
 - Ensuring payment for agricultural produce sold by farmers on the same day.
 - Promoting agricultural processing including activities for value addition in agricultural produce.
 - Publicizing data on arrivals and rates of agricultural produce brought into the market area for sale.
 - Setting up and promoting public private partnership in the management of agricultural markets.
- Typical amenities available in or around the APMCs are:
 - Auction halls, weigh bridges, godowns, shops for retailers, canteens, roads, lights, drinking water, police station, post-office, bore-wells, warehouse, farmers amenity center, tanks, Water Treatment plant, soil-testing Laboratory, toilet blocks, etc.

9.2 Agricultural Marketing in India: Challenges

- **Fragmentation of markets** - for eg. Thousands of APMC markets under respective State Government, with no linkages between them, operating in monopolistic silos.
- Lack of unrestricted movement
 - Obsolete APMC act mandates that **farmer's first sale** shall only be to commission agents, which forces farmers to sell their produce in the **immediate** market yards.
 - This creates problem of plenty at one market and scarcity at another market, resulting either in price-depression and loss to producer, or inflation and loss to the consumer
- **Less farmers' price realisation** - The share of farmer in consumer's price is very low, particularly in perishables, due to a large number of intermediaries, lack of infrastructure and poor holding capacity
- **Discourages Direct selling** - No direct selling to contract farming sponsors, retailers, food processing unit etc. As a result, farmers are unable to command higher profits, forward linkages to food processing industry are distorted, and private investment is adversely affected
- **Exploitation by intermediaries** - Lack of direct selling opportunity also increases exploitation by commission agents, who cartelise themselves, depress gains of farmer,

increase prices of consumer, restrict entry of new players, etc.

- **High Incidence of Market Charges** - Multiplicity of market levies, taxes, commissions, and fees at the first level of trading has cascading effect on retail prices, thus, causing inflation.
- **Non transparency in utilization of levies collected** – Levies do not go to state exchequer and, hence, do not require approval of state legislature. No oversight on its utilization.
- **Political interference & corruption** - APMC and APMC boards are occupied by politically influential persons, who are hand in glove with commission agents to wield monopoly power over a particular market area
- **High Wastages in Supply Chain** - Inclusion of fruits and vegetables under the purview of APMCs has resulted in Post-harvest losses & large wastage
- **Lack of Infrastructure in Agricultural Markets** - No major investment in modern infrastructure such as cold storage, modern warehouses, Electronic weigh-bridges etc
- **High marketing cost** – That particularly affects small and marginal farmers who have small marketable surplus ☐ impacts actual price realisation.

9.3 Recent Agricultural Reform Acts

A. The Farmers' Produce Trade and Commerce (Promotion and Facilitation) Act, 2020

- The Act allows **intra-state and inter-state** trade of farmers' produce beyond the physical premises of states' APMC markets, notified under the various state **APMC Acts**.
- The Act will prevail over the APMC Acts in the area outside such markets.
- **No fees to be levied by states:** The Act prohibits the state governments and APMCs from levying any market fee, cess, or any other charge on the trade of scheduled farmers' produce outside the APMC notified markets.
- **Electronic trading platforms:** The Act provides for setting up of electronic trading platforms to facilitate **direct and online buying and selling** of farmers' produce, resulting in physical delivery of the produce.
- **Three-level dispute settlement mechanism:** In case of disputes arising between a farmer and a trader, the parties involved in the dispute may apply to the **Sub-Divisional Magistrate (SDM)** for relief through conciliation.
- **Significance of the act:** The new legislation will create an ecosystem where the farmers and traders will enjoy the freedom of choice of sale and purchase of agri-produce.

