Minimum Support Price:

How Can We Solve This?



Editors
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Shrikant S. Kalamkar

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January 22, 2026

Foreword

Price support for farmers has been an important instrument of agricultural development and food policy since the mid-1960s. In view of the distorted and unregulated market conditions prevailing for agricultural produces in India, support prices are very imperative for farmers to get assured income from their crop cultivation. The agricultural price policy is aimed at intervening in agricultural produce markets to influence the level of fluctuations in prices and the price-spread from farm gate to the retail level. The Minimum Price Support Policy (MSP) linked to procurement has served the country well in the past six decades. However, in recent years it has started encountering problems mainly because of surpluses of several agricultural commodities and excessive built up of stocks with FCI. Agricultural price policy has come under serious attack in recent years for recommending higher support prices than warranted by the costs of production (CoP) and supposed distortion of the market, leading to food deprivation. The Central agency often incurs loss in their operation of PSS and MIS and the amount of expenditure incurred in the above schemes suggest that Union and State Government spend considerable amount of public money in undertaking the above scheme. The wide gap between price received by producer and price paid by consumer of commodity is another important concern of marketing of agriculture commodities in the country.

Currently, procurement prices/MSPs, buffer stocks, and PDS are three tools used to maintain food security and price policy. The main challenge of the policy has always been to reconcile the conflicting price interests of farmers and consumers. The interest of producers and consumers were addressed by providing subsidies on food items and farm inputs. This has brought back into focus the critical issues of price volatility in agricultural

commodities, agricultural market structures and market efficiency. In view of the existing conditions, vital steps need to be taken to ensure that the farmers get higher realization without putting additional burden on consumers. In this context, I am pleased to note that Agro-Economic Research Centre of Sardar Patel University, Vallabh Vidyanagar and National Council for Climate Change, Sustainable Development & Public Leadership, Ahmedabad have initiated the academic discussions by organizing the two national seminars/interaction meets by inviting the related policy makers, academicians, stakeholders to contribute their evidence based experiences and research for better policy formulation on market strategy for MSP Crops. This book is an outcome of these two interactions meetings.

I congratulate both the editors of book, Dr. Kirit Shelat (NCCSD, Ahmedabad), and Dr Shrikant Kalamkar (Agro-Economic Research Centre, SPU, VVN) for publishing this valuable book.

January 22, 2026.

(Dr. Mahesh Pathak)

Prof. (Dr.) Niranjan Patel



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January 22, 2026

Message

India bases its agricultural policy on Minimum Support Price (MSP) to offer financial stability to farmers across the nation. The MSP is the minimum price set by the government to ensure farmers receive fair value for their crops, even when market prices fall. The policy protects farmers from making desperate sales and enables them to regain their production investment. This concept was introduced in 1966–67 during the Green Revolution as part of agricultural reforms. MSP serves as a safety measure taken by the union government to protect farmers from financial losses and maintain food security. MSP amounts that the government purchases from farmers are processed through the Food Corporation of India (FCI) agencies for stock maintenance and nutrition purposes. Furthermore, the government policy motivates farmers to plant important crops and maintain food supply chains while promoting rural economic development. The government establishes MSP levels each year before the sowing season. It is done through recommendations by the Commission for Agricultural Costs and Prices (CACP). Of the 23 commodities under consideration, the MSP applies to cereal crops, pulses, and oilseeds alongside selected commercial crops.

Agro-Economic Research Centre (AERC) of our University and National Council for Climate Change Sustainable Development & Public Leadership (NCCSD), Ahmedabad has jointly organized two seminars on this important topic of livelihood of not only farmers but also consumers. In fact, AERC since its inception has been working and significantly contributed in policy formulation related agriculture and rural development. NCCSD is known for its think tank output. I must compliment both these Institutions, viz. AERC and NCCSD for this

outcome. I thank policy makers, academicians, stakeholders, bankers, student and all related personal who have contributed in these seminars/ interaction meet for better policy formulation.

I congratulate the editors of book, Dr. Kirit Shelat, and Dr. Shrikant Kalamkar for bringing this valuable book.

January 2026.



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This book is the outcome of the presentations and discussion held in two national seminars organized jointly by the National Council for Climate Change Sustainable Development & Public Leadership, Ahmedabad & Agro-Economic Research Centre, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India.

We have benefited immensely from various scholars, eminent speakers, participants and personalities while conducting the national seminars and preparation of this book. We acknowledge with thanks the support of many personalities who have made this publication possible.

At the outset, we would like to thank **Prof. Ramesh Chand**, Member, NITI Ayog, GoI; **Prof Vijay Paul Sharma,** Chairman, Commission for Agricultural Costs and Prices (CACP), GoI**; Shri Parshottam Rupala,** Member of Parliament (Lok Sabha) and Former Union Cabinet Minister of Fisheries, Animal Husbandry & Dairying, GoI**; Shri Dileep Sanghani,** Chairman – IFFCO & GUJCOMASOL**; Dr. Neelam Patel,** Sr. Advisor [Ag] – NITI Aayog, New Delhi; **Dr. Meenesh C. Shah** (Chairman, National Dairy Development Board (NDDB), Anand); **Shri Atul Shroff** (Former Managing Director, SFT and Transpek Industry Ltd., Vadodara) for their address at the session of two national seminar-interaction meets.

We thank all the expert speakers; all session Chairman, Rapporteurs and Moderator of Session for their participation and support.

We thank **Prof. Niranjan Patel** (Vice-Chancellor) and **Dr. Bhailalbhai Patel** (Registrar) of Sardar Patel University, Vallabh Vidyanagar for their constant encouragement and support for undertaking such academic activity.

We are grateful to the AER Division of Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Government of India for its support in organization and publication of this book.

We also thank the staff of AERC and NCCSD for their support in organizing the two interaction meets. Special thanks to **Dr. Kinjal Ahir** (Hon Deputy Director, AERC & HOD, Economics, SPU); **Dr. Hemant**

Sharma (AERC, SPU, VVN); and **Dr. Satish Chayya** (NCCSD, Ahmedabad) for their support.

Last but not least, we thank all the staff of AERC and NCCSD for their direct and indirect support.

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Dr. Kirit Shelat has written biography of Pujya Pramukh Swami Maharaj – "YUG PURUSH, PUJYA MAHANT SWAMI MAHARAJ – a life dedicated to thers". This is published in six languages with nine editions. He has also written biography of Pujya Mahant Swami Maharaj – "Mahan Rushi Mahant Swami Maharaj" – June 2019.

He was member of sub-committee set us by Planning Commission of India on enhancing preparedness for Climate Change and has his hand in introduction of NICRA-National Initiatives for Climate Resilient Agriculture. He was member of expert committee of Government of Gujarat on Economic Revival in Arena Covid Pandemic". Along with Prof Mbuya of FAMU USA, he introduced the concept of "Building Climate Smart Farmers'. His latest publication includes "Atmanirbhar Bharat – "self-reliant and climate smart farmers – Roadmap for Agriculture 2020–30 India" and "Atmanirbhar Farmers – Gujarat – Roadmap 2030".



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He has made important and useful contributions to the subject of agricultural economics. He has published more than 155 research papers/articles in reputed journals. He has 15 books at his credit. Besides, he has participated in more than 175 national conferences/ workshops/ seminars. Dr. Kalamkar has completed about 79 research projects/studies, mainly for the Ministry of Agriculture, Govt. of India; the Planning Commission, Govt. of India, Government of Gujarat and NABARD, Mumbai; NDDB, Anand. He has submitted notes on topics of national importance as policy briefs and policy alerts (coordinated and published by CMA, IIM, Ahmedabad) from time to time on to the Hon'ble Prime Minister's Office, the Ministry of Agriculture and Farmers Welfare, GOI & others for consideration in policy formulations.

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About Book/Summary

Minimum Support Price: How Can We Solve This?

by

Kirit N. Shelat and Shrikant S. Kalamkar

Introduction

As we all are aware, agricultural price policy has been largely successful in providing reasonable level of margins over the total costs to farmers for major cereals like rice and wheat, followed by pulses. It seems to have also encouraged farmers' investment in yield – enhancing technology to increase production and enable sufficient procurement for buffer stocks. The major underlying objective of the price policy in India is to protect both producers and consumers.

India now ranks first in the world in the production of pulses and milk, second in wheat, rice, groundnut, sugarcane, cotton and fruits-vegetables and fish, and third in production of total cereals, rapeseed, tea and eggs. This increased production has brought in its wake new challenges to handle in terms of a huge marketable surplus. Marketing of agricultural produce serves as a link between the farm sector on the one hand and other sectors on the other hand. The current structure of agriculture produce marketing in India consists of a mix of public and private sectors. Barring direct intervention by the government in some commodities, marketing in most others is dominated by the private sector.

Indian agriculture has become increasingly market-oriented and commercialized. But high price variability in the case of primary products is major concern. it affects both producers as well as consumers through a spill-over effect to the other sectors. This has brought back into focus the critical issues of price volatility in agricultural commodities, agricultural market structures and market efficiency. In view of the existing conditions, vital steps need to be taken to ensure that the farmers get higher realization without putting additional burden on consumers.

These two meets (May 21, 2024 and November 28, 2024) deliberated on issues related marketing of agriculture produce and find some solution or way out so that farmers should get remunerative prices for their crop

produce. The final papers come out form the eminent expert in these meets are briefly summarized here.

Kirit Shelat and Shrikant Kalamkar in their article on 'Future Agriculture – Market for Crops under MSP' highlighted the role of MSP so far played in protecting farmers from price fluctuations and to select crops as it is pre-declared by the Government. This is one of the key factors for sustaining Indian agriculture. This is a threshold mechanism to protect farmers against Market vagaries. Farmers are very vigilant about this support. Some want it as statutory. Despite MSP and APMC, small farmers sell at Village level to intermediary – traders/rich farmers because they don't have adequate quantity or are indebted. They end up losing 20 to 25 percent. There is a huge disparity between price at Village level to consumer level and that increases with distance. Traders are key players. They control APMC Auction price. All these create discontent and periodic agitation. We need to examine what makes crops marketable to fetch decent price. There are crops like Groundnut – oil prices go up every year but farmers do not get fair prices and prefer MSP.

Dileep Sanghani in his article on 'Thinking beyond MSP: cooperative commodity zones, mini-mandi model, and digital innovations' noted that Minimum Support Price (MSP) has played a crucial role in India's agricultural system, but it is now time to think beyond MSP and develop a more inclusive and efficient agricultural market system. The adoption of Cooperative Commodity Zones, transforming, Primary Agricultural Credit Societies (PACS) into Mini-Mandis, and leveraging digital technologies such as Artificial Intelligence (AI) and Blockchain for smart warehouse management are essential steps that can drive India's agricultural self-reliance

While **Meenesh Shah** in his article 'Future Agriculture: MSP and the Way Forward' stated that future of Indian agriculture depends on maintaining a delicate balance between farmer welfare and environmental sustainability. Agricultural farmers need to be incentivised differently to adopt diversified cropping system rather than mono-cropping which are highly input intensive. Minimum support price could really be an incentive for crops crucial for nutritional security such as millets, pulses and oilseeds. Encouraging involvement of private sector through incentivisation could create efficient value chain for agricultural products. While MSP has been a cornerstone of agricultural policy, its current

structure necessitates a shift towards more inclusive and environmentally conscious strategies. Actual role of minimum support price could be when market prices fall below a certain level due to excess production, oversupply or price decrease due to some other external factors. The lessons from the dairy sector provides valuable models for building resilient and diversified agricultural systems. Aligning MSP policies with environmental goals, regional equity and technological innovations can pave the way for a sustainable agricultural framework that ensures prosperity for farmers, preserves natural resources and strengthens food security for future generations.

C.K. Timbadia and **A.A. Bhimani** in their article on 'From Price Support to Market Access: A New Era in Agricultural Marketing' noted that a multifaceted strategy is needed to move agriculture past the Minimum Support Price (MSP), which includes bolstering market processes, boosting crop diversification, improving infrastructure, and enlisting the private sector. To further enhance the market reach of natural farming, digital platforms and e-commerce solutions are proving increasingly effective. Profitability can be increased and market risks can be decreased by diversifying into a larger range of crops, including high-value crops, rather than depending solely on a small number of MSP crops. Allowing private buyers to buy directly from farmers can enhance price discovery and lessen reliance on government procurement; requiring private buyers to buy crops at or above MSP can guarantee fair prices for farmers and lessen their reliance on government procurement; and building a network of agro-and agri-input industries can produce high-quality, standardized agricultural products that can be sold to international markets while also creating jobs locally. By putting these tactics into practice, India can overcome the shortcomings of the current MSP system and build a more robust and efficient agricultural sector that offers farmers improved income prospects, risk management, and price discovery.

A.R. Pathak in his article on 'Minimum Support Price – Farmers Issues & Ways' mentioned that MSP has been significant policy tool in Indian Agriculture landscape but alone MSP cannot address the multi-faceted challenges faced by Indian farmer. For achieving better price by farmers, reducing the cost of production and increasing productivity are important. Establishment of FPO and value addition as well as quality produces are

more important. Enhancing market access is very crucial. A more holistic approach focused on improving productivity, reducing cost of production, enhancing market access, promoting diversification, market demand produce, chemical free produce are very much required for better price realization. The administrative issues like fragmented land holding and limited knowledge of newer technology needs to be addressed properly

Paper by **V.V. Sadamate** on 'Innovations and Reforms for Transformative Market Led Agricultural Extension Strategies: Policy Implications and a Way Forward' highlighted that agricultural extension services both public and private have contributed significantly in the performance of this sector, though, its impact varied from state to state. Hence, there is an urgent need to look into the architecture and delivery models for supporting the performance of the sector in the present and future context enabling the extension services to respond to the extension needs of the farmers and stakeholders. On promotion of the digital enablers the farmer empowered groups can play an important role whereby aggregated production and marketing operations are encouraged for better technology application on one hand and better price discovery on other.

Suresh Acharya in his paper on 'Beyond MSP: Market Strategy for Agriculture' highlighted that farmers encounter major challenges in marketing their produce, impacting their profitability and farm income. Though planned at the national level, the benefits of MSP have remained confined only to few areas and crops. Therefore, it needs complete revamping and gradual scaling down to only to projects of national significance like National Food Security Mission and maintaining national buffer stocks of food grains. He concluded that MSP regime has served its purpose and should be gradually phased out, limiting procurement to food grains required for the NFSM and buffer stock maintenance. Ensuring the effective marketing of agricultural commodities is crucial for improving farmers' livelihoods and strengthening food security. Addressing the numerous challenges faced by farmers requires targeted interventions to create a more equitable and efficient agricultural market landscape

Srinivas Sajja and **Avinash K. Ghule** in their paper on 'Importance of policy instruments and alternative strategies for agricultural market sustainability' noted that agriculture in India is undergoing a transformation driven by technological advancements in market access

and price discovery mechanisms. While policy instruments have played a crucial role in ensuring price security for select crops, there is a growing need for diversified, market-driven approaches to ensure sustainable farmer incomes. Digital platforms such as NCDFI eMarket have emerged as powerful tools that enable direct marketing, efficient price discovery, and seamless trade. This paper explores how evolving marketing options are strengthening agricultural trade via NCDFI eMarket. The paper highlights how farmer participation through Farmer Producer Organisations (FPOs) enhances price realisation and strengthens forward and backward linkages in the agricultural value chain.

K.R. Ashok in his paper on 'Marketing Reforms for Sustainable Agriculture' noted that as India enters Amrit Kaal and works toward a Viksit Bharat, agricultural priorities are evolving significantly and at rapid pace. The Nation has moved far from the 'PL-480 days' by increasing the food grain production nearly 6 times since independence as compared to the 4 times increase in population. While agriculture's share in India's economy has progressively declined to less than 15% due to the high growth rates of the industrial and services sectors, the sector's importance in India's economic and social fabric goes well beyond this indicator. Agricultural marketing is crucial for India's next stage of agricultural development. Government Procurement based on minimum support price is one of the important components in agricultural marketing in India. The Minimum Support Price (MSP) system, while essential for safeguarding farmers against price volatility, is often criticized as unsustainable in the long run due to several economic, environmental, and structural challenges. To address these challenges, a transition to sustainable agricultural policies is necessary including market reforms. While MSP has been instrumental in supporting farmers historically, its long-term sustainability requires structural reforms to create a more market-driven, diversified, and resilient agricultural economy.

Paper by **Anugu Arun Reddy** and **A. Amarender Reddy** on 'Fiscal burden of Minimum Support Price (MSP) under different scenarios in India' highlighted mentioned that for policymakers in India, price-based agricultural support remains central to farm income stabilisation and food security. However, it is important to recognise that the current MSP–procurement–PDS architecture is not primarily a farmer subsidy system, but a consumer subsidy system. Under the National Food Security

Act, food grains—predominantly rice and wheat—are issued at highly subsidised prices (around ₹ 2–3 per kg). Consequently, the food subsidy bill largely reflects the cost of delivering cheap food to consumers, not excess price support to farmers. In fact, in the prevailing global market context, international prices of rice and wheat are broadly in line with India's MSP levels. This implies that MSP procurement today functions mainly as a price assurance mechanism, not as a price subsidy to farmers. Farmers are not receiving prices significantly above market-clearing levels; instead, the implicit subsidy is realised downstream by consumers through low issue prices. Expanding physical procurement under MSP to all notified crops, therefore, risks misdiagnosing a consumer welfare instrument as a farmer income policy, with serious fiscal and administrative consequences. Against this background, proposals to extend assured physical procurement to all MSP crops raise concerns about fiscal sustainability, administrative feasibility, and market distortion. To inform this debate, the fiscal implications of alternative MSP implementation pathways are modelled using crop-wise production, MSP, and modal wholesale price data for the 2024–25 marketing year. Three policy scenarios are examined. The results show that partial physical procurement would require gross farmer payouts of ₹ 3.70 lakh crore (1.12% of GDP). After accounting for disposal revenues, the net fiscal burden ranges from ₹ 3,731 crore to ₹ 22,240 crore, equivalent to 0.011–0.067% of GDP. While this net burden may appear modest, it masks substantial hidden costs related to storage, handling, transport, and inventory management, as well as the risks of excess stock accumulation. The hybrid model delivers comparable income support to farmers while significantly reducing storage, handling, and logistics requirements. By limiting procurement to essential food security needs and compensating price shortfalls through PDP, this approach aligns farmer support more closely with income objectives rather than stock accumulation. A universal PDP system entails a marginally higher fiscal outlay (but with more coverage both interms of crops and price shortfall) but eliminates inventory-related inefficiencies and administrative complexity associated with large-scale procurement. Even universal Price Deficiency Payment (40% paddy and wheat procured along with 100% of other MSP crops output covered with PDP) also require a maximum of ₹ 1.14 lack crore towards expenses, which is very modest. A gradual transition is critical. MSP-based procurement is deeply embedded in India's political economy and farmer expectations,

particularly in surplus-producing states. Abrupt withdrawal would undermine policy credibility. Introducing PDP for other MSP crops alongside limited procurement (close-ended) of paddy ad wheat allows institutions to build capacity in price discovery, verification, and direct benefit transfers, while reassuring farmers that minimum price guarantees remain intact. Over time, such a calibrated shift would also bring greater policy clarity. Consumer subsidies for food security can continue to be addressed explicitly through the food subsidy budget, while farmer income support is delivered transparently through PDP, rather than indirectly through costly and distortionary procurement operations. In sum, under prevailing state capacity and political economy constraints, hybrid price support systems represent a pragmatic second-best reform pathway for India. The evidence suggests that maintaining minimum price assurance for farmers does not require expanding physical procurement. Instead, a gradual shift towards price deficiency payments can protect farmer incomes, reduce systemic inefficiencies, and better align India's MSP regime with both domestic realities and international market conditions—offering transferable lessons for other developing economies seeking to reform procurement-centric price support systems.