B. The Farmers (Empowerment and Protection) Agreement On Price Assurance and Farm Services Act, 2020

- The Act focuses on creating avenues for farmers to **engage in contract farming**.
- **Farming agreement:** The Act provides for a farming agreement prior to the production or rearing of any farm produce, facilitating farmers in selling farm produce to sponsors.
- **Pricing of farming produces:** The price to be paid for the purchase of farming

produce should be mentioned in the agreement. In case the price is subject to variation, the agreement must include:

1. **A guaranteed price** to be paid for such produce.
 2. A clear price reference for any additional amount over and above the guaranteed price.
- **Dispute Settlement:** Act requires a farming agreement to provide for a conciliation board (comprising of representatives of parties to the agreement) and a conciliation process for settlement of disputes.

C. The Essential Commodities (Amendment) Act, 2020

- The Act regulates the supply of certain food items, including cereals, pulses, potatoes, and onions, **only under extraordinary circumstances** such as war, famine, extraordinary price rise, and natural calamity of grave nature.
- A stock limit may be imposed on agricultural produce **only if** there is:
 - A 100% increase in the retail price in case of horticultural produce, or
 - A 50% increase in the retail price in the case of non-perishable agricultural food items.
- Also, processors and value chain participants are **exempted from the stock limit**.
- **Benefits** – Increased investment in cold chain infrastructure and development of food processing industry ☞ better prices to farmers & reduced wastage.

OTHER KEY INITIATIVES FOR REFORMS IN AGRICULTURE MARKETING

- Launch of **e- NAM**, a pan India electronic platform to create a **National Agricultural Market**. Recent initiatives:
 - Integration of Negotiable Warehouse Receipt System (**e-NWRs**) Module with e-NAM.
 - **Farmer Producers' Organisations (FPOs) Portal** – FPO can upload a picture of their produce and quality parameters from their premise to enable distant bidders to visualise the produce before bidding.
 - **Logistic Module** - Linking large logistic aggregator platforms with e-NAM, thus, providing choices to users (Traders) and help in seamless transportation of agri-produce.
- Launch of an e-marketing portal for **Organic Products**.
- Measures to popularise the **pledge loan** and **e-NWR** based marketing.
- State governments have been advised to **exempt fruits and vegetables** from the purview of APMC act.
- **SAMPADA** (Scheme for Agro-Marine Processing and Development of Agro-Processing Clusters) – For creation of modern infrastructure with efficient supply chain management from farm gate to retail outlet, including setting up of new mega food parks (MFP).
- **Operation Greens** - To address price fluctuations in tomato, onion, & potato (TOP). '**TOP to TOTAL**' extends Operation Greens to all fruits & vegetables for a defined period, under Atmanirbhar Bharat Package.
- Developing & upgrading existing 22,000 rural haats into **Gramin Agricultural Markets (GrAMs)**. GrAMs to be **electronically linked to e-NAM** and exempted from regulations of APMCs, thus, enabling farmers to make direct sale to consumers & bulk purchasers.
- Setting up of Agriculture Funds to boost market infrastructure
 - **Agriculture Infrastructure Fund** of Rs. 1 lakh crore for building post-harvest storage and processing facilities, including development of warehouses, cold storage, pack houses and marketing facilities in the rural areas.
 - **Agri-Market Infrastructure Fund** with a corpus of Rs.2000 crore for developing and upgrading agricultural marketing infrastructure in the GrAMs and APMCs.
- NITI Aayog's '**Agriculture Marketing and Farmer Friendly Reforms Index**' to sensitise states about the need to undertake reforms in 3 key areas of Agriculture Market Reforms, Land Lease Reforms and Forestry on Private Land.
- Central Sector Scheme titled "**Formation and Promotion of Farmer Producer Organizations (FPOs)**" to form and promote 10,000 new FPOs by 2023-24.

9.4 Other Govt. Initiatives

NATIONAL MISSION FOR SUSTAINABLE AGRICULTURE (NMSA)

- Launched in 2014-15, as a programme under **National Action Plan on Climate Change** (NAPCC) (initiated in 2010).
- **Objective** - To transform Indian agriculture into a **climate resilient production system** through suitable adaptation and mitigation measures mainly in the domain of crops and animal husbandry.
- **Activities** – It aims at promoting **location specific improved agronomic practices** through soil health management, enhanced water use efficiency, judicious use of chemicals, crop diversification, progressive adoption of crop-livestock farming systems and integrated approaches like crop-sericulture, agro-forestry, fish farming, etc.

NMSA: KEY COMPONENTS

- **Rainfed Area Development (RAD)**
 - It adopts an **area based approach** for development and conservation of natural resources along with farming systems.
 - **Integrated Farming System (IFS)** - crops/cropping system is integrated with activities like horticulture, livestock, fishery, agro-forestry, apiculture
 - Formulated in a **'watershed plus framework'**, i.e., to explore potential utilization of natural resources base/assets created through watershed development and soil conservation activities under MGNREGS, NWDPR (National Watershed Development Project for Rainfed Areas), RKVY (Rashtriya Krishi Vikas Yojana), IWMP (Integrated Watershed Management Programme) etc.
- **Soil Health Management (SHM)** – Aims at promoting location as well as crop specific sustainable soil health management. Includes initiatives like **Soil Health Card** and **Paramparagat Krishi Vikas Yojna**.
- **Sub-Mission on Agroforestry (SMAF)** - Launched in 2016-17 to encourage tree plantation on farm land **"Har Medh Par Ped"**, along with crops/ cropping system and livestock to improve productivity, employment opportunities, income generation and livelihoods of rural households especially the small farmers
 - **Climate Change and Sustainable Agriculture: Monitoring, Modeling and Networking (CCSAMMN)** - Provides creation and bidirectional (land/farmers to research/scientific establishments and vice versa) dissemination of climate change related information and knowledge by way of piloting climate change adaptation/mitigation research/model projects.
- **National Bamboo Mission (NBM)**

- **NBM Launched in – 2006-07, Restructured Mission** - Approved in 2018-19.
- Objective –
 - ✓ To **promote holistic growth** of bamboo sector by adopting area-based, regionally differentiated strategy.
 - ✓ To **increase the area** under bamboo plantation in **non-forest Government and private lands** to supplement farm income, increase availability of quality raw material requirement of industries, and contribute towards resilience to climate change.
 - ✓ To **improve post-harvest management** by establishing innovative primary processing units (near the source of production), preservation technologies and market infrastructure.
 - ✓ To **promote product development** keeping in view market demand, by assisting R&D, entrepreneurship & business models at micro, small and medium levels and feed bigger industry.
 - ✓ To promote skill development, capacity building, awareness generation for development of bamboo sector from production to market demand.
 - ✓ To rejuvenate the under developed bamboo industry in India and realign efforts so as to reduce dependency on import of bamboo and bamboo products.

PARAMPARAGAT KRISHI VIKAS YOJNA

- Sub component of National Mission on Sustainable Agriculture (NMSA).
- **Aim** – to promote **organic farming** and reduce reliance on chemical fertilizers.
- **Approach** - Cluster based ☑ organising farmers in groups of 50 or more, having total holdings of 50 acres to take up organic farming.
- **Financial Assistance** - Every farmer will be provided Rs. 50,000 per hectare in three years for cluster formation, capacity building, incentive for inputs, value addition and marketing.
- Organic products will be linked with the market.
- No liability on the farmers for expenditure on certification of organic manure.
- **Organic Value Chain Development for North Eastern region** - A special scheme has also been launched in **North-Eastern Region** for promotion of organic farming and export of organic produce.

NATIONAL LIVESTOCK MISSION

- **Launched:** 2014-15
- **Objective:** Sustainable development of livestock sector, focusing on improving availability of quality feed and fodder.
- **Coverage:** all the activities required to ensure quantitative and qualitative improvement in livestock production systems and capacity building of all stakeholders
- 4 Sub-missions –
 1. **Fodder and Feed development** – To address the problems of scarcity of animal feed resources, and eliminate deficit.
 2. **Livestock Development** - productivity enhancement, entrepreneurship

development and employment generation, strengthening/ modernization/automation of infrastructure of state farms, conservation of threatened breeds, livestock insurance etc.

3. **Pig development in North-Eastern Region** - all round development of piggery in the region.