Paper by **Megha Desai** on "Market Access for Small and Marginal Women Farmers of Gujarat- SEWA's experiences" highlighted that with over 3.2 million women workers as its members and almost 50% of them small and marginal farmers, one of the challenges that SEWA faced is that why farmer families go hungry even after putting so much of toil in their fields? In rural areas, small and marginal farmers have a very small marketable surplus resorting to "Distress Sell" of their produce at the time of harvesting due to lack of access to markets and value addition and creation activities. In order to address these challenges. SEWA launched its own "Agriculture campaign" in 1995 with the objective to address the question "Why does the farmer remain hungry? SEWA's approach has been to treat Farm as an enterprise and Farmer as Entrepreneur so that agriculture moves form subsistence to becoming viable and profitable.

Shrikant S. Kalamkar in his paper on 'Food Policy and Parastatals, Marketing Mechanism and Farmers' Income in India: Status and Challenges' reviews food policy and parastatals, various interventions, support provided, recent marketing reforms, and level of farmers' income in India. As in India, governments have played a crucial role in shaping

policies in the agricultural sector all over the globe. In emerging nations, agriculture accounts for a significant share of all productive activities, and food has a dominant share in consumption expenditure. The different agricultural economic policies and interventions have been pursued by the government. However, despite interventions, the struggle of farmers continues, and farming is becoming an unremunerative activity.

R.S. Pundir and **Remalli Anthony** in their paper 'Minimum Support Price in India: Challenges and Alternative Policy Pathways noted that the Minimum Support Price (MSP) provides a safety net by guaranteeing minimum remunerative rates for 23 major crops, helping protect farmers from price volatility. However, its effectiveness is limited as high procurement remains largely confined to paddy and wheat, resulting in regional imbalances, ecological strain, and rising fiscal costs. This study examines the limitations of the MSP framework and explores alternative interventions such as direct benefit transfers, decentralized procurement, price deficiency payments, and market intelligence systems. A key focus is placed on the Anand Agricultural University's Centre for Agricultural Market Intelligence (under NAHEP-CAAST), which leverages machine learning, AI, and satellite data to craft multivariate forecasting models and real-time advisories. The findings suggest that combining MSP with predictive, data-led strategies offers a more equitable, efficient, and sustainable agricultural support system.

Shrikant Kalamkar and **Hemant Sharma** in their paper on 'Agricultural Marketing Reforms in India noted that in recent years, the Union Government of India has initiated a number of reform measures related to agriculture marketing which are likely to have far reaching positive impact on farmers' income. Many states carried out partial reforms only (2003), on a pick-and-choose basis, wide variation in adoption of content and coverage of reforms, thereby defeating the objective of creating a uniform trade environment across the country. However, in some states some alternative marketing systems (direct marketing, contract farming, private market, organised retail, producers' organisation, cooperatives in marketing, food processing, etc.) have developed. Year 2007 witnessed circulation of model APMC rules across the states for implementation but there was wide variation in adoption of content and coverage of reforms.

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Future Agriculture: Market for Crops under MSP

nd Shrikant Kalamkar

Introduction

MSP is a revolutionary concept introduced in India. The objective is assure farmers that their produce will be bought by the at a reasonable price. It is covering the risk of farmers as agriculture is a risky business dependent on nature and weather. MSP protects them from price fluctuations and helps them to select crops as it is declared by the Government. This is one of the key factors for Indian agriculture. This is a threshold mechanism to protect farmers against market vagaries. Farmers are very vigilant about this . Some want it as statutory.

Hon'ble Prime Minister Shri Narendra Modi is leading nati era of Amrutkal for Viksit Bharat. The objective is to make sustainable and continuing increase in income of farmers. The challenge is how to make agriculture not only sustainable but profitable and attract investment and attract reverse migration and that its products are bought at reasonable price from the farmers and sold to consumers at reasonable price. There are already crops like Castor, Spices, Tea, Coffee, , some of fruits apart from Dairy Products, Fisheries, Po which have established market link and fetch values and farmers get good prices. These crops do not need MSP support. Even among MSP Crops, some have export markets and very good demand. We have many times a situation where a little setback in results into scarcity of commodities and prices go up and exports get banned like that of Rice,

What is needed how to connect market without a major gap between the paid to farmers and price paid by the end consumer.

Executive Chairman of National Council for Climate Change, Sustainable Development and Public Leadership (NCCSD), Ahmedabad (India).

Director Professor, Agro Economic Research Centre (MoA&FW, GoI), Sardar Patel University, Vallabh Vidyanagar, Gujarat (I

identify who are intermediaries who absorb the gap between price paid to farmers and price fetched from consumers. It must be clearly understood that we have already done this successfully and the same is required to be replicated in MSP Crops.

e MSP and APMC, small farmers sell at Village level to /traders/rich farmers because they don t have adequate quantity or are indebted. They end up losing 20 to 25 percent. There is a huge disparity between price at Village level to consumer le increases with distance. Traders are key pl58rs. They control APMC auction price. All these create discontent and periodic agitation. We need to examine what makes crops marketable to fetch decent price. There are crops like Groundnut ices go up every year but farmers do not get fair prices and prefer MSP. In fact, we import edible oil. The Indian Farmers have been facing major constraints such as:

- Farmers cannot sell their produce outside APMC.
- Farmers are restrained from Exports if Domestic prices go up.

Not that efforts are not made to remove them. Enactment of Three Farm laws is illustrating this. They were required to be withdrawn because of resistance by the Farm Lobby. Farm Laws envisaged liberating farmers from the clutches of

Another major hurdle is middlemen. They are traders, some rich farmers are also traders. They over weigh the farm lobby and influence. There are vested interests and they control rural and urban markets across the country. In case of Groundnut, Gujarat set up **Gujarat Cooperative Oilseeds Growers' Federation Ltd** in Eighties on line Amul model promoted by NDDB and State Govt. But after persistent efforts it failed and was wound up. Mainly because of the Trade Lobby of oil.

Our strategy hence needs to keep these in view. We need to realise that despite knowing what is hurting we have failed to remove the cause which is creating wounds. Hence, we have to lay the path with these hurdles. It is a hurdle jumping run. ture Administration ICAR has not paid enough attention to the market market trends and opportunities and no extension inputs to individual farmers. success in Dairy Coffee is because of a professional organization

In view of above, an attempt is made in this paper to analyze the issues in Indian agricultural marketing and steps to be taken for future agriculture.

Agricultural Market Mechanism

s current agricultural market mechanism is a layered system wh backed public procurement, APMC mandis, and village traders coexist with emerging private markets and digital platforms like e but with large gaps for small and marginal farmers in practice. A reformed structure must protect price floors and bargaining power while opening competitive supply chains where entities such as Reliance, Tata and others operate under clear rules, transparency, and farmer centric contracts.

Present Market Structure

s market structure today operates through overlapping channels rather than a single unified market for farmers. Public procurement at MSP is narrow in crop and regional coverage, while most smallholders sell to local traders or unregulated haats due to distance, cost and information

MSP & procurement:

- MSP is announced for 20+ crops, but effective large is concentrated in wheat and paddy, especially in Punjab, Haryana, MP and a few states.
- Even in these states, only a share of total output reaches MSP centr for wheat and paddy, official data show that a large proportion is sold to local traders rather than mandis.

APMC mandis:

- State APMC Acts require notified crops to be sold in regulated mandis through licensed commission agents, with market fees and ce
- Mandis provide some infrastructure and price discovery, but there are too few markets relative to production, infrastructure is inadequate and cartelisation and high intermediation margins remain common.
- Studies show that 49% of paddy and 36% of wheat are sold directly to local traders or at village haats, often below MSP, due to high transport cost, lack of storage, credit dependence and time constraints faced by small farmers.

- These traders provide credit, inputs, and door step pickup, but also exercise significant monopsony power and often under weigh produce or delay payments and charge commission and deduct presumed

New Channels:

- NAM integrates APMC mandis on an electronic platform; by early 2024 it connected 1,389 markets, 1.77 crore farmers and 2.56 lakh traders, but genuine inter state trade and assaying based quality are still limited.
- Direct marketing by processors/retailers, FPO based aggregation, and ing exist but remain thin compared to the traditional trader structure.

MSP: design, performance and issues

MSP is a policy price, and its impact is uneven across crops, states and farm sizes. In practice MSP has become both a lifeline and a source in the agricultural economy.

Role and Strengths:

- MSP for wheat and paddy underpins the public distribution system and food security buffer stocks, stabilising prices for farmers in major

- During years of price crashes, MSP procurement has prevented severe farm income shocks in procurement intensive regions.

- Actual procurement is heavily skewed; many MSP crops see negligible purchase, and large parts of eastern India, rainfed areas, and cereal crops receive li
- Small and marginal farmers often cannot access MSP yards because of transport costs, long queues and paperwork, so they sell at lower prices to traders who arbitrage with MSP/mandi rates.
- Assured MSP for rice and wheat encourages mono depletion and delayed diversification in states such as Punjab and Haryana.

APMC Mandis and Village Traders

APMCs have provided a regulatory framework and revenue for rural e but are also criticised for creating entry barriers and

seeking. Village traders fill the access gap but often at the cost of

APMC strengths:

- Mandis offer weighbridges, auction platforms, and some dispute settlement mechanisms, compared with unregulated village markets.
- fees have historically financed local road, storage and market infrastructure, particularly in Green Revolution regions.

APMC Weaknesses:

- Limited number and uneven spread: many farmers travel long or skip mandis entirely.
- Licensing controls and commission agent dominance reduce tion; farmers face collusion, delayed payments and non

- Small farmers' choice models show they will often accept lower prices village markets in exchange for lower transaction costs and credit/ relationship benefits.
- Without formal oversight, practices like under grading, verbal agree and bundled credit sales contracts reduce effective farm gate

- The floor price for auction is fixed arbitrarily by clique of traders.

Three Farm Laws: Content and Critique

The three central farm laws of 2020 sought to bypass some APMC rigidities and promote private markets and contracts, but were repealed in scale protests which were masterminded by Traders' and followed by some farmers without understanding that laws were for their benefit.

The three Acts were:

- Farmers' Produce Trade and Commerce (Promotion and Facilitation

  llowed trade of farmers' produce outside APMC mandis without market fees; enabled inter state and intra
  and electronic platforms.

Aim: increase competition for farmers' produce and reduce trading costs, especially through private markets and digital trade.

- Farmers (Empowerment and Protection) Agreement on Price and Farm Services Act, 2020:
  Provided a national framework for contract farming agreements between farmers and agri business firms, retailers, exporters, et agreed pricing and services.
  Proposed conciliation boards and SDM level dispute resolution to avoid civil courts.
- Essential Commodities (Amendment) Act, 2020:
  Deregulated stocking limits for cereals, pulses, oilseeds, onions, potatoes and oils, except under extraordinary circumstances, to encourage private storage and investment in supply chains.

for Large Corporates (Reliance, Tata, etc.)

Large business groups can play multiple roles in a reformed market, from logistics and processing to digital platforms, but need clear guardrails and centric frameworks.

Potential positive roles:

- Supply chain, logistics and storage:
  Corporates can invest in warehouses, cold chains, and processing , addressing chronic post harvest losses and seasonality in

  Groups like Tata (through Rallis and other initiatives) work on input supply, sustainable crop protection, and water management ise productivity and resilience.
- Retail, procurement and digital platforms:
  Organised retail entities linked to Reliance Retail and others already handle significant shares of fruits and vegetables in urban , enabling direct sourcing models.
  tech platforms backed or partnered by large firms can offer digital advisory, market information and direct purchase channels to FPOs and farmers.
- Technology and finance:
  Corporates can support precision agriculture, traceability, quality , and climate smart practices, as seen in Tata Trusts' Green Revolution and water missions.

create value chains with FPOs, sharing risk and investing in quality upgrading, grading and branding for domestic and export markets.

s and Safeguards:

- Public concerns during the farm law protests linked corporate entry with potential capture of markets and land; Reliance publicly clarified that it is not engaged in contract or corporate farming and has no plans to buy agricultural land, and that it will insist its suppliers

- Without clear regulation, asymmetries in information, finance and legal capacity between small farmers and large firms could lead to exploitative contracts, monopsony buying and exclusion of the

Priority Reforms and Suggestions

A balanced reform package has to: (a) protect a meaningful price floor, (b) reduce transaction costs for smallholders, (c) enhance competition and investment, and (d) build strong farmer institutions, especially FPOs. following broad directions emerge from the evidence:

Reframe MSP and Procurement

- Move from open ended physical procurement in a few states to:
- Targeted procurement for food security plus price deficiency payment schemes for selected crops, where farmers receive the difference MSP and market price directly in their accounts, reducing stockpiles while maintaining income support.
- incentivise diversification in Punjab, Haryana and western UP by offering assured procurement/MSP linked support for pulses, oilseeds and coarse grains with water saving benefits.

Explore a statutory framework where:

- MSP acts as a reference floor in government contracts and public purchases, and
- private buyers above a certain scale commit to transparent formula based pricing linked to benchmark markets, while keeping room for local competition.

Reform and Modernise APMC, Don

Within APMC:

- multiple types of licensed buyers and electronic bidding, with time public display of prices and volumes; integrate mandis more NAM and standardised quality assaying.
- Rationalise and cap market fees and commissions to reduce trading costs and limit rent seeking, while ensuring alternative revenue for infrastructure.
- Amend Act to include Women Farmers, SC & ST farmers to be part of Board of Management and by rotation Chairman as it is in local

Outside APMC:

- e markets, farmer consumer markets and direct purchase centres, but require registration, basic infrastructure standards, trans weighing/assaying, and regular reporting of prices and volumes
- Ensure that APMC and non APMC markets compete on a leve playing field rather than one being fiscally disadvantaged by asym

Protect and Empower Small Farmers vis vis Village Traders

- Reduce dependence on exploitative village traders by:
- Expanding village level procurement (mobile MSP vans, local buying centres) during peak harvest in remote clusters.
- Supporting FPOs and cooperatives that aggregate produce, negotiate traders/corporates, and provide shared storage and grading

Strengthen regulation and transparency at th

- Make simple, legally enforceable receipts mandatory for all purchases above a threshold; promote digital payments and SMS receipts even for small lots.
- Provide all farmers with use of AI regular, vernacular price obiles, community radio, and panchayat boards to improve their reservation price in negotiations.

Framework for Corporate and Contract Farming

Design farmer centric contract farming rules:

- Standard model contracts in local languages specifying price quality standards, risk sharing (weather, pest, market), and exit registration with a district authority.
- cost dispute resolution (ombudsman/fast tribunals) accessible to smallholders, with penalties for unfai

Conditions for large corporates (Reliance, Tata, etc.):

- Require disclosure of average farm gate prices, payment timelines and rejection rates by company and crop to monitor fairness.
- collaboration with FPOs/cooperatives the default route for volume sourcing, rather than atomised individual contracts, to bargaining power and reduce transaction costs.

Level and Regional Focus (including Haryana)

States like Haryana and Punjab, can pilot:

- Diversification compacts where MSP/procurement and corporate value chains jointly support pulses, oilseeds, fodder crops and with assured off
- Integration of block level collection centres, e NAM mandis, and corporate processing units so that even small farmers can sell graded produce beyond local traders.

In rainfed or under served regions:

- Prioritise basic market density (more small mandis, haat upgradation and rural roads, along with climate smart cropping and storage

Integrated Strategy: State to Ground

Strategic Pillars

Block as Mission Unit: Declare the block as the core planning and implementation unit for diversification, water, and farmer income enhancement.

Farmer Collectives at the Centre: Use FPOs, cooperatives and SHG rations as primary channels for inputs, services, value addition, and marketing.

Convergence of Schemes: Align agriculture, horticulture, animal husbandry, water resources, rural development, and livelihoods around a single Block Diversification & Water Plan.

based Extension and Incentives: Shift from target input distribution to results driven support measured in , water use efficiency, and farmer income.

Digital and Data Backbone: Use AgriStack and other digital tools for precise targeting, monitoring, and transparency.

International and Indian Learning Embedded

- Global and Indian examples show that professionally managed organizations with secure market ties and access to credit ly raise smallholder incomes.
- Successful extension reforms link research, extension, and markets, rely on group based learning, and decentralise decision local units (blocks/watersheds/districts).
- stressed regions that succeeded in stabilising agriculture used community water budgeting, diversified cropping, and strong collective institutions rather than only price or input subsidies.

Level Implementation Model

Institutional Architecture

Block Agriculture & Rural Livelihoods Platform (BARLP)

- SDM or BDPO; Members: officers of Agriculture, Horti , Water Resources, Animal Husbandry, Rural Development, Cooperatives, KVK representative, bank lead, and 2 3 FPO/SHG

-

  Prepare and implement a 3 5 year Block Diversification & Water Plan, updated annually.

  Approve convergence of departmental schemes and budgets at

  Review performance (diversification, water, FPO business, scheme reach) every season.

FPO and village cluster structure

- One Block FPO Cluster for every 10 15 villages, with clear focus (e.g., pulses oilseeds, maize fodder, dairy, veget ables, agroforestry).
- FPO roles: member enrolment, aggregated input purchase, mechanisation/custom hiring, primary processing and storage, collective marketing, insurance facilitation, and data sharing with

Planning and Target Setting

. Block Diversification & Water Plan

- Use AgriStack data (land, crop history, farmer profile) plus ground status and climate risk maps to set:
  Annual targets for paddy reduction and diversified crops by

  Priority zones for micro irrigation, water harvesting, and natural/ input farming.
  Livestock and fodder expansion plan.

Village Cluster Plans

- Jointly prepared by Block Extension Hub and FPOs through Gram and cluster meetings.
-
  Named farmers and acreage shifting crops in the coming season.
  Required support package: seed, credit, irrigation, marketing

  Infrastructure requirements (collection centers, sheds, small

Extension and Capacity

Block Extension Hub

- **Disciplinary Team:** agronomy, horticulture, livestock, water management, and agri business/marketing
- **Key activities:**
  wise advisory calendars for major crops and enterprises.

Demonstration plots and farmer field schools on diversified saving technologies, integrated farming, and quality

Joint programmes with KVKs and research institutions.

. *Lead farmers and digital advisory*

- 5 lead farmers per village for different enterprises (crops, dairy, , natural farming) acting as local resource persons, trained regularly at block level.
- ries, IVR, and WhatsApp groups linked to data to issue location specific messages.
- Extension performance linked to adoption and income indicators, not only number of trainings.

Markets, Value Chains, and Risk

Market and value chain development

- FPOs to sign MoUs or contracts with processors, organised retailers, institutional buyers, and exporters wherever feasible.
- State to facilitate:
  Price discovery platforms and e
  scale processing (cleaning, grading, milling, drying, packag ing) at FPO level through subsidies and soft loans.
  Branding and promotion of block specific products.

. *Finance and insurance*

- Dedicated FPO financing windows in banks and cooperatives, with partial credit guarantees and interest subvention for both working capital and infrastructure.
- level coordination on crop insurance: universal coverage of FPO members, better yield estimation methods, and time

- Use FPOs to enrol farmers and verify losses to reduce moral hazard

Monitoring, Learning, and Accountability

- **level dashboard showing:** Crop mix, scheme coverage, FPO performance, irrigation and water structures, insurance claims, and farmer incomes (sample surveys).

- Annual public review at block level, with farmer representatives and civil society, to evaluate the Block Plan, identify bottlenecks, and adjust strategy.
- Mechanism for pilots and innovation (e.g., new crops, technologies, contract models) in selected clusters with rigorous documentation up if successful.

Policy and Regulatory Changes Required

Government Orders and Institutional Mandates

- Issue a state notification constituting BARLPs in all blocks with clear powers to: approve integrated Block Diversification & Water Plans and oversee scheme convergence and monitoring.
- Amend departmental guidelines so that major agriculture schemes must align with and report against the approved Block Plan.