4. **Skill Development, Technology Transfer and Extension** – to help farmers adopt the technologies developed by research institutions.

RASHTRIYA GOKUL MISSION

- Launched in 2014
- **Objective:**
 - Development, preservation and conservation of **indigenous** Bovine breeds “in a focused and scientific manner”
 - To enhance milk production and productivity of indigenous bovines.
 - Interventions under RGM
 - Setting up of integrated cattle centres - **Gokul Grams**
 - Establishment of breeders societies – **Gopalan Sangh**
 - Award to Farmers – **Gopal Ratna** & Award to breeders societies – “**Kamdhenu**”
- **Target beneficiaries** – Rural cattle and buffalo keepers irrespective of caste, class and gender.

Gokul Grams: Integrated Indigenous Cattle Centres

- **To be established in:** native breeding tracts and near metropolitan cities for urban cattle.
- **Setup:** independently or through PPP.
- **Milch & unproductive animals:** to be maintained in ratio of 60:40.
- **Regular screening:** for diseases like brucellosis and tuberculosis.
- **Self-sustaining:** will generate economic resources from sale of A2 milk, organic manure, vermi-composting, urine distillates, and production of electricity from bio gas.

RGM: 2 SUB COMPONENTS

- **National Programme for Bovine Breeding**
 - Focuses on extension of field level Artificial Insemination (AI) network through MAITRI.
 - **MAITRI** - Multi Purpose Artificial Insemination Technicians to provide AI services & and breeding inputs at Farmer’s Doorstep)
- **National Mission on Bovine Productivity**
 - **Objective** – Enhance milk production and thereby make dairying more remunerative to farmers.
 - **Key components**
 - ✓ **Pashu Sanjivni**– It is an Animal Wellness Programme; encompassing setting up of Emergency Help Lines, provision of Animal Health cards (**‘Nakul Swasthya Patra’**) along with UID identification and a **National Data Base** (INAPH).
 - ✓ **E-PashuHaat portal** - To connect farmers and breeder (State, Central, Co-operative, Milk Federations, and private agencies) of indigenous breeds regarding availability of bovine germplasm. It provides real time authentic certified information on availability of germplasm.

PRADHAN MANTRI MATSYA Sampada YOJANA (PMMSY)

- The Prime Minister launched the Rs 20,050 crore-**Pradhan Mantri Matsya Sampada Yojana** (PMMSY), as a part of the **Aatmanirbhar Bharat Abhiyan**.
- It is the **flagship scheme** to bring about **Blue Revolution** through sustainable and responsible development of fisheries sector in India.
- Key Targets –
 - **Enhancing fish production** by an additional 70 lakh tonne by 2024-25 to 220 lakh metric tons at an average annual growth rate of about **9%**.
 - **Increasing fisheries export earnings** to Rs. 1 lakh crore by 2024-25.
 - **Doubling of incomes** of fishers and fish farmers.
 - **Reducing post-harvest losses** from 20-25% to about 10%.
 - **Generation of additional employment** - 55 lakhs direct and indirect gainful employment opportunities in fisheries sector and allied activities.
 - **Investment** - Rs. 20,050 crores. It is the **highest ever** in the fisheries sector with focus on:
 - Beneficiary-oriented activities in Marine, Inland fisheries and Aquaculture
 - Fisheries Infrastructure – 42% of investment
- **Implementation period** - 5 years from FY 2020-21 to FY 2024- 25 in all States/Union Territories.
- Implementation strategy
 - Adopting '**Cluster or Area based approaches**' and creation of Fisheries clusters through backward and forward linkages.
 - Special focus on employment generation activities such as **seaweed & ornamental fish cultivation**.
 - **Consolidating gains of Blue Revolution & New interventions (Swath Sagar plan)** such as fishing vessel insurance, support for new/up-gradation of fishing vessels/boats, Bio-toilets, Sagar Mitras, Fisheries FPOs/Cs, Fisheries and Aquaculture start-ups, Integrated Aqua parks, Integrated coastal fishing villages development, E-Trading/Marketing etc.

10. WTO and Agriculture

Imagine a situation when many people are driving fast from different directions without traffic lights at road crossings. Will there not be a chaos? As road need traffic signals for an orderly movement, so does International Trade require predictability and stability in the rules of business? And World Trade Organization (*i.e.* WTO) seeks to provide this.

The long-term objective of the Agreement on Agriculture (AoA) is “to establish a **fair and market-oriented agricultural trading system**”. Its roles include:

- i. operating a global system of trade rules,
- ii. acting as a forum for negotiating trade agreements, and
- iii. settling trade disputes between its members;

The Uruguay Round of multilateral trade negotiations (1986-1994) resulted in an Agreement establishing the World Trade Organization (WTO), which serves as an umbrella agreement.

It was established on 1 January 1995 with 164 Members and is based in Geneva. It is successor to GATT, but subsumed GATT.

The Scope of WTO agreements covers **goods, services and IPRs**. Annexed to this umbrella agreement are dispute settlement mechanism, the trade policy review mechanism and the **plurilateral** agreements.

The original GATT applied to agricultural trade but it contained a number of loopholes that were exploited by countries, resulting in highly distorted international agricultural trade.

The Agreement on Agriculture (AoA) is an important outcome of the **Uruguay Round** of multilateral trade negotiations. It introduced disciplines in three pillars:

- i. market access – (*various trade restrictions confronting imports*);
- ii. domestic support – (*subsidies and other programmes*); and
- iii. Export **competition** and other government support programmes that subsidize exports.

The **AoA** was intended to provide a framework for the long-term reform of agricultural trade and domestic policies over a period of time. It includes provisions that encourage the use of less trade-distorting agricultural domestic support policies.

Although the obligations for developing countries looked less stringent, the provisions of the **AoA** were framed in such a way that developed countries retained the right to continue to provide high subsidies and use various tariff-related measures which led to a distortion of the global agriculture markets.

The **Doha Ministerial Declaration of November 2001** committed Members to substantial improvements in market access; phasing out of all forms of export subsidies; and substantial reductions in trade-distorting domestic support.

In 2001, agriculture negotiations became a part of the agenda of the Doha Round of trade negotiations. The Doha Round remains unfinished and it is uncertain when or even whether it will be concluded.

Virtually every item of the Doha Round negotiation is considered as part of a whole and indivisible package and cannot be agreed separately. In other words, “nothing is agreed until everything is agreed”. Further, all major decisions in the WTO are normally taken by consensus.

An agreement to eliminate agricultural export subsidies was pushed through, during the Tenth Ministerial Conference of the WTO held in Nairobi in December 2015. But other parts of the agriculture negotiating agenda namely, market access and domestic support, remain deadlocked.

Although the AoA was supposed to result in decline in domestic support in agriculture, in fact, the overall value of such support has increased. The agreement obliged developed countries to reduce the AMS (Aggregate Measure of Support). However, only some types of subsidies fall under the AMS. While developed countries reduced their AMS, they also increased their exempted subsidies significantly, thereby offsetting the AMS reduction and resulting in an increase in total domestic support.

*Various kinds of subsidies and support are broadly classified in 3 different boxes namely **Green Box, blue box and Amber box.***

Green Box include the amounts spent on Government services such as research, disease control, and infrastructure and food security. ... Since they are permitted in WTO regime, the most developed countries have kept providing **subsidies** to their farmers.

It is important to note that many of the provisions of Green Box support (Annex 2 of the AoA) were formulated to allow developed countries to continue providing subsidies without any limit. To illustrate, the provision allows the US to provide unlimited subsidy through its Food Stamp scheme. On the other hand, developing countries are constrained by their *de minimis* limit in providing support for food security through public stockholding programmes.

Blue Box

Under Blue Box, subsidies are provided to limit production by imposing production quotas or requiring farmers to set aside part of their land.

There is no upper bound on the amounts of such subsidies.