FPO Strengthening Framework

State FPO policy t

- Define minimum professional staffing and governance standards.
- bound, performance linked grants for business develop and infrastructure.
- Prioritise FPOs for procurement, custom hiring centres, storage subsidies, and value

Incentive and Budgeting Reforms

- Convert existing schemes (MSP expansion, Bhavantar, Mera Pani Meri Virasat, natural farming incentives) into a unified "Block Diversification and Water Security Envelope" with outcome

- e additional incentive when diversified crops are sold through FPOs or cooperatives (per quintal bonus), linking support to both crop choice and collective marketing.

Extension and HR Policy

- Create sanctioned multi disciplinary extension posts at block level with revised job descriptions and appraisal systems tied to diversi , water outcomes, and farmer income indicators.

- Issue a partnership framework for KVKs, NGOs, and private service providers to formally support BARLPs under accountability for results.

Data, Transparency, and Risk Management

- Fully operationalise AgriStack for: unified farmer IDs, land/crop records, scheme mapping, and outcome tracking; publish non sensitive, block level summaries online.
- op insurance guidelines at state level to: adopt based yield estimation, set time bound claim settlement standards, and link disaster relief with insurance and price support

Suggested Outline for a Block Level Implementation Plan

r any given block the implementation plan can be structured as:

Baseline and diagnostic (3 Detailed mapping of crops, water status, farmer categories, existing schemes and institutions, and FPO readiness.

Constitution and training of BARLP (1 2 months, Issue local orders, orient all departments and FPO representatives, and agree on roles and timelines.

Preparation of Block Diversification & Water Plan (3 months data plus farmer consultations to finalise targets, clusters, and support

Launch of FPO centred service package (year 1 , custom hiring, demonstrations, insurance enrolment, round market tie

Scaling and deepening (years 3 Expansion to full block infrastructure build out, more advanced value addition, and refinement of incentives based on outcomes.

Strategic Brief: Synergizing Amul & FPO Models for Agriculture

Structural Comparison & Core Philosophies

The Indian agricultural landscape is currently navigating two distinct paths of aggregation. While the Anand Pattern

tested social movement, the is a modern business

	Amul (Cooperative) Model	FPO/Producer Company
	Cooperative Societies Act	(Professional/Corporate)
	Producer: Social equity and high patronage bonus.	Market: Agility, profit maximization, and scaling.
		Derived from Input Aggregation &

Strength & Weakness Analysis

The Amul Model: The

- **Value Retention:** Successfully returns 80% of consumer spend to the
- Massive vertical integration from village collection to global
- **Mile Logistics:** Highly efficient daily collection and cold chain.
- Difficult to pivot to new commodities outside of dairy.
- **Bureaucratic Risk:** Vulnerable to political interference in society

The FPO Model: The

- **Professional Management:** Can hire specialized CEOs and use modern tech stacks.
- **Input Cost Reduction:** Aggregating seed/fertilizer buys saves farmers
- Easier to secure VC funding or bank loans compared
- **Survival Rates:** High failure rate once initial 3 year government

- **Branding Gap:** Most FPOs lack a consumer facing brand to compete

Integration: How They Become Complementary

The future of Indian agriculture lies in a **Hybrid Ecosystem** strengths of one mitigate the weaknesses of the other.

The "Hub and Spoke" Supply Chain

FPOs can act as the "Local Hubs" for multi commodity aggregation pulses, grains, honey), while Large Cooperatives (like Amul) provide the National Spoke for processing and marketing.

- A local FPO manages the collection and grading of honey; buys it in bulk, processes it, and sells it under the Amul brand.

Digital Integration (AgriStack & e

The FPO serves as the digital interface for the farmer. By registering members on the **National Agriculture Market** (**e** , FPOs can bypass **APMC Mandis** (which are often controlled by local cartels while using the Cooperative s logistics to move the goods.

Policy & MSP Synergy

- **FPOs for Procurement:** The government can designate FPOs as official procurement centers for crops, reducing the farmer's dependence on the "Arhatiyas" (commission agents) in APMC

- **Bhavantar Bhugtan:** FPOs can digitally record price data to help the government implement **Price Deficiency Payments** bank accounts.

The Reform Roadmap (Moving to 2026)

To achieve true Agriculture as an Enterprise, the following reforms are

Single Licensing: FPOs and Cooperatives should be allowed to trade across state lines without multiple APMC cess/taxes.

Professionalization Grant: Instead of just capital grants, the govern should fund the "CEO Salary" for FPOs for 5 years to ensure professional management.

Essential Commodities Reform: Liberalizing stock limits for FPOs to allow them to build their own silos and warehouses (as attempted in the 2020 laws).

Contract Farming Framework **Price Assurance Act**
let FPOs sign 3 back contracts with food processors, price stability similar to the

Marketing and Trust

Operations and Scale. By integrating FPOs into the structure of larger cooperatives, India can finally transition from a subsistence farming led agricultural economy.

Strategic brief: Establishing a Special Purpose Board for Agriculture Marketing

There is need for setting up a Special Purpose Board (SPB) for agriculture marketing, modeled on successful precedents like the Coffee Board and Spices Board of India. These boards have effectively promoted exports, quality standards, provided market intelligence, and supported value addition for niche crops. The proposed SPB would focus on key rice and horticulture (mango, banana), livestock (chicken, meat), and processed ready to enhance farmer incomes, boost exports, and integrate with national schemes like APMC reforms and ONDC.

Background and Rationale

Agriculture sector contributes significantly to the state's GDP, with rice as a staple crop, horticulture products like mango and banana driving exports, livestock (poultry and meat) supporting rural livelihoods, and a growing processed ready eat food industry. However, farmers face challenges such as volatile prices, limited market access, inadequate e, and weak export linkages.

The Coffee Board (est. 1942) and Spices Board (est. 1987) exemplify autonomous bodies under the Ministry of Commerce that have trans formed niche sectors through R&D, certification, marketing, and financial

s of the Proposed Board

- Promote marketing, branding, and exports of rice, mango, banana, chicken/meat, and processed foods.
- Ensure quality standards, traceability, and GI tagging (e.g., Kesar , Surti Buffalo Meat).
- Facilitate farmer producer organizations (FPOs) and cooperatives farming, and direct market linkages.
- Support value addition through processing units and cold chain

- Provide market intelligence, price stabilization, and financial as via NABARD/bank tie

Crops/Sectors Covered

The Board would prioritize:

	Rice (e.g., Basmati	Milling, export promotion, MSP
	Mango, Banana, sapota,	harvest management, ripening centers, global branding
		Slaughterhouses, hygienic processing, halal certification
	snacks, meat products)	FSSAI compliance, packaging, e

Proposed Structure and Governance

- Statutory body under Agriculture Produce Markets Act, 1963 (amended), with tripartite funding (Centre 40%, State 40 Industry/Farmers 20%).
- **Governing Council:** Chairman (IAS officer), 15 20 members reps, industry experts, NABARD, FPOs, and Dept. of Agriculture/Horticulture.
- **Key Divisions:**
  Marketing & Exports Division.
  Quality Control & Certification Lab.
  R&D and Processing Infrastruct
  Digital Platform for e trading and price info.

- **Headquarters:** Ahmedabad, with regional offices in Surat (horticulture), Rajkot (livestock), and Anand (dairy/processed).
- ₹500 crore, sourced from state budget, cess on agri produce, CSR

Functions and Powers

- Regulate marketing operations, including auctions and direct sales.
- Establish grading/packaging centers and export facilitation hubs.
- Subsidize processing units (50% capital subsidy for FPOs).
- Collaborate with APEDA, HDFC Bank/NABARD for credit and

- Launch campaigns like Meat Excellence.
- Monitor via annual reports to state assembly.

Implementation Roadmap

		Cabinet approval, draft legislation
		Recruit core team, pilot centers in 2 districts
		Full operations, export targets (e.g., 20% agri

Expected Outcomes

- Increase farmer realization by 25 30% via better prices and exports.
- Create 50,000 jobs in processing/mar
- Position Gujarat as a hub for processed agri foods, targeting Middle East/EU markets.
- Capture 10% share in targeted international markets (e.g., UAE rice/meat, US mango).
- Boost domestic sales via FPOs to urban Gujarat/India by 15%.

Thinking Beyond MSP: Cooperative Commodity Zones, Mini Mandi Model, and Digital Innovations

Dileep Sanghani

The Minimum Support Price (MSP) has played a crucial role in India agricultural system, but it is now time to think beyond MSP and develop a more inclusive and efficient agricultural market system. The adoption of Cooperative Commodity Zones, transforming Primary Agricultural Societies (PACS) into Mini nd leveraging digital technologies such as Artificial Intelligence (AI) and Blockchain for smart management are essential steps that can drive India agricultural self

Cooperative Commodity Zones: A Tool for Social E Employment Generation

The primary objective of Cooperative Commodity Zones (CCZs) is to empower farmers and ensure better price realization for their produce while acting as a tool for social equity. These zones will integrate labourers, small traders, and even marginalized communities into the agricultural value chain, ensuring inclusive economic growth. By involving all strata of society, CCZs will democratize the agricultural , providing equal opportunities for all.

ishing a unified frame spot markets and future markets, CCZs will eliminate the role of intermediaries, ensuring that farmers and consumers benefit from transparent pricing mechanisms. This transformation will create millions of employment opportunities, as eholders will be involved in warehousing, processing, logistics, digital trading, quality assessment, and marketing. Countries such as Brazil and the Netherlands have successfully implemented cooperative driven commodity exchanges, ensuring fair pricing an

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IFFCO & GUJCOMASOL.

For example, South Korea s *National Agricultural Cooperative Federation (NACF)* plays a key role in managing the entire agricultural value chain, ensuring higher pay for farmers and reducing costs for consumers. Similarly, Kenya has successfully implemented cooperative marketing strategies by using *Kenya Agricultural Market Information Systems (KAMIS)* to provide real time market data to farmers. Learning from these models, India can establish CCZs where farmers are equipped scientific knowledge, financial tools, and better access to markets.

nsforming PACS into Mini

India has approximately *63,000 functional PACS*, which can be developed into decentralized Mini Mandis to ensure efficient farm Mandis will reduce farmers dependency on intermediaries, thereby increasing their earnings and streamlining the procurement process.

Under this transformation, PACS will be integrated with:

- Electronic Trading Platforms to enable competitive price
- Storage and Processing Facilities to prevent post
- Cooperative Procurement Centersto facilitate bulk purchase of inputs like fertilizers and machinery.
- A Value Chain Based Model where farmers are linked to proces units and exporters, ensuring a seamless market connection.

A global case study can be drawn from the New Zealand Dairy Cooperative Model, where cooperatives own the processing and marketing units, ensuring value addition remains within the farmer Similarly, Canada s New Agriculture Model focuses on contract farming within cooperatives, reducing the price volatility that small farmers face.

*Smart Warehouse Management: AI and Blockchain Integration

To make the supply chain transparent and efficient, India needs to AI and Blockchain technologies in warehouse management.

Based Warehouse Management:

- Predictive Analysis for Production Estimates to plan storage and more effectively.
- Time Market Demand Forecasting for better stock management

- Driven Quality Control Systems* to assess the moisture content and grading of crops at procurement centers.

Blockchain for Transparent Supply Chain

- Immutable Transaction Records, ensuring fair prices for farmers.
- *Digital Warehouse Receipts, enabling farmers to secure loans against stored produce.
- Smart Contracts, facilitating direct transactions between farmers and buyers without middlemen.

operative Farming Model and Based Coffee Trading System provide insights into how Indian agriculture can benefit from decentralized digital ledgers, reducing fraud and ensuring greater price

Tier Model of Amreli: A Scalable Success Story

Amreli district in Gujarat has demonstrated a successful thre cooperative model, which can be replicated across India. This model ensures holistic development of agriculture through processing, and marketing cooperatives functioning in a synchronized

PACS at Panchayat Level

Acts as a grassroots level institution providing credit and

Encourages *Agroecology Based Farming* to enhance

Strengthens local level warehousing to reduce distress selling.

and Market Linkage Cooperatives

This level manages *immediate processing* and value addition of

Supports secondary storage, grading, and packaging facilities to enhance product quality.

Encourages the formation of Farmer Producer Organizations (FPOs) to improve bargaining power.

Level Marketing Cooperatives

Ensures integration with national and global supply chains.

Facilitates price stabilization through *hedging and forward trading mechanisms*

Competes with major market players, enhancing the farmers market leverage.

New Zealand Fonterra Cooperative Model operates on a similar three tier principle, where dairy farmers are not only producers but also stakeholders in marketing and export businesses. By implementing this in India, agricultural cooperatives can drive *value added exports
better incomes for farmers.

Enhancing National Agricultural Security

By adopting these new cooperative frameworks:

- Food security can be improved, as farmers will have better access to price discovery and storage solutions.
- Dependency on middlemen will reduce, making agriculture more profitable for small and marginal farmers.
- Economic stability will increase, as cooperatives will function as generating entities contributing to India

Conclusion

Thinking beyond MSP and adopting Cooperative Commodity Zones, Mandis, and AI powered smart warehouses will revolutionize Indian agriculture. These models will not only increase but also make Indian agriculture more *organized, , and globally competitive*.

As the Vedas say: Sangachchhadhwam Samvadadhwam Sam Vo Manansi Let us move together, speak together, and align our min
unity, for cooperation and solidarity are the true paths to prosperity.

Future Agriculture: MSP and the Way Forward

Meenesh Shah

Agriculture remains the cornerstone of India s economy, supporting nearly 70 percent of the population and serving as the backbone of socio economic development. It engages millions of rural households in farming and allied activities, making it vital to national food security. Before the Green Revolution, India grappled with chronic food shortages, relying heavily on imports and international aid. The Green Revolution transformed the agricultural landscape, enabling to become self reliant and a net exporter of food. Today, the nation ranks as t global producer of milk, pulses, and spices, and the second producer of rice, wheat, cotton, sugarcane, fruits, vegetables, and tea.

Despite these advancements, agriculture continues to face inherent risks from unpredictable climatic changes, pest outbreaks, and market price instability aggravated by limited market access which jeopardize farmers income. Keeping these in view, the Government of India has introduced several strategic initiatives, with the **Minimum Support Price (MSP)** me playing a pivotal role. Introduced during the Green Revolution, MSP is a critical tool that assured farmers of a remunerative price for their produce, irrespective of market fluctuations, thus reducing income uncertainty and enabling investments in agricultural inputs.

Key benefits of MSP

Price stability: By ensuring a minimum assured price for agricultural commodities, with government agencies stepping in to procure crop produce if market prices fall below the threshold, MSP provides a for farmers to recover costs and sustain their livelihoods.

Food security supported procurement help build government reserves, crucial for the Public Distribution System (PDS) and other welfare schemes.

Chairman, National Dairy Development Board, Anand, Gujarat.

Incentivizing production: Guaranteed prices encourage farmers to invest in productivity enhancing technologies and practices (such as yielding varieties and modern farming techniques), boosting national agricultural output.

While MSP has provided financial security to millions of farmer practical application has been limited. MSP benefits are unevenly distributed, largely favouring a few states and crops due to storage and inadequate procurement infrastructure. Therefore, most of the small and marginal farmers are still dependent on private traders. Additionally, the concentration of MSP benefits in selected regions has widened economic disparities among farmers. For instance, large in Punjab and Haryana thrive under MSP procured crops, while small farmers in rainfed areas of eastern and southern regions struggle without adequate procurement infrastructure. Farmers in such remote areas often resort to selling their produce to local traders at prices below MSP, undermining its effectiveness.

In spite of economic benefits, MSP driven focus on water intensive crops has wider implications for the environment, such as groundwater depletion, environmental pollution, declining biodiversity and soil degradation, etc.

Depletion of groundwater: Paddy cultivation, heavily incentivized by MSP, consumes vast quantities of water. States such as Punjab and Haryana have witnessed alarming decline in groundwater levels, threatening long term agricultural sustainability.

Stubble burning for high productivity leaves farmers with little time between harvesting and sowing cycles. Inadequate reach of straw pickup devices across states results in most paddy crop residues lying unutilized in the field. This leads to its burning, causing severe air pollution and greenhouse gas emissions.

Reduced biodiversity: MSP driven monocropping discourage crop diversification, thereby reduce the cultivation of pulses, oilseeds, and other less water intensive crops.

Soil degradation: Overuse of fertilizers in regions with intensive rice and wheat cultivation deteriorate soil health and reduce agricultural

Inadequate reach of MSP benefits across states and its associated environmental concerns makes farmers further vulnerable to market an

climatic risks. Therefore, a critical reassessment of MSP realigning it with sustainability goals is crucial for shaping the future of Indian agriculture towards more sustainable, resilient, equitable and long term viable growth.

without MSP

The Indian dairy sector provides a unique example of a thriving agricultural sub sector operating without MSP. Dominated by small and marginal farmers, the sector has flourished under the cooperative model. Key factors contributing to its success include:

owned institutions: Dairy cooperatives provide direct market access to farmers, ensuring fair and stable price for milk while eliminating middlemen.

Stable income: Regular payments by cooperatives insulate farm from market volatility. During market crises (COVID cooperatives continued to procure milk, providing stability to rural

Value addition: NDDB and cooperatives emphasize value products such as cheese and butter, enabling Indian dairy products to compete in domestic and international markets.

Sustainability focus: The sector is continuously demonstrating its commitment to sustainable development through various initiatives that benefit environment as well as ensure economic growth of rural

The future of Indian agriculture depends on maintaining a delicate balance between farmer welfare and environmental sustainability. Agricultural farmers need to be incentivised differently to adopt diversified cropping system rather than mono cropping whic input intensive. Minimum support price could really be an incentive for crops crucial for nutritional security such as millets, pulses and oilseeds. Encouraging involvement of private sector through incentivisation could create efficient value chain for agricultural products. While MSP has been a cornerstone of agricultural policy, its current structure necessitates a shift towards more inclusive and environmentally conscious strategies. Actual role of minimum support price could be when market

below a certain level due to excess production, oversupply or price decrease due to some other external factors. The lessons from the dairy sector provides valuable models for building resilient and diversified agricultural systems. Aligning MSP policies with environmental goals, regional equity and technological innovations can pave the way for a sustainable agricultural framework that ensures prosperity for farmers, preserves natural resources and strengthens food security for future

From Price Support to Market Access: A New Era in Agricultural Marketing

C.K. Timbadia and A.A. Bhimani

Introduction

O the findings of the Commission of Agricultural Costs and Prices (CACP) of the Government of India, MSPs are announced at the beginning of the agricultural commodities planting season (Kumari 2023). The minimal value that farmers receive in exchang agricultural products sold in the market is guaranteed by the MSP, which is the price that is given to them for their production. With their large purchases of rice and wheat, the MSP policies are believed to promote expansion in the area planted to these crops (Korekallu Srinivasa 2023). To make sure farmers can cover their production expenses and get a fair return on their investment, MSP establishes a minimum price guarantee (Mishra & Kujur, 2024). Among the MSP s primary goals are tting a floor price for agricultural commodities and giving farmers a minimum price that the government guarantees. Despite being issued for 24 crops and covering all Indian farmers, the MSP s real procurement and direct benefits are restricted to a few surplus states and particular commodities because of storage issues and procurement channels. studies have demonstrated that, with the exception of states with an abundance of food, the program s benefits are not equitably distributed (Sudhakar & Wale, 2017). For generations, India has been based mostly on agriculture, with millions of farmers depending on the harvests from their fields to make a living. One of the most crucial elements of Indian agricultural policy is the Minimum Support P (MSP), which guarantees that farmers obtain a fair price for their produce. The Minimum Support Price (MSP) is a crucial component of s agricultural pricing strategy. It aims to ensure farmers receive a support price and consumers receive an affordable price through the public distribution system (PDS) (Parikh & Singh 2007).

Vice Chancellor, Gujarat Natural Farming Science University, Halol
Assistant Professor, Gujarat Natural Farming Science University,

green revolution, the price support system was envisioned as an institutional tool to encourage farmers to adopt new technology (Planning Commission 2005; Deshpande 2008). Based on the Jha committee suggestions, the Agriculture Price Commission was later founded in 1965 to recommend support prices for crops after accounting for cultivation (Kadasiddappa 2013). The commission s main goals are to rantee farmers fair prices and consumers fair prices, as well as to sustainable resource use in the direction of a socially desirable crop mix (Parikh & Singh 2007).

Challenges Faced by Farmers with MSP

While the goal of MSP is to give farmers financial stability, there are certain issues with the system, including

Geographical Disparities: Farmers frequently have to sell their crops at lower prices in local marketplaces and have trouble accessing MSP procurement centres in some locations, especially in rural or underdeveloped

Limited Coverage: MSP does not cover all crops. Certain farmers might cultivate crops that are not covered by the MSP program, making them susceptible to changes in market prices.

Inconsistent Proc A small number of states, including Punjab, Haryana, and Uttar Pradesh, account for the majority of government procurements conducted by organizations like the Food Corporation of India (FCI). Without access to these systems, farmers es might not be able to take advantage of MSP

Quality Standards: Occasionally, the produce s quality may fall short of the requirements for MSP procurement, leaving farmers with little choice but to sell their produce on the open market for less mon

Delayed Payments: In certain situations, farmers who need immediate financial assistance experience cash flow issues as a result of payment delays when the government purchases their crops.

Beyond MSP Marketing Strategy

A multifaceted strategy is needed to move agriculture past the Minimum Support Price (MSP), which includes bolstering market processes, boosting crop diversification, improving infrastructure, and enlisting the private sector. By giving farmers greater tools for price discovery and

management, this change seeks to lessen reliance on government and promote a more robust agricultural industry, including 1. Farmer Groups and FPOs: Technology that would enable an electronic auction system for transparent price discovery would be used by markets operating throughout the state. By creating standards for quality and compliance for a range of agricultural products, connecting , warehouses, and cold stores, increasing bidding competitiveness, and setting up facilities for market sampling and assaying, warehouses, and cold storage facilities to enable quality based trading of the produce, a virtual market would be created Raising awareness of quality and compliance and its significance for generating demand in local, r and global markets; enabling farmers to take the lead in primary value addition and enhancing price realization through direct farmer integrated stakeholder marketing; offering secure storage options through warehouse accreditation; and promoting warehouse based sales. Allowing farmers to determine the time and price of sales, creating an efficient and effective agricultural marketing information system, connecting secondary markets for key commodities to state participants, encouraging contract farming in the state to lower barriers related to the need for large deposits, and encouraging the establishment of warehouses and logistics parks in each district to serve as marketing hubs Reach out to customers directly through farmers table gatherings, and internet channels. Work with nearby eateries, food processors, and merchants to possibly boost revenue.

In the digital age, social media has emerged as a powerful tool for farmers practicing natural farming to promote their produce and establish a strong market presence. By actively sharing updates on platforms like Facebook, WhatsApp, Telegram, and YouTube, farmers can showcase their daily agricultural activities, such as sowing, preparing natural inputs, harvesting, and pos harvest handling. This online visibility helps farmers build credibility among their network, enhance consumer trust, and attract potential buyers. Regular content sharing not only promotes transparency but also encourages referrals, leading to better ma outcomes and direct sales. Therefore, maintaining a digital identity is essential for farmers to engage directly with consumers and establish a consistent revenue stream through natural farming.

Community Supported Agriculture is a collaborative model that fosters a direct relationship between producers and consumers. Under this model,

consumers invest in a farm s produce by paying an upfront subscription fee before the start of the season. In return, they receive periodic shares of fresh, locally grown produce throughout the season. This pre payment provides farmers with critical working capital, reduces economic risks, and enhances planning efficiency. For consumers, CSA ensures access to nutritious food while nurturing a sense of connection with the food source. The model promotes shared responsibility, as consumers accept seasonal variations in yield and quality, thereby participating in natural uncertainties of agriculture. CSA programs vary from traditional farm initiatives to cooperative, health focused, urban oriented, and income supportive models. This diversity makes CSA a valuable foundation for natural farming enterprises, ensuring early cash flow and fostering long term customer loyalty through mutual trust and

markets provide natural farmers with an accessible and low avenue to sell their produce directly to consumers. These markets are ypically held in public areas such as parks, streets, or community spaces, allowing multiple producers to gather and interact with buyers. use simple stalls or stand to display their produce, benefiting from near prices without the involvement of intermediaries. The startup cost is often limited to a small stall fee, making it a cost effective model, especially for new or small scale natural farmers. In Gujarat, initiatives like the Shrusti Market have demonstrated the success of such models promoting natural produce. Moreover, the Government of Gujarat has directed all districts and blocks to allocate designated spaces for natural twice a week, thereby institutionalizing their market access. Examples like the Juhu Organic Market in Mumbai and Ima Keithel in Manipur highlight how such spaces can also be platforms for women empowerment and community engagement.

Own farms represent an interactive marketing model where consumers are invited to harvest their own produce directl field. This approach reduces harvesting labour for farmers and enhances consumer experience and connection with agriculture. It is especially to families seeking fresh produce for home consumption or preservation. Around Bangalore, farms such as The Farm on Bannerghatta Road, Chiguru Farm in Kanakapura, Sukrishi Farm in Chikmaranahalli, Aditi Farms, and Silver Oak Farms in Nandi Hills

exemplify the U Pick concept. In parallel, farm stands offer another form of direct marketing. These are physical structures, ranging from basic roadside stalls to full fledged retail outlets, usually located on or near the farm. Farm stands operate seasonally or year round and may focus on a single product or a diverse range of items. As permanent structur
must comply with local regulations and serve as reliable points for direct consumer sales.

An emerging trend in the marketing of natural produce is the establishment of direct supply chains between farms and restaurants or institutions. In this model, farmers provide high quality, specialty directly to restaurants, which often highlight the origin of their ingredients on their menus. This not only promotes transparency but also appeals to environmentally and health conscious customer
instance, Om Made Café in Bangalore uses organic ingredients in its offerings, while Rasa India specializes in organic South Indian cuisine. The Green Path Organic State, also in Bangalore, emphasizes sustainability and traditional Indian food prepared from naturally grown ingredients. Beyond restaurants, natural farmers are building supply relationships with hospitals, schools, and retirement homes. These institutional linkages offer stable markets and contribute to healthier diets mmunity settings while ensuring consistent demand and income for

Private sector enterprises are increasingly playing a key role in promoting organic and natural farming through integrated value chains, branding, and export facilitation. Companies such as 24 Mantra Organic, managed by Sresta Natural Bioproducts Pvt. Ltd., collaborate with over 45,000 farmers and export their products to more than 50 countries. Similarly, Nature Bio Foods, a subsidiary of LT Foods, works with more than 60,000 organic farmers across India. These companies support farmers through direct linkages, training, certification, and transparent marketing systems. Additionally, large corporations like Reliance Fresh Organic and ITC Ltd. have entered the natural product space, further legitimizing the sector. Given their infrastructure and market access, there is considerable scope for developing public private partnerships that leverage government support and private sector efficiency to promote and export natural farming produce on a larger scale.

To further enhance the market reach of natural farming, digital platforms commerce solutions are proving increasingly effective. The s electronic National Agriculture Market (e NAM) integrates regulated market yards and enables farmers to sell their produce across states through an online portal, ensuring transparency and better pricing. commerce platforms such as Amazon, BigBasket, and JioMart, along with niche organic focused sites like Farmizen and Organic Mandya, nable farmers to connect directly with urban consumers. Additionally, mobile applications and communication tools such as WhatsApp Business AgriBazaar, and KisanKonnect support order placement, logistics, and digital payments. Subscription and produce such as those offered by Zama Organics and Onganic Foods, allow consumers to receive deliveries of fresh farm products. Digital traceability tools like QR codes and blockchain enhance transparency and build consumer trust. Furthermore, vir markets and initiatives like the Open Network for Digital Commerce (ONDC) are creating new digital marketplaces for farmers, helping them reach wider audiences and streamline their sales. Moreover, use of Mobile Apps for Market Information and Advisory Services & Role of SMS Services, email marketing, online marketplaces, and online bidding platforms (E Auction) are some examples of how using these platforms to sell agricultural products can increase market reach.

Getting certified, particularly for organic and natural farming practices, can reassure customers and command a premium price. Creating a strong brand identity for products can increase consumer trust and loyalty. agriculture produces value added products, such as jams, kles, or dried goods, which can increase market value. Direct supply to supermarkets, retail chains, and food processors can also increase market

Profitability can be increased and market risks can be decreased by diversifying into a larger range of crops, including high rather than depending solely on a small number of MSP crops. Allowing private buyers to buy directly from farmers can enhance price discovery and lessen reliance on government procurement; requiring private buyers crops at or above MSP can guarantee fair prices for farmers and their reliance on government procurement; and building a network input industries can produce high quality, standardized

agricultural products that can be sold to international markets while also creating jobs locally.

By putting these tactics into practice, India can overcome the shortcomings of the current MSP system and build a more robust and efficient agricultural sector that offers farmers improved income prospec management, and price discovery.

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Minimum Support Price— Farmers Issues & Ways

A.R. Pathak

Introduction

Minimum support price is a guaranteed price for agriculture produce to farmer by the government of India against any sharp fall in farm produce prices. The minimum support price is announced by government of India at the beginning of the kharif and rabies s season based on recommendation of Commission for Agriculture Cost and Price (CACP). MSP is price fix by Government of India to protect the farmer producer against fall in market price. The major objectives are to farmer from distress sale and to procure food grains for public . If market price falls below the MSP, the government purchase the entire quantity from farmers at MSP.

Government has announced MSP for 23 crops but practically it is effective for only few crops like rice, wheat, groundnut, pulses only in some of the states like Punjab, Haryana, Utter Pradesh, Madhya Pradesh, Gujarat, Chhattisgarhi.

There are other crops which area is quite in the country and its contribution to agriculture GDP is quite but do not have M example, castor, fruits, vegetables, flowers, milk, poultry, fish, tea, coffee, rubber, spices etc. are not included in MSP. These products have well organized market network and farmers are getting good price because the have the demand and specific board like tea board, spice board etc. Crop like groundnut under MSP but there is shortage of edible oil and imported spending crores of rupees as well as every year oil price Still farmers sale it under MSP.

Government of India has suggested, States to improve APMC regulation to have farmer s interest. Many states have not done. Though MSP and APMC exist, small farmers sale their produce at village level to traders or rich farmers because of less quantity or not access to APMC Market.

Former Vice Chancellor,

There is huge disparity price at village level and APMC. Traders are key players even at APMC they control auctions Recent Reserve Bank of India survey published in Indian Express dated February 26 2025, indicated that farmers received 40 to 67% of consumer price of their produce. Perishable crops like fruits and vegetable have lower farmer share and higher to the traders and retailers.

has been significant policy tool in Indian Agriculture landscape but alone MSP cannot address the multi llenges faced by Indian

For achieving better price by farmers, reducing the cost of production and increasing productivity are important. Establishment of FPO and value addition as well as quality produces are more important. Enhancing s is very crucial. A more holistic approach focused on improving productivity, reducing cost of production, enhancing market , promoting diversification, market demand produce, chemical free produce are very much required for better price realization administrative issues like fragmented land holding and limited knowledge of newer technology needs to be addressed properly.

Innovations and Reforms for Transformative Market Led Agricultural Extension Strategies: Policy Implications and a Way Forward

V. Sadamate

Impressive Performance of the Farm Sector

n the last five years, the agriculture sector has grown at an average growth rate of 4.18 per cent per year. The growth in the agriculture and sectors has contributed positively to the growth of the Indian Indian agriculture sector provides livelihood support to 42.3 per cent of the population, provides 7% of its food grain export and has a share of 18.2 per cent in the country s GDP at current 23, foodgrain production hit an all time high of 329.7 duction reached 41MTs and pulses 28MTs. Similarly, increase recorded in Fruits 100 MTs, vegetables 200 MTs, Milk 240 MTs, Meat 14 MTs, Fish 16.24 MTs (12.12 Inland & 4.12 Marine) & Eggs 138 Bn/Yr.

Agricultural Extension Contribution

ral extension services both public and private have contributed significantly in the performance of this sector, though, its impact varied from state to state. Hence, there is an urgent need to look into the architecture and delivery models for supporting the performance of the sector in the present and future context enabling the extension services to respond to the extension needs of the farmers and stakeholders.

Agricultural Extension A Huge Task

Extension Services, both public and private have played crucial role in delivery. Further, it a huge task to cover over 700 districts,

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around 7000 blocks and nearly 7 lakh villages covering 127 agro zones & 14 Cr. Farmers, 83% of which are small and marginal ones spread over varied social dimensions, varied geographical dimensions, varied conditions, hence, xtension is a tough articulation and architecture.

Earlier Extension Efforts

Series of voluntary projects in pre independence era, such as Community pment Program (CDP 1952) and National Extension Service Blocks (NES 1953) were the major earlier extension efforts. Subsequently, Pre Green Revolution interventions implemented include: Intensive Agricultural District Program (IADP, 1961) and Intensive icultural Area Program (IAAP, 1964). Followed by Green Revolution 1967), duly supported by intensive extension efforts like National Demonstrations (ND 1965), Farmers Training Centres (FTC Small and Marginal Farmers Development Agencies (SMFDAs Krishi Vigyan Kendras (KVK 1974, 732) and lab to land program (that subsumed in KVKs). In 1974 75, a very major extension intervention through World Bank Funded Training and Visit (T&V) system resulted in restructuring of the extension system. F significant impact, it was expanded throughout the country from 1984 to 1995 through National Agricultural Extension Project (NAEP). Further, process of Extension Reforms was strengthened under National Agricultural Technology Project (NATP, 1998) by establishing Agricultural Technology Management Agency (ATMA) at district level, now covers 676 districts in 29 States/3 UTs under the National Mission on Agricultural Extension & Technology (NMAET).

Extension Models in Operation

Extension Models evolved over a period of time would

Research Institutions Outlets like Krishi Vigyan Kendra (KVKs),
Development Department outlets,
Commodity Board Outlets (Spices, Coconut, NDDB, NFDB,

Private Sector Interventions: Entrepreneurs, PPPs, Start
CSR provisions, Input agencies,
Financial Institution Interventions like NABARD, RRBs, DCBs,

Farmers & Farmer Organizations,
NGOs: Local, Regional, National & International,
Media (Print, Electronic),
Social Media and
Externally Aided Projects and Donor Driven Reforms Models.

Extension Constraints

xtension delivery is seriously affected by the major constraints like :(i) Policy support and systemic inadequacies, (ii) inadequate investments and extension infrastructure, (iii) gaps in need based deployment of manpower at various levels, (iv) weak extension set up in allied sectors like horticulture, livestock, fisheries, agro forestry and speciality agriculture, etc.(v) outreach constraints of existing extension models, inadequate capacities at the district block level extension agencies to respond/address the field problems,(vi) need for convergence of extension efforts, (vi need for promoting PPPs, start ups, extension entrepreneurs & paid extension initiatives in commercial farm enterprises to begin with, (ix) need for farm youth and farm women specific extension strategies, (x) need for strengthening research linkages and feedback management, (xi) enhancing media/ICT applications, (xii) need for value chain management, greater market integration and farm business orientation, (xiii) technology specific and location specific extension requirements, ng farmers, field functionaries and stakeholders, (xv) intensive research in extension systems for their efficacy, (xvi) need for in M&E for timely correctives in extension actions, and (xvii) need for capturing international experiences for strategic advantages. These constraints need addressal through systematic policy interventions, programmes, investments and operational measures at various levels.

Innovations and Reforms Suggested for Effective Market Intelligence

The Extension delivery models have to get transformed to deal with the current and future challenges. Hence the Innovations and reforms suggested are as follows:

Intensive Awareness Camps/Campaigns on the Schematic Provisions

Awareness campaigns are needed especially at the block l through agriculture and allied sector departments, KVKs, NABARD, etc. Involving FPOs, NGOs, CSRs, PRIs, Gram panchayats,

Cooperatives, SHGs, etc. with focus on availing provisions available under various schemes and modalities to avail them.

ng & Empowering Farmers Aggregates for Managing Extension

Promote farmer aggregates like SHGs, FIGs, CIGs, FOs, FPCs, Cooperatives, etc., and enhance their skills for better production, and price negotiating programme delivery capacities. capital formation, community led initiatives, participatory approaches, involvement of community resources encouraged in the extension processes. Farmer Organizations Farmer Producer Companies (FPCs) should come up on a cluster basis with the strong market integration, where they may act as a single window service centres to all farmers/producers in a given production cluster. The small, marginal and weaker sections of the farming communities may be duly represented and sustained in such

Enhancing Outreach of the Extension Models in Operation

It is important to improve outreach, interplay and performance of extension models to their optimum levels by (i) widening the sectoral coverage, (ii) partnerships and resource sharing, (iii) enhancing integrated delivery, (iv) improving penetration of services to the small producers, etc. There is need to promote chains of agents, formal informal, such as Para techs, start platforms, entrepreneurs, ACABCs across the production systems and build their capacities for effective extension delivery. Market extension strategies are required to be worked out involving farmer aggregates. Further, increased investment in market infrastructure (electricity, warehousing, rural roads, modern ICT etc.) by the government, private sector and local communities are urgently spelt and operationalized.

Area Level Farm Science Centres, like Kristi Vigyan Kendras Science Centres India) mechanism may be promoted and strengthened for technology assessment refinement and demonstration of the frontline technologies. Eventually, they may stand up as strong knowledge resource base for public and private extension services and across the production systems.

In allied sectors like horticulture, animal husbandry, dairy, poultry, fisheries, nutri cereals, etc., the extension outreach is very weak, although these sectors contribute significantly. Hence, extension needs organized in allied areas by way of: i) providing additional subject matter specialists (SMS) to the district block levels in potential areas, ii) promoting growers associations, commodity groups, entrepreneurs, iii) promoting dairy/fish cooperatives and using dairy fisheries entrepreneurs as extension agents. Extension for dis areas/groups could be addressed through innovative extension solutions like i) combination of extension service provider (ESP), ii) involving NGOs Para techs, iii) intensive use of Folk media, and iv) participation of local communities and institutions, etc.

Farmers Field Schools (FFSs) seed villages proved as an effective extension tool, practiced widely, needs scaled, and not only for crops but also in the allied sectors too, as these provided opportunity for farmer farmer knowledge dissemination and capacity development, promoting farmer led innovations and farmer first extension. National Farmer Innovation Fund could be established to promote farmer to farmer extension. Farmer first approach needs to be promoted with focus on critical needs of the farmers in a given micro ecology and work out options for their redressal. Farmer Business Schools tried by FAO in Africa, South East and Latin America may be tried and promoted.

It is important to create enabling environment for women extension personnel in extension services. Enhanced access to credit farm women and providing gender sensitive and home scale nutritional extension services are crucial. Specific measures proposed include sensitising reorienting the extension services on gender and nutrition issues, developing and piloting such extension models, promoting nutri gardens and alternate nutri empowerment, enhanced use of digital networks, public awareness and stakeholder participation. Pilot studies in vulnerable areas and capacity building at various levels is strongly recommended.

There should be adequate focus on motivating and attracting youth as entrepreneurs in agriculture for which high tech agriculture, secondary agriculture, processing and value addition opportunities, innovative marketing, commercial enterprises, etc. should be

targeted. Youth in agriculture needs to be provided institutional and financial support through R&D organizations, agri clinics, financial institutions, etc. for promoting them as development agents providers. Committee of Food Security (FAO High Level Panel of uggested youth engagement strategies like: securing dignified and rewarding livelihoods, social recognition, increasing equity and rights to resources, enhancing knowledge, education and skills, fostering sustainable innovation. Incubation programmes and ups be promoted involving youths.

Benchmarks for extension performance may now include extent of of IFS approach, extent of programmatic convergence with other departments, enhancement of production income of the producers, enterprise combination, crops and cropping pattern diversification for the economic advantage of the farmers, market linkages, etc. Extension accountability needs to be systematically designed, cultivated and promoted through farmer aggregates.