Given the shortage of food production in developing countries, little wonder then that Developing countries have not been able to take recourse to this option. Empirics show that these provisions have been mainly used by the EU and by the US in some years. Thus, the

AoA resulted in a category of domestic support that can be used by the developed countries without any limit.

Amber box (AMS or Aggregate Measure of Support) subsidies are those **subsidies** which distort the international trade by making products of a particular country cheaper in comparison to same product in another country.

Examples of such **subsidies** include input **subsidies** such as electricity, seeds, fertilizers, irrigation, minimum support prices etc.

Nearly all domestic support measures considered to distort production and trade (with some exceptions) fall into this **box**

Any domestic support, which is not covered under the categories of Green Box, or the Blue Box, is categorized as **Amber Box** support.

It includes price support measures and all non-exempt direct payments.

It consists of two parts—product-specific subsidies and non-product specific subsidies

Imbalances in the Export Subsidies Pillar

The imbalance and asymmetries in the provisions on export subsidies in the AoA are huge. Countries that were providing high export subsidies in the reference period of 1986-1988, acquired the legitimacy to continue to provide export subsidies in future. On the other hand, most of the developing countries did not provide export subsidies during the base period. As a result, they are unable to provide significant export subsidies.

Tariff Bindings

Quantitative restrictions on agricultural imports were put in place in India mainly due to Balance of Payment (BOP) reasons. Following the Uruguay Round, India only had to bind its tariffs and schedule the bound rates and she submitted binding tariffs ranging from 15 percent upto 300 percent.

Notwithstanding high bound tariffs, the actual applied rates of tariffs on most agricultural products are quite low. For about 90 percent of tariff lines, the applied rates are up to 50 percent only in case of India.

An important part of India's agricultural support regime is its Minimum Support Price (MSP) for public procurement operations of staple food items. Under the *de minimis* provisions, as a developing country, India is entitled to provide 10% of the total value of production of a basic agricultural product as product specific support and 10% of the value of total agricultural production as non-product specific support.

There is an Optical Illusion in Product Specific Subsidy for MSP operations. These look large but are not so because current Procurement Prices are compared with the Prices in the reference period 1986-88 i.e. with those prices that prevailed over 30 years ago, and without any adjustment for inflation. In essence, there is a statistical flaw in the methodology in which such subsidies are worked out.

At the end of the round, higher the MSP, higher is the subsidy component, other things being equal.

Emerging Scenario in AoA

The WTO is facing multiple challenges. Given the slow progress under the Doha Round and the lack of consensus on how to move forward, WTO's negotiating arm is almost paralysed. During 2008 and 2013, the Doha negotiations remained in a state of dormancy.

'Peace Clause' permits developing countries to procure foodstuffs for public stockholding programmes, even if the domestic support that is attributable to the procurement exceeds the ceilings of subsidies specified in the AoA.

The term **'peace clause'** has been a cause of disquiet ever since India flagged the issue of domestic food security in the WTO negotiations.

At India's insistence, the WTO Members agreed to put in place an interim mechanism for the issue of public stockholding in relation to support provided for traditional staple food crops in pursuance of public stock holding programmes for food security purposes.

What lies ahead

From 2015 onwards, developed countries and some developing countries no longer endorse the Doha Round... and instead started negotiations on Electronic commerce, Investment Facilitation, Trade and Gender, Trade and MSME

WTO is cast in the mould of interest of developed world and its rules have curtailed the policy space for developing countries, but some developing countries like India have gained in agriculture sector as it is net food exporting country. US is attempting to marginalize WTO and is likely to aggressively seek bilateral deals. It is not merely a short-term disruption.

Developed countries have virtually resorted to **'Phenomenon of kicking away the ladder'**, meaning thereby that once a country has attained the summit of greatness, she *kicks away the ladder* by which she has climbed up, in order to deprive others of the means of climbing up after her. In the aftermath of Covid-19 with a paradigm shift towards Atamirbhar, there will be an increasing tendency to reduce dependency on other Nations for key food supplies. Rules of the game of WTO are likely to undergo irreversible changes. **World is changing rapidly and WTO is smart enough to keep pace with emerging changes.**