Integrating Private Sector Extension Services and Efforts for greater impact

Private Partnerships (PPPs) are required down the line to promote MOU based participatory extension arrangements. Public sector would need to be oriented on contribution and strengthenin of PPPs. The capacity of private agents also needs to be improved by strategic alliances which need policy directions. Agri clinics and Agri business Centres (ACABCs), agri entrepreneurs, agri start platforms, etc. are found to be gaining space in extension operations. Agribusiness MBAs, IT graduates and farm youths (including school dropout, men and women) may be promoted for providing advisory services on payment basis in collaboration with public and private sectors. There is need to promote Private Paid Extension (PPE) in commercial horticultural crops as practiced in developed countries and in agriculturally well performing States.

Strengthening Research and Extension Linkages for Desired Outputs

There are various research and extension (R&E) linkage forums available in agriculture and allied sectors at various levels (national, regional, state, district and even at the block level). The performance these linkage forums need a lot of improvement in terms of contents, coverage, joint actions and follow up. Technology options

climatic zones and sub zones needs to be systematically worked out as per socio economic dimensions of each micro agro eco situation. This would enhance dynamism in extension processes. ntists Interactions (FSI) may be up scaled in knowledge driven technologies. Likewise, successfully demonstrated innovations by the research agencies should be up scaled by the Field Extension agencies. Greater involvement of the scientists is needed in chnology driven extension like NRM, IPM, INM, conservation agriculture, farm mechanization, climate resilience, etc. Knowledge extension agents may first work some time with scientists and then with the farmers for a considerable time, results through demonstrations and then upscale innovations, preferably through the farmer aggregates for wider footprints.

Feedback on collation of information from the farmers and field functionaries is seemed to be weak in present day extension system, so also its systematic documentation and analysis. The collation of feedback (both positive and otherwise) from the farmers and field functionaries may be the first essential step, followed by documentation analysis at the district vel. The review and reporting could be taken up by the regional set up. Such an would not only make the extension operations demand driven but may also facilitate providing policy signals to the higher level R&E management. Feedback management mechanisms are pilot tested across the sectors and for micro agro situations then

Streamlining Training & CB the Field functionaries, Farmers and

State and District Training frame work be suitably strengthened in terms of manpower and infrastructure. Interplay of these institutions needs to be worked out systematically, sharing the input relationships and the experiences. Farmer in agriculture and allied sectors is shared by the large number of organizations at the district block levels. It is suggested that d segregated training responsibility needs to be assigned to different agencies as per expertise and competence of the agency. Innovative farmers, credible farmer cooperatives and FPOs, successful Agri Clinics, effective IT platforms could be integrated in

the training and CB strategies as applicable in agriculture and allied sectors and as per demands and special felt needs of each categories of farmers, farm women and farm youth.

With the change in present day farming scenario, farmers to be up graded oriented towards entrepreneurship, income orientation, value added secondary agriculture, aggregated production and marketing, etc. Accordingly, extension workers emphasis on social skills, entrepreneurial management skills, technical , and media management skills. Skill enhancement of the farmers, field functionaries and SMSs (subject matter specialists) need to be prioritized to make them ready for area specific, commodity specific, technology specific and eco specific extension applicable to the micro agro situations and vulnerable groups.

Priority Setting & Convergence of Extension Efforts at the Block

There are series of district level planning instruments, scheme sion functionaries may scan these instruments for the right priorities across the schemes programmes. The crucial extension issues must reflect in the systematically developed Block Extension Plans (BEPs) at the cutting edge levels, defining the various extension service providers (ESPs). Well established networked R&D platforms at the cutting edge level could be a convergence arrangement. The resources from the converging departments would need to be pooled and the roles and responsibilities required to be delineated carefully harmonizing of work plans of the related Federal State schemes. Convergence requires proper role space and resources amongst stakeholders for mutually agreed Block Action Plan (BAP). Matrix mode approach is indicating the ongoing programs and the gaps to be bridged. flexibilities to the converging partners need to be worked out in advance and provided for. Large number of convergence pilots be carried out both for resource poor and resource endowed learning inculcated in the ongoing programmes and schemes

ICT and Media Management to Accelerate the Extension Delivery Processes

Social media (WhatsApp, Facebook, Twitter, Instagram, emails, blogs based services, block chains, etc.) are powerful communication

tools that enhance the beneficiary coverage in the shortest period of time which could be used effectively in networking farmers offering context specific information. Further, dedicated tele numbers could be provided by the R&D agencies like Kisan Call Centres (Farmers Call Centres) in India that provide country wide digit toll free number 1800 1551 for providing tele replies to the farmers queries in local languages. ICTs are also being used to strengthen the capacity of extension officers staff to first reach the farmers with timely and accurate information and help capture data from the field. The e Choupal initiative of ITC Corporate, as an example has had positive effect, the system enhanced supply chain efficiency.

Advanced ICTs like AI, ML, drones, satellite systems as well as intelligence, machine learning etc. are used for precision farming, improved farm management, providing real time data, etc. platforms and mobile applications are emerging very fast. However, the pertinent question is how to increase its access to the number of farmers & reliability of the information. Hence, need for promoting farmer farm women knowledge groups FWKGs) at the grass roots level.

The farmers and the field functionaries may be thoroughly oriented and skilled in use and operations of advanced technologies like drones, sensors, robotics, machine learnings, artificial intelligence, data analytics, etc. This approach should be the game changer for extension strategies and operations in developing countries in Asian and African regions. The R&D outlets of the Farm Universities and the private organizations at the District should be capacitated to demonstrate impacts of such technologies. Successful demonstrations and experiences should be widely

Use of traditional media, field days, campaigns, vernacular press, are also important and supportive extension methods in disadvantaged flung areas. Location specific Farm Telecasts, Radio broadcasts nd Community Radio Stations (CRS) would continue to play role in farm information dissemination process. Important considerations for farm radio TV broadcasts are: content develop , treatment, delivery mode and the real time impact in the Different media combinations should be worked out as per subject

climatic and socio economic criteria of the farmers. The Directorates of Extension of the Agri Universities and farm information wings of the State Departments may need to revisit their role when the private players and IT platforms are proactive now.

Research in Extension Revisit the Present Process to Make It Demand Driven and Sensitive to Market

Research in Extension is a crucial area but not attended adequate Strong extension research input is required from various academic and semi academic stakeholders to evolve a body of extension knowledge and strengthen it. Farmers, their field endowment, socio economic setting, innovations technologies, adoption proce be looked in to seriously. Farm sectoral variations, are the research for overall impact of the extension interventions. The extension research labs need to be promoted in competent organizations and at various levels, for examples the Excellence of the MANAGE in India could take a lead in this

The future extension research strategies must draw strengths from international, private sector, NGOs and multilateral donor experiences. Future extension research may focus on systems interplay convergence, agribusinesses and entrepreneurs, App based extension for unreached, climate change adaptation, etc. Extension Research outcomes be ploughed back for reforming existing policies and operations. Suitable state specific mechanisms may be worked out by the SAMETIs, ATARIs and the Directorates of Extension of

Upcoming Technologies that Need Intensive Extension Efforts

There are good number of upcoming farm innovations & technologies that need serious attention of the extension agencies for wider dissemination through effective integrated extension strategies and cost reduction applications.

Some of the crucial ones include: (i) Promoting barren lands as solar energy hubs, (ii) Roof top solar pa its promotion in rural areas, Promoting climate resilient agriculture and climate smart farmers with involvement of farming community at the grass roots

level, (iv) Soil health management, especially judicious and timely nutrient application as per the recommendations of soil health cards,(v) Promotion of one district one product scheme for export opportunities, (vi) Greater integrated developmental focus on the identified aspirational districts/blocks, (vii) Promotion of drip irrigation and protected cultivation, (viii) Promotion of Tissue culture technology produced planting material, especially in horticultural crops, (ix) Raised bed cultivation and zero tillage technologies, (x) 0rganic agriculture and natural farming pilots tion of green carbon credit scheme (xii) Small scale farm mechanization for hilly and mountainous areas and horticultural crops, (xiii) Promotion of nutri gardens in peri urban and rural areas, xiv) Intensive application of drones, sensors, artificial int robotics, machine learnings, and making farmers ready for such take over gradually (xv) Promotion of fodder technologies for animals and fish feeds and (xvi) Health management practices for the small ruminants & poultry, etc.

Crucial System Supportive Interventions

The emergence of pluralistic models suiting the macro and micro agro climatic zones need much needed flexibilities in extension by capturing best of technologies/extension innovations and their dissemination.

Promote youth in high tech agriculture through well designed opportunities ups, Agri Entrepreneurs, Agri PPPs, Agri IT Platforms enabling next gen agri reforms socially attractive and

Processing and value addition is essential to add to the farmer income whenever there is marketable surplus particularly the perishable produce is more and is in excess to the demand. It has a great proven promise and extension services need to be geared up to such value chain de

It is essential that extension functionaries should demonstrate and adopting the Farming Systems Approach diversification of production portfolio (food crops, commercial crops, , oilseeds, horti crops, animal husbandry, fishery, poultry, homestead farming, etc) for higher economic gains. It may prove to be the most effective system and win win situation against climatic and calamities.

There is need to capture learnings and experiences from overseas successful extension models and promote regional partnerships. It would call for exchange of extension operators, exposure visits, capture the good extension practices, etc. for mutual advantage. Agricultural Platform for South Asia is one such upcoming

There is a lots of scope for integrating the following innovations in extension delivery like: management input from IIMs, MOUs with private sector organizations, partly commercial use of KVK farms, promotion strategies, Community actions for climate change, water management, plant protection, on farm NRM, etc. promoting farmer trainers, upgradation of training modules with feedb success stories, IT Platforms, sharing web links, market price discovery, learnings from farm demos, local directory of extension

Digital Enablers for Agri Marketing Ease

Prominent Digital enablers having marketing intelligence impacts Mobile Apps, Portals, Websites, Robotics, Automation, Drones, IOT Sensors, Remote Sensing, Big Data Analysis, AI, ML, Block Chain, Cloud Computing, etc.

Tremendous benefits: Increased access, greater connectivity, arming, exploring new knowledge frontiers, efficient resource management and empowered farmers. Provides Win Win Situation for Farmers, Governments, Industries and Consumers.

Market Intelligence provides for Direct Engagement with the buyers, merce, digital Market places, mobile apps, etc.

Key Initiatives by the Government: Digital Agriculture Mission, with private platforms, Virtually Integrated Systems IT intervention at each stage from soil health management to input management to PP to harvest to market, Based DSS, e NAM, agmarketnet, DBT under PMKisan, Kisan Suvidha Apps, KCC, M Kisan Portal, Farmer Portals, etc.

ICAR initiatives include: Kisan developed by DIKMA (integrates 300 mobile apps), KVK Portal, Network Program on Precision Agriculture(NePPA), Kisan Sarathi, etc.

IMD initiatives: MausamGram, Agro met advisories, etc.

State Initiatives: Kerala AIMS & VAIGA, Andhra Pradesh Krishi, Maharashtra Krishak App, Gujrat i Farmer, Ori Sugam, Karnataka, K
Private Initiatives: Jio Kisan, Ninjacart, e Chaupal, Skymet, etc.

The Extension delivery is a very complex system dealing with farm technologies on one hand and the socio dimensions on the other. In a given micro situation in the absence of reformed extension services, the programme delivery to the targeted clientele is inadequate and of a weaker impact in the field. Hence, strong extension innovations organizational and management reforms are pleaded both in public and private extension systems and in the delivery mechanisms. Extension innovations and reforms need to be strengthened and a few others pilots tested to suit the local needs and resources. There is need for greater convergence and coordination of extension efforts at various levels.

Needless to say, that the extension service delivery would be far more visible, efficient and location specific and most productive if it is backed by the public policies, investments, incentive linked good agricultural practices (GAPs), market reforms, strategic scaling innovations and credit input augmentation for efficient and dynamic performance of the farm sector with focus on self sufficiency, food security and export opportunities.

promotion of the digital enablers the farmer empowered groups can play an important role whereby aggregated production and marketing operations are encouraged for better technology application on one hand and better price discovery on other. Digital platforms promoted by the systems are making big dent though the coverage is yet to take a scaled size. In parallel there is need for intensive skill and CB efforts for updating the field functionaries. Integrated ICT and digital enablers would need to be tried on large number of pilots focused on small and marginal farmers

Needless to emphasize that the marketing infra and connectivity both for government and private markets needs lots of improvements enabling the farmers to get due share from consumers

ICT led empowered models are recommended and scaled too.

Beyond MSP: Market Strategy or Agriculture

Suresh Acharya

- Farmers encounter major challenges in marketing their produce, impacting their profitability and farm income.
- Though planned at the national level, the benefits of MSP have remained confined only to few areas and crops. Therefore, it needs complete revamping and gradual scaling down to only to projects of national significance like National Food Security Mission and maintaining national buffer stocks of food grains.
- The current MSP system suffers from two problems at farmers level viz, limitedness and late. The purchase under MSP has limited purchase eligibility, wherein farmers can sell only a fixed quantity during a limited period of time based on the 7/12 document rather than actual landholding size. This creates problems in transparency as farmers resort to selling their produce on the 7/12 documents of

- problem relates to cumbersome MSP procedures entailing registration, quality checks and payment processes that ca inordinate delays both in selling and receiving the payments. The payment is done direct to the farmer s bank account, which is excellent for the transparency. However, the procedural rigmaroles delay payment sometimes up to two months, necessita faster payment mechanisms.
- Though the prices in agriculture market are not related to quality of the commodity; yet current assessment of quality threshold is quite prudent for informed selling of the commodity. However, if the produce is deemed substandard at the market, farmers incur heavy transport, time and labour costs. This needs solution such that farmer can get the market fitness certificate of the commodity right at his farm gate. The market fitness quality of the commodity can be at the farm gate itself from the accredited parties so that

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farmer avoids investing in logistics and can prevent such losses on the substandard commodities. The on farm quality testing by accredited agencies may be done on payment basis as it is in the in

- Contract Farming is in vogue in crops like potato, where in processing units support contracted farmers with quality inputs including quality seed, besides advising on good agriculture practices for attaining good quality production, creating a win win situation for both the farmer and the industry. Different commodity industrial houses can be brought around to expand this model in crops of their interest.
- There are some incredible industry specific procurement models the processors purchase commodities direct from the farmers, be it be on contracts or otherwise. This model is being practiced in castor. The good quality of the commodity being in the forefront of considerations of the industry, they also help farmers by campaigns for increasing productivity and quality in the area of interest. The modified form of this model is being practiced in groundnut, where sample failure due to shelling per cent stipulations is quite common. The agent from the mill directly collects the produce from a designated area at higher price than the MSP and transport it directly to the processing mill at a nominal commission. This can be further facilitated by adopting Fair and Remunerative (as in sugarcane) for assuring remunerable prices to the farmer for their farm produce.
- It cannot be denied that the farmer put very less efforts in marketing compared to what he tolls in fields to grow the commodity. He has to organise himself say in cooperatives model, or for that m farmers Producers Organisation (FPOs), etc. The best example s cotton sector that has thrived through cooperative ginning and marketing. Similar models can benefit other crops. Similarly, commodity specific markets like seed spices sector successfully use their resources to ensure quality, price stability and farmer support. Expanding such models can improve overall marketing efficiency in agriculture.
- predominant chunk of agriculture commodities like fruit and e perishables. The marketing plights in such perishable crops need no underscoring. The estimates say that the farmer often

receives just less than one third of the market price due to inordinate length of supply chain with enormous intermediaries involved leading to huge losses and wastage. Sometimes, preserving good quality in such a long supply chain too becomes arduous.
to the consumers through government facilitated cooperatives, FPOs, etc can relieve this hurdle. Strengthening FPOs can enhance bargaining power among farmers and reduce reliance on intermediaries. FPOs can facilitate collective marketing efforts that improve price realization and provide access to essential services like credit and technical support. Further, the successful cooperative models like Gandevi s fruit cooperative can be demonstrated and encouraged at selected places for Seeing as Believing

- Strengthening Farmer Producer Organizations (FPOs) can enable sales and reduce dependency on intermediaries
linkages of the FPOs to the processing industries can increase the profit margin for the farmer. This also entails linking of inter cooperatives and FPOs for realising maximum profits for their produce. This can be understood with an example of dates grown in Kachchh are marketed by say Kerala FPO/cooperative and black pepper marketed by Kachchh FPO/ cooperative such that consumers of each state get better quality product with good returns to the Similarly, such organisations can be assigned the responsibility of exporting good quality commodities under condition prescribed by the government.
- There are many consumers who want to eat fresh vegetables with a feeling as to how they are grown in field. There are certain models in cities like Bangalore where such consumers contract directly with the farmers to grow the vegetables of their interests and pay the farmers accordingly. Such models can be replicated around big cities.
- The farmer often lacks market intelligence and often struggle with time price, demand trends and consumer preferences. This leads to uninformed decision both in growing and marketing, resulting in lower profitability. Digital platforms can bridge this providing real time market insights and direct trading options. The farmers need both facilities and trainings on these aspects.
- The state of post harvest losses and logistics issues need no mention in augmenting the plight of marketing in agriculture. Very often 40% of the produce is lost due to lack or poor condition of the post

harvest facilities. Poor storage and infrastructure also spur wastage and high transit costs. Village level storage facilities and collective marketing can minimize such losses. This would help in selling the appropriate quantity of a farm commodity at the right time of demand to fetch better prices.

- The government has created many facilities like in many states like Gujarat. They are particularly piv increasing the shelf life and preserving the quality and quantity of the commodity, particularly in crops like onion. However, they are under utilized. Therefore, there is need to create awareness about the role of such processes in maintaining quality and increasing shelf life to realize best prices when the consumers demand is high.
- The govt has many policies to support farmers with low interest agricultural loans and training on market regulations. However, the farmers are not aware of these policies. They need better awareness empowerment of these policies to adopt better marketing

- Encouraging value addition through processing units can help farmers fetch higher prices and reduce raw commodity dependency.
- Thus, it can be concluded that the MSP regime has served its purpose and should be gradually phased out, limiting procurement to food grains required for the NFSM and buffer stock maintenance. Ensuring the effective marketing of agricultural commodities is crucial for improvin livelihoods and strengthening food security. Addressing the numerous challenges faced by farmers requires targeted interventions to create a more equitable and efficient agricultural market landscape.

Importance of Policy Instruments and Alternative Strategies for Agricultural Market Sustainability

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Agriculture in India is undergoing a transformation driven by technological advancements in market access and mechanisms. While policy instruments have played a crucial role in ensuring price security for select crops, there is a growing need for diversified, market driven approaches to ensure sustainable farmer incomes. Digital platforms such as NCDFI eMarket have emerged as powerful tools that enable direct marketing, efficient price discovery, and seamless trade. This paper explores how evolving marketing options are strengthening agricultural trade via NCDFI eMarket. The paper highlights how farmer participation through Farmer Producer Organisations (FPOs) enhances price realisation and strengthens forward and backward linkages in the agricultural value chain.

Introduction

Agricultural marketing in India has traditionally depended on , leading to inefficiencies in price discovery and value realisation. Policy instruments providing price assurance have historically played an important role in ensuring income stability and promoting agricultural growth. However, long term sustainability transition towards market driven and technology enabled solutions that inefficiencies, fiscal burdens, and constraints on crop diversification The integration of advanced technologies, innovative marketing mechanisms, and multi rticipation is essential for creating a resilient and self sufficient agricultural ecosystem.

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With the rise of digital trading platforms, new opportunities have emerged for farmers to engage directly with buyers, reducing transaction costs and market risks. This paper examines the role of these platforms in ensuring fair pricing and sustainable agricultural trade, focusing on Maize trades at NCDFI eMarket a widely cultivated crop with applications in cattle feed and other agri

Organisations (FPOs) and Direct Marketing

For generations, Indian farmers have relied on conventional selling methods, facing challenges such as price fluctuations, middleman exploitation, and limited market access. However, the emergence of r Organisations (FPOs) and digital direct marketing platforms is transforming the agricultural landscape, providing farmers with greater control over pricing, market reach, and income stability.

Establishing food processing units, FPOs, and agri
empowers farmers to diversify into grain milling, dairy processing, and organic produce packaging. These initiatives allow farmers to retain a larger share of profits instead of depending on fluctuating market rates. Government incentives and rural entrepreneurship programmes provide financial and infrastructural support, enabling small scale farmers to scale their operations sustainably.

A key driver of this transformation is direct marketing through digital platforms, which eliminates intermediaries and enhances price transparency. Some major benefits include:

- Digital platforms use auction based models that prevent price manipulation.
- ***Cost Efficiency:*** By eliminating the role of intermediaries and by reducing marketing costs, both farmers and buyers benefit.
- ***Market Expansion:*** Farmers are no longer restricted to local mandis; digital platforms connect them to a wider network of processors and exporters without geographical boundaries.
- ***Supply Chain Efficiency:*** Efficient price discovery and market intelligence facilitate better inventory management and reduce post

By leveraging FPOs and direct marketing, farmers can enhance income security, improve price stability, and reduce dependence on traditional

market systems and Government support. This shift towards a technology sustaining agricultural model benefits individual farmers contributes to a more resilient and efficient agricultural economy.

Expanding eMarkets and Digital Platforms for Better Price

Leveraging technology for sustainable agriculture can lower production costs and enhance market competitiveness. Expanding eMarkets and digital platforms for better price realisation will reduce reliance on external price support mechanisms.

functioning and transparent agricultural market is key to ensuring that farmers receive fair compensation for their produce. Digital platforms and electronic marketplaces, such as NCDFI eMarket, eNAM National Agricultural Market) and other agri initiatives, provide direct access to buyers, eliminating intermediaries and enhancing price . These platforms facilitate real time auctions, competitive bidding, and direct procurement from agribusinesses, enabling farmers to secure better prices. The ability to sell across different states and to multiple buyers ensures greater market reach and price competitiveness. , contract farming agreements and direct sourcing arrangements with food processors and retailers can offer stable incom opportunities, reducing the need for policy driven price assurances by an efficient, demand driven market where farmers engage directly with buyers.

Efficient Price Discovery Through Technology

driven platforms like NCDFI eMarket revolutionise and dairy trade through dynamic auction mechanisms. Unlike fixed pricing models, these platforms use real data to determine fair market prices, ensuring that farme

Key features of such platforms include:

- *Automated Competitive Bidding:* Ensuring transparent and fair valuation of commodities.
- *Remote Participation:* Farmers, cooperatives, and buyers can trade from anywhere, enhancing market a

- *Price Stability:* time price discovery reduces market uncertainties and helps farmers make informed decisions.

By integrating technology into pricing, farmers are better positioned to maximise earnings, reduce dependence on intermediaries, and participate in a more equitable agricultural market.

The Dairy Sector: A Model for Market Driven Pricing

Unlike staple crops such as wheat or rice, milk is a perishable commodity with fluctuating production costs and dynamic demand patt
these challenges, the dairy sector has evolved into an organised and self sustaining market without or with very little need for external price support mechanisms. This has been made possible through the establishment of a ative structure, owned by producing farmer members.

The Indian dairy sector operates through well integrated cooperative networks, ensuring that farmers receive fair prices without reliance on fixed price guarantees. Cooperatives such as Amul, Nandini, and other state milk federations function at multiple levels, starting from level societies, which collect milk from farmers; to district and level milk unions, which handle processing; and state federations look after distribution, and marketing. This structured approach ensures price stability and fair remuneration for dairy farmers by balancing supply with market demand. At the national level, the apex dairy cooperative, NCDFI, facilitates institutional marketing and bul commodity trades.

Digital trading platforms like NCDFI eMarket, offered by NCDFI, has streamlined price discovery in the dairy sector, especially in the B2B space. NCDFI eMarket platform facilitates transparent and real price determination by matching supply with demand dynamically, thereby reducing market uncertainties. The integration of cooperative procurement, stakeholder participation, and digital trading mechanisms has created a self regulating market, eliminating the need for policy ce interventions. This model ensures that prices remain competitive, benefiting both farmers and consumers.

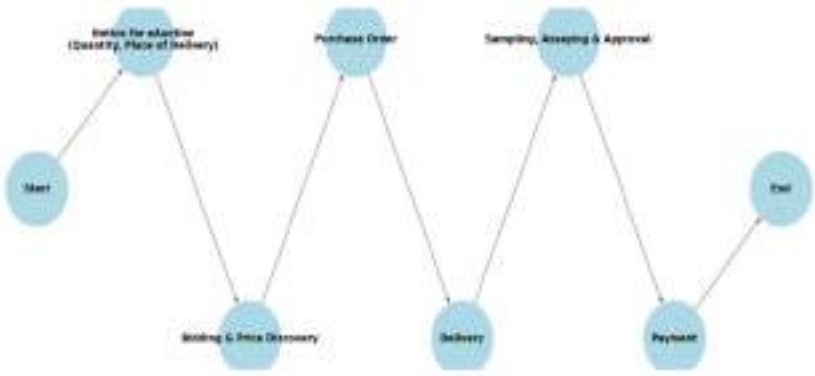
Applying the Dairy Model to Other Commodities: Case of Maize

The principles that have contributed to the success of the dairy sector approach can be applied to other commodities, such as

maize, which is a key input in cattle feed production. Maize trade through platforms like NCDFI eMarket demonstrates how direct farmer , organised bulk procurement, and digital price disco lead to a more efficient and profitable agricultural ecosystem without external price controls.

In the case of maize trade on NCDFI eMarket, farmers sell directly FPOs, ensuring better price realisation by eliminating traditional . This results in higher earnings for farmers while maintaining affordability for bulk buyers, such as dairy cooperatives that use maize for cattle feed production. Additionally, bulk procurement by cooperatives allows for better quality control and supply chain efficiency, ensuring consistent feed availability for dairy farmers. The elimination of intermediaries further strengthens market efficiency, as farmers receive competitive prices while cooperatives benefit from cost effective sourcing.

On NCDFI eMarket, maize trading primarily takes place through the Reverse Auction mechanism, where cattle feed plants owned by dairy cooperatives procure maize. In this system, sellers compete by offering the lowest price (higher than the declared MSP), en procurement for the cattle feed plants process begins with the Notice for , where the buyer posts its maize requirement, specifying quantity, place of delivery, quality standards, and other terms. Following this, the Bidding & Price Discovery phase takes place, where sellers submit their bids in real time eAuctions, competing by lowering their prices until the auction closes. Once the lowest bid that meets all conditions is selected, a Purchase Order is issued to the winning se next step is delivery, where the seller transports the maize to the specified location. Upon arrival, the maize undergoes sampling, assaying & approval to ensure quality compliance. Finally, after successful verification the payment is processed, completing the transaction efficiently on the eMarket platform. The details of transacted business in this model are shown in Table 1.



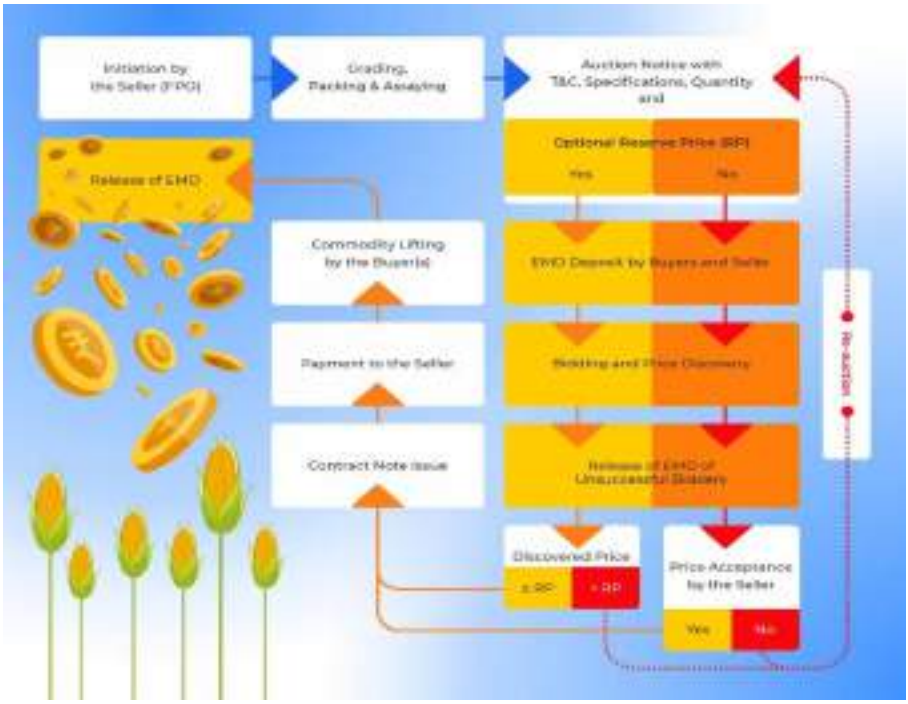
Transacted Business in this Model

Cattle Feed Plant				
Participating FPOs				
MSP (Rs./Quintal)				

NCDFI eMarket Data

It is evident from Table 1 that the FPOs got a much higher price than the declared MSP, while Cattle Feed Plants got the raw material at competitive prices due to larger participation, thereby benefitting both stakeholders. This model ensures cost efficiency, transparency, and market competitiveness. Additionally, it eliminates middlemen, making the process more direct and fair.

Further, an alternative model wherein FPOs can initiate auctions at NCDFI eMarket for the sale of their produce is proposed in Figure 1. This model is expected to enhance efficiency and price discovery to support the FPOs in getting remunerative prices.



at NCDFI eMarket

Schematic illustration of the suggested model for agricultural commodity auctions (Dave & Sajja, 2023)

By expanding organised trade networks, strengthening FPOs, and digital marketplaces, other commodities such as pulses, oilseeds, and horticultural products may move towards a self driven pricing system.

Conclusion

The success of milk as a market driven commodity demonstrates that tier market structures and digital trading platforms can be an alternative to policy backed price assurances. The dairy sector cooperative model, integration with private players, and use of digital platforms ensure price stability, efficient supply chain management, and better farmer incomes. The maize trade on NCDFI eMarket shows that similar mechanisms can be scaled to other agricultural commodities,

ensuring a sustainable and competitive agricultural economy. By leveraging technology, direct market participation, and business risk management tools, Indian agriculture can transition towards a more resilient and independent pricing system.

Marketing Reforms for Sustainable Agriculture

As India enters Amrit Kaal and works toward a Viksit Bharat, agricultural priorities are evolving significantly and at rapid pace. The Nation has moved far from the by increasing the food grain production nearly 6 times since independence as compared to the 4 times increase in . While agriculture s share in India s economy has progressively declined to less than 15% due to the high growth rates of the indus and services sectors, the sector s importance in India s economic and social fabric goes well beyond this indicator. Agricultural marketing is s next stage of agricultural development. Government Procurement based on minimum support price is one of the important components in agricultural marketing in India. The Minimum Support Price (MSP) system, while essential for safeguarding farmers against price volatility, is often criticized as unsustainable in the long run due to several nomic, environmental, and structural challenges. To address these challenges, a transition to sustainable agricultural policies is necessary including market reforms. While MSP has been instrumental in supporting farmers historically, its long ability requires structural reforms to create a more market driven, diversified, and resilient agricultural economy.

Organized Marketing Models

n India, farmers have access to several marketing models to sell their produce. These models include:

Traditional Mandis (APMC Markets): Farmers sell their produce in regulated Agricultural Produce Market Committees (APMCs). These markets ensure standardized pricing but often involve intermediaries, leading to lower profits for farmers.

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APMC Markets dominate the Indian agricultural market with the largest share. According to reports, around 80 85% of agricultural trade still happens through these regulated markets. APMC markets play a critical role due to their long established infrastructure and ility for small and marginal farmers.

Government Procurement: Government agencies like the Food Corporation of India (FCI) procure crops at Minimum Support Prices (MSP). This provides price assurance but is **limited to select crops and regions.**

c stock holding program: Procurement of food grains from farmers at MSP and subsidized distribution under NFSA. Under AoA countries are bound by 10% de minimis limit nations argue this may lead to overproduction and distort global trade affecting market prices.

NAM (Electronic National Agriculture Market)

NAM enhances price discovery, reduces transaction costs, and eliminates intermediaries by connecting farmers directly with buyers nationwide through a digital platform. It offers bette transparency and competitive bidding.

Cooperative Marketing/Regulated Markets

Farmers form cooperatives to collectively market their produce. It helps in bulk selling, better price negotiation, and reduced transaction

Uzhavar sandha: Farmers bypass middlemen and sell directly to consumers, retail chains, or processors. Models include farmer producer organizations (FPOs) and direct sales at local haats or fairs.

Contract Farming

Farmers enter into agreements with companies to produce specific crops for a predetermined price. contract farming, provides farmers the advantage of negotiating prices directly with buyers and reducing post harvest losses. It reduces market risks but may limit onomy in decision

Private Markets and Aggregators/use of digital platforms

Private companies set up procurement centers or digital platforms for farmers. Examples include platforms like DeHaat and

Namdhari Fresh, Bangalore
Small farmers, Large Field Models in Odisha,
Vegetable and Fruit Promotion Council Keralam(VFPCK) in

Rythu Bazar in Andhra Pradesh,
Samruddhi Tarakari Seva Kendra (STSK) in Karnataka,
Sufal Bangla in West Bengal,
Minimum Support price for vegetables and fruits in Kerala

International Experience

European models and American models are subsidy based in several forms to get back to income support to the farmers and leave the share of farmers price to the market. In China farmers of each commune (village) have a direct contract with the buyers in the local towns and cities where or branding and packaging happens. Middlemen are avoided. In Brazil, no restrictions on farmers where they can sell. Private sector competitive and bring a package of seeds to harvest model product of specific quality directly from the farmers who are paid directly by the company at the end of the season as well as provide extension services. Some of the key strategies and models adopted by developed countries include Farmers Markets and Community (CSA) in USA, Farm Fork (F2F) Initiatives in Europe, Farming in Brazil, and Vegetable Box Scheme in Cape Town,

Fallowing is used periodically as a tool for supply control in agriculture, especially in countries like the U.S. and the EU. The strategy involves incentivizing farmers to leave their land uncultivated for helps manage commodity prices by reducing overproduction, conserving soil quality, and improving long term agricultural sustainability

- Conservation Reserve Program (CRP), introduced in 1985.
- EU regulate production under the Common Agricultural Policy (CAP) by linking subsidies to land

Each model has its benefits and challenges, with recent emphasis on digital platforms and direct farmer market linkages to ensure better pricing and reduce exploitation by intermediaries.

Revamping agricultural marketing system that shall fetch ma
in consumer rupee to producers is the challenge before the Government and Policy makers.

Farmer share in consumer rupee largely varies across crops and states (50% to 90%). Crop specific and state specific studies need to be taken armers farmers share in consumer rupee.

Several factors Contribute to the Decrease in the Farmer Share in Consumers

These include fragmented supply chains, lack of price transparency, infrastructure deficiencies, weak bargaining power, price volatility, and policy constraints. The producer share in consumer rupee is determined by length of the marketing channel, marketing costs incurred and of marketing margins different middlemen take, distance from the point of production to the consumption points, mode of transport and transportation cost, extent of perishability, processing etc. Thus, addressing these issues would pave way for increasing the farmers rupee. Some specific measures which may be adopted to increase farmers share in consumers price may include the following:

Shortening the Supply Chain

Direct Marketing Platforms: ine platforms connect farmers directly with consumers, eliminating middlemen and reducing marketing costs. Examples include La Ruche Qui Dit Oui! Local Harvest in the US. Establishing direct marketing online platforms forfarmers would enable farmers to sell directly to , thereby reducing the role of intermediaries and increasing their income share.

Strengthening of Farmers It is the initiative taken by the State Government of Tamil Nadu to bring welfare to the farmers by providing marketing facilities, free logistics, weights and measures, storage facilities and better prices for the farm harvested commodities lutches of the market middlemen and at the same time to reap better profits. The Farmers Shandies not only help farmers to fetch better prices for their produce also help them to solve cash issues as it facilitates regular income to the farmers to me expenses. Revamping and strengthening of Farmers the state would help increase farmer s share in consumer

Empowering Farmer Producer Organizations (FPOs): Producer Organizations (FPO) as aggregators for t commodities at farm gate, the role of pre harvest contractor, village

middle men can be eliminated which would avoid distress sale at production cluster. FPOs would help achieve economies of size in marketing and improves bargaining power. Empoweri through capacity building, creating market and credit linkages, and facilitating for exports are highly warranted.

Enhancing Transparency and Information Sharing

Promoting Contract Farming: When the farmers enter into contract farming with companies/agro industries, the prices are pre determined based on mutual interest and quality parameters of the customized contracts and the contractual obligations are properly honored for better price for the commodities and better quality for the buyers. Contract farming models are successful in the case of sugarcane, poultry, flowers, trees etc. Promoting contract farming agricultural and horticultural commodities are essential to ensure better market and prices.

The electronic National Agriculture Market NAM) is the pan India electronic platform for trading of agricultural and horticultural commodities with better price discovery and transparency. It helps farmers to be market inclusive through line electronic transactions to eliminate any market intermediaries. Though, the e NAM is being implemented across the state, still it is yet a long way to go. strengthening of e NAM, creating awareness among the farmers, educating farmers NAM facilities in the APMCs would pave way for improving efficiency in the agricultural marketing system.

Market Intelligence and price forecasting: time data on prices, demand, and market trends helps farmers make informed decisions about production and pricing. The pre sowing and pre harvest market advisories developed and disseminated by the Domestic and Export Market Intelligence Cell, CARDS, Coimbatore has been helping the farmers to find solutions for better sowing ecisions to realize

Blockchain Technology: Blockchain tracks products from farm to fork, providing consumers with information about origin and , potentially justifying higher prices for farmers.

Strengthening Market Infr

Investment in Infrastructure: Improved storage facilities and transportation networks reduce post harvest losses and improve marketing efficiency.

Establishment of Integrated Market Complex in all districts to provide integrated facilities such as input shops, farm sales and service, banking, techno advisory services etc. will make far reaching impact on agricultural

Value Addition and Branding

Owned Processing Facilit Processing adds value to raw commodities, increasing farmer profits.

Geographical Indication (GI) Tags: These protect the reputation and quality of specific agricultural products from a particular region, allowing farmers to command

Small Processing Vending small processing vending units may be installed in local villages. This enables the farmers to process the food grains particularly cereals and pulses which will fetch better prices to the farmers. This e small and marginal farmers to add value to their products, used for home consumption and direct marketing to the consumers.

Government Policies and Support

These can encourage farmers to adopt new techno , invest in value addition, or participate in cooperatives

Risk Management Programs: Crop insurance and other programs help mitigate risks associated with weather, pests, and market

Frontier research on packaging technologies, increased particularly for perishables like fruits and vegetables, flowers etc. Market and commodity research on various agricultural and horticultural commodities are highly warranted.

Fiscal Burden of Minimum Support Price (MSP) under Different Scenarios in India

Anugu Arun Reddy **A. Amarender Reddy**

For policymakers in India, price based agricultural support remains central to farm income stabilisation and food security. it is important to recognise that the current MSP architecture is not primarily a farmer subsidy system, but a consumer subsidy system. Under the National Food Security Act, food grains predominantly rice and wheat ighly subsidised prices ₹ 3 per kg). Consequently, the food subsidy bill largely reflects the cost of delivering cheap food to consumers, not excess price support to farmers. In fact, in the prevailing global market context, international prices of rice and wheat are broadly in line with India MSP levels. This implies that MSP procurement today functions mainly as a price assurance mechanism, not as a price subsidy to farmers. are not receiving prices significantly above market instead, the implicit subsidy is realised downstream by consumers through low issue prices. Expanding physical procurement under MSP to all notified crops, therefore, risks misdiagnosing a consumer welfare instrument as a farmer income policy, with serious fiscal and consequences. Against this background, proposals to extend assured physical procurement to all MSP crops raise concerns about fiscal sustainability, administrative feasibility, and market distortion. To inform this debate, the fiscal implications of alternative implementation pathways are modelled using crop production, MSP, and modal wholesale price data for the 2024 Three policy scenarios are examined procurement, covering 40% of paddy and wheat production A hybrid system, combining limited physical procurement of paddy and wheat with price deficiency payments to up to 20% and 40% of the production of other MSP crops A universal price deficiency payment (PDP) regime, without public stockholding for other MSP crops but procurement of 40% of

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production for paddy and wheat for PDS. The results show that partial physical procurement would require gross farmer payouts ₹ (1.12% of GDP). After accounting for disposal revenues, the net fiscal burden ranges from ₹ ₹ 22,240 crore, equivalent to 0.067% of GDP. While this net burden may appear modest, it masks substantial hidden costs related to storage, handling, transport, and inventory management, as well as the risks of excess stock accumulation The hybrid model delivers comparable income support to farmers while reducing storage, handling, and logistics requirements. limiting procurement to essential food security needs and compensating price shortfalls through PDP, this approach aligns farmer support more with income objectives rather than stock accumulation. A universal PDP system entails a marginally higher fiscal outlay (but with coverage both interms of crops and price shortfall related inefficiencies and administrative complexity associated scale procurement. Even universal d wheat procured along with 100% of other MSP output covered with PDP) also require a maximum of Rs.1.14 lack crore towards expenses, which is very modest. A gradual transition is based procurement is deeply embedded in India and farmer expectations, particularly in states. Abrupt withdrawal would undermine policy Introducing PDP for other MSP crops alongside limited ended) of paddy ad wheat allows institutions to build capacity in price discovery, verification, and direct benefit transfers, while reassuring farmers that minimum price guarantees remain intact. Over time, such a calibrated shift would also bring greater policy clarity. Consumer for food security can continue to be addressed explicitly through the food subsidy budget, while farmer income support is transparently through PDP, rather than indirectly through costly and distortionary procurement operations. In sum, under prevailing state capacity and political economy constraints, hybrid price systems represent a pragmatic second India. The evidence suggests that maintaining minimum price farmers does not require expanding physical procurement. Instead, a gradual shift towards price deficiency payments can protect farmer incomes, reduce systemic inefficiencies, and better align India regime with both domestic realities and internatio offering transferable lessons for other developing economies seeking to reform procurement centric price support systems.

Minimum Support Price, Agriculture, India, Fiscal Efficiency, Administrative Feasibility.

s agricultural price policy stands at a critical juncture. The Minimum Support Price (MSP) system, one of the most interventionist price support mechanisms in the developing world has been central to stabilising farm incomes and ensuring food security since its introduction during the Green Revolution of the mid 1960s. Designed to incentivise production under conditions of yield and price uncertainty, MSP played a decisive role in achieving self sufficiency in foodgrains and reducing bility to food shortages. Over time, it has become a cornerstone of s food security and rural welfare architecture.

However, the structure and operational logic of MSP have not evolved in line with the changing realities of Indian agriculture. While currently announced for 23 crops, including cereals, pulses, oilseeds, cereals, and selected commercial crops, their effective implementation remains highly uneven across crops and regions. Prices are recommended by the Commission for Agricultural Costs and Prices (CACP) using a cost plus framework, with an intended margin of at least 50 per cent over Cost A2+FL. Yet, in practice, MSP operates not as a universal price floor **selective, quantity backed guarantee** limited to a narrow set of crops and geographies.

This disconnect between policy intent and operational reality has become increasingly problematic. Through the Food Corporation of India (FCI) and state agencies, MSP enforcement is overwhelmingly concentr scale procurement of paddy and wheat to supply the Public System (PDS) and allied welfare programmes. For most other MSP crops particularly pulses, oilseeds, coarse cereals, and crops such as copra procurement is sporadic, limited in scale, and contingent on market conditions. As a result, MSP is binding only for a small subset of farmers, primarily in surplus rice wheat regions, while a majority of producers remain exposed to price volatility despite formal MSP announcements

centric procurement model has generated mounting fiscal, efficiency, and distributional pressures, underscoring the need for policy reorientation. Procured grains are distributed through the PDS at highly subsidised issue prices of ₹ ₹ kg to nearly 80 crore beneficiaries, creating a large and persistent wedge between procurement cost and issue

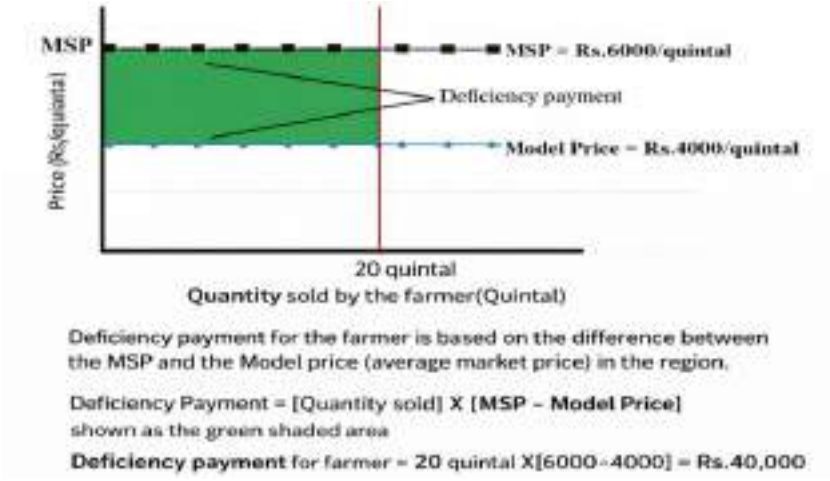
price. The fiscal burden associated with procurement, storage, transport, distribution, and wastage has risen steadily, with India s food subsidy ₹ 2.11 lakh crore in 2023 24. Rice and wheat alone account for more than 85 per cent of procurement expenditure. In this context, extending assured procurement to all MSP crops, as frequently demanded by farmer organisations would entail a sharp escalation of fiscal commitments and administrative complexity, raising concerns about term sustainability.

At the same time, the limitations of the existing MSP framework have become more visible as Indian agriculture diversifies and confronts new allenges. Price volatility in pulses and oilseeds, regional disparities in market access, environmental stress from cereal monocropping, and the exclusion of rainfed and marginal regions from effective price support all point to the inadequacy of procureme led MSP as a universal income stabilisation instrument ((Reddy, 2009; Reddy ., 2009; Reddy and , 2012). These structural concerns have prompted growing policy **alternative mechanisms that can protect farm incomes without relying exclusively on physical procurement**

Against this backdrop, instruments such as Price Deficiency Payments (PDP) and Direct Benefit Transfers (DBT), which compensate farmers for the difference between MSP and realised market prices without physical procurement have gained prominence in policy debates. Such mechanisms offer the possibility of broader crop and regional coverage, reduced market distortions, and lower fiscal and logistical burdens, while retaining the income protection objective of MSP.

er responds to the emerging need for reform by analysing five alternative policy scenarios that progressively transition from the existing centric procurement system towards graded Price Deficiency (Figure 1) mechanisms. The scenarios range from the status quo wheat procurement, through partial procurement, to PDP coverage for 20 per cent, 40 per cent, and ultimately 100 per cent of of the remaining MSP crops. Using crop wise data on production, MSP, and market prices for 2 25, the study evaluates the fiscal burden, administrative feasibility, and efficiency implications of each option, with particular emphasis on crops and regions historically excluded from effective price support. The analysis aims to inform a based restructuring of India s agricultural price

policy that reconciles farmer income protection with fiscal sustainability and market efficiency.



Price Deficiency Payment Mechanism

Theoretical and Empirical Foundations

Economic theory underscores that minimum price policies are effective only when the state credibly commits to purchasing unlimited quantities at the announced support price (Timmer, 1989; Gardner, 2006; Chand, 2022). In the absence of such commitment, support prices function largely as reference signals with limited influence on market outcomes. This distinction between **announced MSP and enforced MSP** understanding the growing disconnect in India

The broader literature on agricultural price stabilisation in developing economies cautions that procurement backed price floors, while effective in the early stages of food security transitions, tend to generate market distortions, fiscal stress, and spatial concentration of benefits ov (Timmer, 1997; Dorward ., 2006; Chand, 2022). When procurement capacity and fiscal resources are uneven, price support disproportionately benefits surplus regions and larger producers, while marginal farmers and diversified cropping systems remain excluded (Negi

s MSP system reflects these theoretical concerns. Despite MSP announcements for 23 crops, effective procurement remains over

concentrated in paddy and wheat. For pulses and oilsee
market prices frequently fall below MSP with limited compensatory intervention, rendering MSP largely notional for these crops (Gulati
., 2014; World Bank, 1999; CACP, 2024). Consequently, MSP has been characterised as a **selective and asymmetric**
a comprehensive income protection mechanism (Government of India, 2024; 2025; Reddy

Fiscal analyses further reinforce the case for policy change. Studies show that a large share of food subsidy expenditure arises not from MSP itself but from low issue prices, storage, handling, transport, and distribution under the PDS (Jha and Ramaswami, 2010; Gulati and Juneja, 2022). Moreover, procurement driven incentives have contributed to environ
externalities, including groundwater depletion and monocropping
wheat belt (OECD, 2023; OECD/FAO, 2023).

International experience illustrates viable alternatives. The United States has shifted from procurement based price support to decoupled income support and counter cyclical deficiency payments, significantly reducing market distortions (Gardner, 2006). Ch s move from state procurement to target price and deficiency payment systems for maize and cotton demonstrates that income stabilisation can be achieved without excessive stock accumulation or fiscal leakage (Huang and Yang, 2017).

Within India, policy research increasingly supports Price Deficiency Payment mechanisms, particularly for pulses and oilseeds where public distribution is neither necessary nor efficient (Gulati ., 2014; NITI Aayog, 2017). Evaluations of state level initiatives such as M
s Bhavantar Bhugtan Yojana suggest that, despite design
, PDP schemes can expand income support coverage while reducing procurement related distortions (Chand

Anchored in this literature, the present study conceptualises MSP not as a single instrument but as a **continuum of policy options**, ranging from full procurement to partial and full price compensation. By systematically comparing procurement PDP hybrids, the paper contributes to the policy debate by quantifying fiscal costs, administrative feasibility, and efficiency trade offs, while explicitly addressing the persistent exclusion of
wheat crops from effective price support.

Review of Literature

The existing literature consistently highlights the fundam
between income stabilisation, fiscal sustainability, and market efficiency
based price support. Estimates by CACP and assessments by
. (2021) and Chand (2025) suggest that universal MSP backed procurement would impose prohibitively high fiscal and administrative costs, potentially running into several lakh crore rupees annually. Importantly, these studies emphasise that fiscal stress arises less price support per se and more from procurement, storage, and ted operations.

Empirical evidence also documents substantial inefficiencies and spatial concentration in procurement. Rising handling and carrying costs, stock accumulation, and operational rigidities within the FCI have amplified subsidy outlays while li s reach (Jha and Ramaswami, 2010; Vohra and Sharma, 2024). Producers of pulses, oilseeds, and coarse cereals often located in rainfed and marginal regions remain weakly integrated price support mechanisms.

International experience further strengthens the case for reform. Evidence from the United States and China suggests that deficiency payment and target price systems can stabilise farm incomes at significantly lower fiscal and logistical cost than procurement led models, provided administ systems are robust (OECD, 2023; Huang and Yang, 2017). In India, oriented studies and limited state level experiments point to the potential of PDP mechanisms, particularly for non cereal crops, despite implementation challenges (Gulati ., 2024; Chand, 2015).

Despite these insights, gaps remain in the literature. First, most studies treat procurement and PDP as binary alternatives, overlooking graduated or hybrid transition pathways. Second, scenario based fiscal comparisons data are limited. Third, the distributional implications of alternative instruments for historically neglected crops and regions are insufficiently analysed.

Objectives of the Study

In response to these gaps and the growing need for reform, this study

Compare the fiscal implications of alternative MSP implementation scenarios combining procurement and Price Deficiency Payments.

Assess the administrative and efficiency implications of shifting from centric procurement to graded PDP co

Evaluate the extent to which alternative policy scenarios improve price support coverage for non cereal crops and underserved regions.

Data and Methodology

Data Sources

This analysis is based entirely on official and routinely used government atasets to ensure transparency and policy relevance. Minimum Support Prices (MSPs) for the marketing year 2024 25 are taken from notifications of the Directorate of Economics and Statistics (DES), Government wise production data are drawn from the Third Advance Estimates for 2024 25 issued by the Commission for Agricultural Costs and Prices (CACP) and the Ministry of Agriculture and Farmers Welfare.

Domestic market prices are derived from national modal price averages reported in AGMARKNET and CEDA, which are widely used for price monitoring and policy assessment. For rice and wheat, international reference prices are taken from the World Bank Pink Sheet (2024) to linked disposal revenues. All fiscal estimates are computed at national level and expressed in ₹ crore. The simulations assume full participation for the specified coverage under each scenario, with existing Food Corporation of India (FCI) operational

By relying exclusively on official data sources, the analysis ensures that results are directly interpretable and usable for policy design, budgeting, ministerial deliberations.

Analytical Framework

From a policy perspective, the fiscal cost of MSP implementation arises from the price paid to farmers but also from the operational costs of procurement and the revenue realised from disposal. Accordingly, the net fiscal burden is estimated as:

Net Fiscal Burden = Farmer Payout + Incidentals Disposal Revenue

- represents payments to farmers, either through procurement at MSP or through price deficiency payments

- are assumed at 10 15 per cent of payouts, reflecting procurement, handling, storage, transport, and administrative cos currently incurred by FCI and state agencies.
- **Disposal Revenue** captures the value realised through domestic sales (assumed at 90 per cent of MSP) or exports of rice and wheat at prevailing international prices.

based models, where physical procurement is replaced by direct income transfers, the fiscal cost is calculated as:

PDP Cost = Coverage Share × Production × MSP × Deficiency Rate

This unified framework allows policymakers to directly compare based support with DBT based income support on a like like fiscal basis, explicitly accounting for operational savings and revenue offsets.

Policy Scenarios

To inform reform choices, five policy scenarios are examined. These represent a graduated transition from procurement intensive MSP implementation to a digitally enabled, market aligned income support system. Together, they offer policymakers a menu of realistic options rather than a binary choice between procurement and PDP.

Scenario 1: Full Procurement (Benchmark)

- 100 per cent procurement of all 23 MSP notified crops at MSP.
- Incidentals of 10 15 per cent applied uniformly.
- Provides complete price assurance across crops and regions.

This scenario is included as a theoretical upper bound. While it ensures universal price protection, it is fiscally and logistically infeasible and serves primarily to illustrate the magnitude of resources required for full MSP enforcement.

Scenario 2: Operational Procurement (Baseline)

- Procurement of 40 per cent of paddy and wheat output and 20 per output of the remaining 21 crops.
- Paddy and wheat are disposed through exports at international prices; other crops are sold domestically at 90 per cent of MSP.

This scenario broadly reflects current operational capacity and fiscal
s a realistic baseline against which reform options are

Scenario 3: Partial PDP (Hybrid Model)

- Paddy and wheat procurement as in Scenario 2.
- For the remaining 21 crops, 20 per cent of output receives a PDP equivalent to 10 per cent of MSP via

This hybrid model significantly reduces physical handling and storage requirements while extending income protection to crops and regions currently excluded from effective MSP support.

Scenario 4: Enhanced PDP

- Paddy and wheat procurement unchanged fro
- PDP coverage expanded to 40 per cent of output of the remaining 21 crops, with a deficiency payment of 20 per cent of MSP.

This scenario prioritises wider coverage and stronger income stabilisation, particularly for pulses, oilseeds, and dryland crops, at a higher but still manageable fiscal cost.

Scenario 5: Universal PDP (Fully Digital Model)

- Paddy and wheat procurement retained at Scenario 2 levels to meet PDS and food security obligations.
- The remaining 21 crops receive PDP for 100 per cent of production.

Two variants are considered:

- PDP at 10 per cent of MSP.
- PDP at 20 per cent of MSP.

This scenario represents the most inclusive and administratively streamlined MSP design, eliminating procurement, storage, and dispo
cereal crops and relying entirely on DBT infrastructure.

Together, these scenarios form a structured policy continuum, enabling comparison of fiscal sustainability, administrative feasibility, and farmer coverage under alternative MSP des

Results and Discussion

Scenario 1: Full Procurement (Benchmark)

Procuring 100 per cent of production of all 23 MSP crops would require farmer payouts exceeding ₹ 12.37 lakh crore annually. After adding , total expenditure would rise to ₹ 14.2 lakh crore. Beyond fiscal infeasibility, this scenario faces severe logistical constraints. Existing national storage capacity of about 150 million tonnes is grossly inadequate to handle an estimated 406 million tonnes of output. The risks of spo inefficiency, and fiscal stress make this option impractical (Table 1).

Procurement Scenario

	(						

For policymakers, this benchmark clearly demonstrates that legally enforceable, universal procurement based MSP is neither fiscally nor operationally viable.

Scenario 2: Operational Procurement

Under this more realistic model, total farmer payouts are estimated at ₹ 3.7 lakh crore, rising to ₹ 4.25 lakh crore after incidentals. After for disposal revenues, the net fiscal burden ranges between ₹ ₹

While fiscally manageable, this approach remains heavily skewed toward paddy and wheat and does little to address price risks faced by producers of pulses, oilseeds, and coarse cereals.

Scenario 3: Partial PDP (Hybrid Model)

Introducing a 10 per cent PDP for 20 per cent of output of non and wheat crops reduces dependence on procurement while extending income support. The DBT payout for these crops is estimated at ₹ 12,468 crore. After accounting for cereal procurement revenues, the net burden falls to ₹ ₹ 2,388 crore, which are very modest for the country size of India.

For policymakers, this scenario emerges as a **risk transition pathway** combining fiscal prudence with meaningful expansion of MSP coverage.

Scenario 4: Enhan

Expanding PDP coverage to 40 per cent of output with a 20 per cent deficiency payment increases DBT outlays to about ₹ 49,873 crore. While the net fiscal cost rises to ₹ ₹ 39,793 crore, this model substantially improves income protection for farmers in rainfed and diversified cropping regions. It also eliminates post harvest losses and operational inefficiencies associated with procurement for these crops.

The results highlight the sensitivity of fiscal outcomes to PDP coverage and payment rates, underscoring the need for careful calibration.

Scenario 5: Universal PDP

Under Universal PDP at 10 per cent of MSP, DBT payouts amount to ₹ 62,341 crore, with a net fiscal burden of ₹ ₹ 52,261 crore after cereal procurement adjustments. At 20 per cent PDP, the fiscal cost rises ₹ ₹ 1.14 lakh crore.

Despite higher costs, both variants eliminate procurement inefficiencies cereal crops and offer predictable, transparent, and scalable income support using existing DBT infrastructure.

Policy Implications

The results offer clear guidance for policymakers:

- heavy MSP regimes impose high fiscal and logistical costs while delivering limited coverage.
- Hybrid MSP fram procurement for paddy and wheat with PDP for other crops offer the most balanced reform
- PDP (10%) emerges as the most fiscally sustainable option with meaningful coverage expansion.
- Enhanced and Universal PDP models are best suited as counter cyclical or crisis response instruments rather than permanent
- Successful implementation requires strengthening price discovery (AGMARKNET), farmer databases, and DBT systems, foundations that already exist but need targete

A calibrated, phased transition from procurement led MSP to PDP income support can reduce distortions, promote crop diversification, and improve fiscal management while preserving the core objective of farmer income protection.

Analysis Matrix of Different Scenarios

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Market Access for Small and Marginal Women Farmers of Gujarat—SEWA Experiences

Megha Desai

Introduction

Over the years, agriculture as a whole in the Global South has witnessed two important trends gradual shift to family farming farmers being small and marginal and feminisation of agriculture with greater participation of women in agriculture. In India itself, small and farmers constitute almost 90% of the total holdings contributing to almost 50% of total output with almost 70% of farm labourers being women.

According to World Food Program (WFP), of the 343 million people who are extremely hungry, almost 60% are women and girls. Food insecurity and extreme poverty often go hand in hand. Further, poverty is primarily a rural phenomenon, with up to 80 percent of the extreme poor living in rural areas. This is being exacerbated due in large part to extreme climate phenomena with women and youth being disproportionately impacted by climate change and are pushed furt as they struggle on the front lines of the climate crises. As a result although smallholder farms produce close to 30% of the world food supply, yet majority of the people who don t get enough good, of them are farmers.

rm productivity, climate change and water scarcity and structural inequities in areas like finance and infrastructure faced by small and marginal farmers, discourages their children to look at viable livelihood option, leading to a cycle of migration, social distress

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Self Employed Women's

s Agriculture Campaign

With over 3.2 million women workers as its members and almost 50% of them small and marginal farmers, one of the challenges that SEWA faced is that why farmer families go hungry even after putting so much of toil in their fields? In rural areas, small and marginal farmers have a very small marketable surplus resorting to of their produce at the time of harvesting due to lack of access to markets and value addition and on activities. In order to address these challenges,

SEWA launched its own Agriculture campaign in 1995 with the objective to address the question Why does the farmer remain hungry? approach has been to treat Farm as an enterprise and ntrepreneur so that agriculture moves form subsistence to becoming viable and profitable.

s Agriculture Campaign focuses on following pillars four pillars

Organising and capacity building: Advising and training farmers technical and entrepreneurial aspects right from soil testing, inputs, using quality/certified seeds, advisory on crop mix, natural inputs, natural farming practices, clean technology use, drip irrigation, solar based information and climate resilient practices etc.

Access to Inputs: Availing good quality seeds to the farmers, good quality fertilisers and access to farm equipment like automatic sowing machine, etc

Access to Credit: ding access to affordable finance through SEWA Bank or local nationalised banks for members agriculture related needs. Farmers usually were borrowing money from the local traders and were forced to sell their produce to the same trader at an agreed rate. They were not able to get the better rates prevailing in

Market Linkage: Small and marginal farmers have small quantity and thus can mainstream markets and have to sell to middlemen. To address a producer company called Company was formed which operates through a hub and spoke model.

Through the campaign, farmers are organized into Farmers Development Groups (FDGs) or clusters based on a particular commodity. It helps

establish Seed bank, fertiliser bank, plant clinics, field schools. tools equipment library or rural storage facility which strengthens their production. It also enables direct linkages to local and national banks, conduct technical training schemes, and collectivize the cleaning, ing, and distribution of farmers goods
brand. The campaign has helped address the four major issues facing those being the lack of access to finance, information, capital, and market linkages.

Each of the districts where SEWA culture Campaign is active, it has trained Agronomists who build capacities of village leaders or aagewans on climate resilient agriculture, quantity and type of fertilisers to be used in natural farming. In case of pest attacks they also advise on pestici pesticides. AAgewans then conduct farmers field school to train farmers, conduct demonstrations and provide advisory support for crop mix, land preparation, irrigation practices, pesticides etc

Each district has Tools and Equipment libraries for farm equipment rental so small marginal farmers get timely equipment at affordable rates. Above all, SEWA also provides market linkages through RUDI customers or linkages with factories or other bulk customers or ginners

District Associations have license and operate and seed banks to provide certified seeds and ensures right quality of

organised Bachat mandals (SHGs) and tied them to SEWA bank to get funds for seeds, fertilisers, labour payment etc. They get 18% interest rate

Market Linkage: RUDI

SEWA found that achieving women s economic empowerment requires a holistic approach and long commitment and gender perspectives must be integrated at the design stage of the secured livelihood mean by SEWA is to provide regular income, ensuring of good health of women and their families and involve them in policy making; as one of the main stakeholder.

Incorporated in 2004, RUDI is SEWA s small women farme business initiative designed to empower small and marginal women . RUDI integrates the agricultural value chain, connecting producers with consumers to generate employment opportunities for women and retain wealth

Historical Context and Significance

Before RUDI s inception, many small and marginal farmers faced exploitation by intermediaries, receiving minimal returns for their hard work. Recognizing this challenge, SEWA initiated RUDI to
link between producers and consumers, thereby eliminating middlemen and ensuring fair compensation for farmers. Over the years, RUDI has evolved into a robust network that not only secures livelihoods for rural women but also ensures that quality food circulates within local
enhancing food security.

Objectives and Functioning

RUDI operates with the dual objective of ensuring nutrition and food security while providing income security to rural communities. RUDI
company owned and managed by rural women runs on the
Spoke model. RUDI procures directly from the small farmers at fair market prices and sale in the rural households through hiring rural youth and women who gets livelihood opportunity which
migration. RUDI has established 33 processing centres in seven states which act as rural warehouse and commodities are cleaned, graded, packed and sold under RUDI brand. The portfolio
selected as per the needs and purchasing power of rural household. RUDI
iated the digital payment integration and a mobile app and MIS
RUDI Sandesha Vyavhar (RSV) which help vulnerable
access technology, mobility and financial inclusion which
increased efficiency, reduce drudgery, dignified work a

The enterprise achieves this by establishing a women led value chain that offers forward linkages to small and marginal farmers. The process begins
village women procuring raw agricultural produce
farmers. This produce is then processed at local centers to create products such as pulses and spices. These goods are subsequently marketed and distributed by women known as who sell them directly to consumers, thereby ensuring that the benefits of the value chain
within the community. Till date RUDI has sold around USD 1 million of commodities covering 100 thousand farmers and 4000
providing nutrition security to 4.5 million HH.

Case Studies Related to Market Linkages

1: Castor Seeds

as tied up with 3 4 Institutional buyers for bulk purchase of castor seeds from SEWA members. Currently there are 7500 farmers from 30 villages in 14 districts who supply to the buyers. It started volume of 200 tons supply and now castor seed procurement is approx. tons each season

Supply Chain of Castor Cluster Approach

have been selected based on the volume of Castor seeds grown. SEWA creates awareness amongst its members by sharing information at different intervals e importance of natural fertiliser and inputs, during land preparation training on seed treatment, preparation of organic fertiliser, pesticides, during season weather information, pesticides information and at time of cultivation market rate information. SEWA has formed commodity in villages who are given these inputs. The farmer field school train farmers on seeds and other natural inputs. During these training ssions, SEWA members were also provided training on types of seed be used, practices to be followed to ensure similar type of quantity and so that there is standardisation of produce. Soil testing is done through KVK.

SEWA has entered into agreement with buyers on services offered, rate transparency, payment terms and service fee. Agreement is also reached on amount of estimated production for the season. Aagewans guide and monitor the process of procurement from farmers at the field itself. care of transportation costs. SEWA takes a service fee of 2% which takes care of overhead costs. SEWA shares market rate with the farmers on a daily basis through whatsapp group, text messages rates are also updated on the SEWA center notice boards every day. These way farmers are made aware of he APMC rate and the rates fixed by the institutional buyers. The rates are shared every morning for different quality grades.

If a farmer choses to sell via SEWA network, transportation, quality k is taken care of by the SEWA field aagewans/Agronomisyt who are trained on all these aspects. The farmers get their payment the

whereas the Institutional buyer makes the payment to SEWA in 10 days. transferred directly to the farmers account by SEWA. SEWA makes a daily commitment to the Institutional buyer by late afternoon, which if not met attracts a penalty Current coverage is 50% of castor growing farmers translating to 15% of the total tonnage of Castor and Surendranagar

to Market Linkage

Rate transparency and lesser fluctuation: APMC rates fluctuate during the day. Usually there are 3 different rates in a day, whereas the rates declared by SEWA are fixed for the day and farmers can the different rates. Even for the farmers who don network, they have the access to information through voice about rates which helps them to bargain better with the local

Transportation This is taken care of as per the agreement with the institutional buyer and the farmer doesn spend on it. The grading sorting ensures right pricing as per the rather than standard pricing offered in general by the local

Usually there is a different of 500g 600g per 20 kg bag during weighing at the local market. Fair weight practice ensures that farmer is benefitting through additional 2.5% of total

Crop 2: Procurement of Cumin

Cumin is procured from the villages in Surendranagar and Patan district. The challenges for cumin farmers are that the price in the local APMC fluctuates through out the day. For small and marginal farmer members of SEWA, once they transport their produce to the APMC, price cartelisations amongst the traders.

To help the farmers, SEWA formed cumin clusters in both Patan and Surendranagar districts. Since some Cumin farmers have smaller quantity around 50kg or 100kgs, efforts were made to aggregate produce at the cluster level. At present there are 3500 farmers who sell their produce aggregate their produce and sell it through RUDI. SEWA has a tie up with 2 companies as well as with the local market to offer transparent prices and fair weighing facilities through the RUDI processing

As a result of these arrangements, on an average a SEWA member on an average receive Rs 50 more per 20 kg than the local APMC market. Besides this due to aggregation of produce, there is a savings of around kg per farmers related to transportation and also they don the commission amount of 6 7% at the APMC.

As on date SEWA has trained around 2400 farmers across the two districts on use of natural fertilisers des during cultivation, cleaning, grading and the need to control moisture. Out of the total members, around 1200 farmers has been linked to markets with average ranging between INR 3500

Food Policy and Parastatals, Marketing Mechanism and Farmers Income in India: Status and Challenges

Shrikant S. Kalamkar

This paper reviews food policy and parastatals, various , support provided, recent marketing reforms, and income in India. As in India, governments have played a crucial role in shaping policies in the agricultural sector all over the globe In emerging nations, agriculture accounts for a significant share of all productive activities, and food has a dominant share in consumption expenditure. The different agricultural economic policies and interventions have been pursued by the government. However, despite interventions, the struggle of farmers continues, and farming is becoming

Food Parastatals, Agricultural Marketing, Farmer

Introduction

ndia is still a rural based economy where more than half of the population is dependent on agriculture (64.14% of India residing in rural areas in 2021, which accounts for 26.42% of the World rural population, GoI, 2024). Though the agriculture sector s contribution to the national income has been shrinking continuously (accounts for 18% of nominal GVA in 2024), it remains the primary driver of (49% of the total workforce in the country, NITI Ayog, 2018), and livelihood (47% of households in 2021) (GoI, 2023

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*Paper presented at Conference held at GIPE, Pune. Views expressed are personal and University/Ministry attached. Thanks to the anonymous expert for constructive comments on the paper. Usual disclaimer applies.

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https://www.pib.gov.in (2090875)

https://www.pib.gov.in (1894901)

also a primary source of raw material for many industries and contributes ing foreign currency through export (11.87% in national exports 25) (GoI, 2025). Besides, out of total landholders, the livelihood of about 86.07 per cent of landholders depend on agriculture (small land holders <2 ha) in 2015 16 (GoI, 2024). Thus, growth of the rural is closely tied with growth of agriculture and allied activities (Kalamkar, 2011, 2011a; 2011b). The progress in agriculture has a significant impact on prices of food products and thus overall inflation, economic stability, trade and commerce, and industrial activity (Chand and Parappurathu, 2012). Besides, growth in agriculture is supportive to the underprivileged (Xavier 2001; Christiensen 2006; Douglas 2009; Cerventes and Dewbre 2010; Dewbre Sharma and Kumar 2011; Grewal 2012) and thus helps in the reduction of poverty in rural areas (Ravallion and Datt 1996; Datt and Ravallion 1998; Virmani 2008) as intended in Sustainable Development Goals (Bisen and Kumar, 2018). Therefore, reasonable growth in the agriculture sector is a pre condition for meeting the food security of a populous country of the world having 1.466 billion population

During the last seven decades, significant progress has been made by the country. India is now among the top three producers of major agricultural commodities in the globe (1 in production of pulses and milk production of wheat, rice, groundnut, sugarcane, tea, cotton and fruits vegetables and fish, & 3 in production of total cereals, and eggs (GoI,). The increase in the area under crops and use of new technology has increased the production of crops. Food grains production has increased to 353.96 million tonnes (mt) in 2024 from 50.82 mt in 51. Besides, the output of oilseed crops, sugarcane, cotton, fruits and vegetables has also increased significantly. A large part of the praise for this achievement goes to the several million small farming families (Kumar and Mittal, 2006). The factors that have helped in the increase in and productivity are different policy support, strategies adopted, and investment in infrastructure research and extension activities (Kumar and Mittal, 2006). Among the various policies adopted by the overnment, the agricultural price policy has been playing a

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https://www.worldometers.info.

Contributes 25% of global milk production (239.2 mt in 2023 (https://www.pib.gov.in/id=154532)

https://pib.gov.in (PRID=2132263)

role in bringing about noticeable changes in the production and productivity of the agricultural sector (Dev and Rao, 2010). Despite various interventions of the government, the hardship of the cultivators exists, and crop cultivation has become a loss making activity or venture. The future of the country s requirement of food depends on 86 per cent of small farms; unremunerative crop production for the majority of smallholders is a major concern. The income of farmers is hindered due to various constraints such as market imperfection, quality and untimely availability of inputs, low adoption of technologies, poor service facilities, with information asymmetry. In order to increase the income of farmers in the country, many policies and programs are framed and the results are not that promising. Therefore, there is a need to present status and challenges in the implementation of policies towards licy so as to make suitable policy implications

The present study was undertaken with the objective to review the food policy and parastatals, various interventions, support provided, recent marketing reforms, level of farmers income in Indi

Data and Method

The study is based on secondary statistics compiled from different publications (Commission for Agricultural Costs and Prices (CACP) *Agricultural Statistics at a Glance 2023*, Directorate of Economics & Statistics, Ministry of Agriculture and Farmers Welfare, Government of India) and related websites. A simple tabular analysis was used for quantitative data analysis.

Results and Discussion

The effective regulation of agricultural produce markets has been increasingly recognised as an important institution for agricultural sector development (Purohit, 2016). In order to protect the producer and consumer, a marketing system is developed with interventions by the administration. The inconsistency in the policies of the government on nternational trade sometimes led to artificial price fluctuation (Shanmugam, 2009). Over the period, due to efforts of the government and supportive agencies, significant changes were observed in farmers marketing practices and agricultural marketing systems. Let us have a look at grain marketing practices in the Asian countries.

Grain Marketing Parastatals around the Globe with Focus on Asia

Governments have played an important role in influencing policies in the agricultural sector all over the world (Bathla, 2004). In developing countries, agriculture accounts for a substantial share of all productive activity, and food has the dominant share of total consumption . In this situation, price interventions in food markets have far reaching outcomes. Furthermore, since cultivators derive a major proportion of their incomes from food production, fluctuations in food scale fluctuations in the income of a large proportion of agricultural producers. The prices of agricultural commodities in countries are strongly impacted by the association between traders and their influence in government decision making (Bhatia, 1994). One of the major objectives of price polic developing countries is therefore to impart stability to the prices of important agricultural commodities like food grains. Other objectives are give price assurance to farmers through a system of MSP to increase their production and simultaneously to keep prices low for consumers for food security reasons (Bhalla, 2007). While in the developing countries, these policies are found to act as a tax on agriculture and a subsidy on food consumption, urban population is taxed in developed countries to pport farm production and incomes (Hoekman and Kostecki, 2004; Acharya and Agarwal, 1999; Pursell and Gulati, 1993; Gulati and Sharma 1991; and Goldin and Knudsen, 1990). Nonetheless, the broad common objectives of the policies are to increase agricultural production and productivity, achieve stability in farm prices, transfer resources to the non agricultural sector, reduce dependence on exports and attain minimum nutritional standards (Bathla, 2004). The restrictions on international trade and movements of food grains, as well as private storage with assurance about credit availability, are being used in all countries

goes without saying in a country where agriculture dominates; market failure and equity act as silent factors behind governmental mediation. The initial economic conditions and the rationales for public intervention in food grains markets were remarkably similar in those Asian Countries whose governments intervened in their food grains markets. The detail on food policy and parastatals in India is discussed below.

For more details, please see, Rashiid,

Food Policy and Parastatals in India

The emergence of agricultural policy in the Indian context can be traced back to the official documents beginning from the Food grains Policy Committee of 1943 (Gregory, 1943). T 1960s, the focus was on maintaining proper flow in market operations by checking detrimental activities to producers and consumers. Though minimum supply for consumers was assured, the objective of remunerative prices with income to farmers was never met. The New Strategy of Agricultural Development, articulated in the Fourth Plan, marked a bold step beyond previous policies (Rashid 2008). In view of the shortage of food grains, the government rolled out direct and indirect involvement i agricultural markets and prices, with procurement policy for wheat and paddy and their distribution. This gradually expanded to cover several other crops/products and aspects of domestic trade in agriculture (Chand, 2012). Government interventions in the agriculture market take different forms, Price Support Scheme and Market Intervention Scheme are some Food Corporation of India Agriculture Prices were established in 1965 to help administer food security in the country. Today, the FCI is the agency to purchase food grains at MSP or the procurement price, and to stock and distribute these to the consumers through the public distribution system (PDS), which consists of as many as 5.45 lakh fair price shops spread all over India. FCI also undertakes open market operations with a view to stabilising prices.

Price Support to Producers

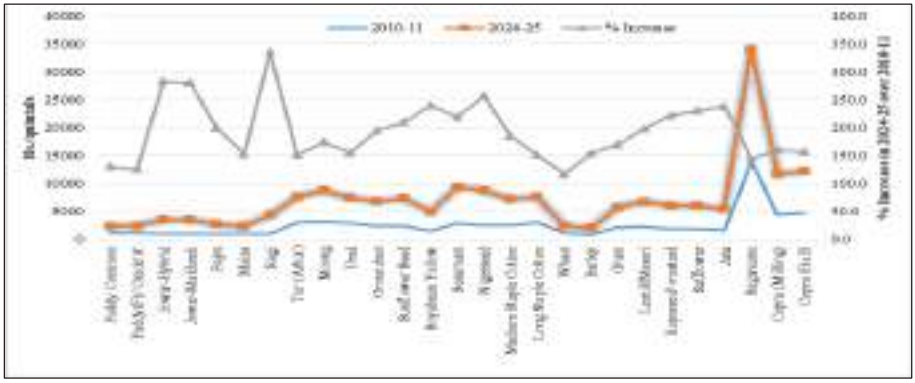
Price support for crop producers has been a crucial mechanism in the development of the crop sector and food policy since the mid These prices were first fixed in 1964 by the *Jha Committee*. In pursuance of the recommendations of this committee, the APC (known as Commission for Agricultural Cost and Prices since 1983) is entrusted with the task of making recommendations on administered prices for agricultural commodities. While making its recommendations, the commission is, , to keep in view the seven factors (Terms of). The production cost of commodities is one of the components in the recommendation of MSP. Currently, the union

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https://nfsa.gov.in/public/nfsadashboard/PublicFPSDashboard.aspx
https://cacp.da.gov.in/content.aspx?pid=62

government declare MSP for 23 farm products (7
oilseeds, raw cotton and jute, sugarcane and copra (dried coconut) (
1). Over the period, there is a remarkable increase in MSP declared in the
11 in absolute terms for all crops.

Currently, procurement prices/MSPs, buffer stocks, and PDS are three ols used to maintain food security and price policy . The interest of producers and consumers was attempted to address by providing subsidies on food items and farm inputs. While, adequate quantity of stock was maintained to meet the requirements of the same under the public distribution system. While on the basis of market behaviour, domestic production and requirement, the procurement target has been fixed and thus varies from year to year. Therefore, there is a need to provide remunerative prices for farmers to meet food security and to double farmers income. Though discussion on price versus non factors is started in academic forums, review of literature shows that they are complements rather than substitutes (Dev and Ranade 1998; Rao Schiff and Montenegro 1997).



MSP/FRP Fixed by Government (crop year): 2010
https://cacp.dacnet.nic.

Procurement by Government

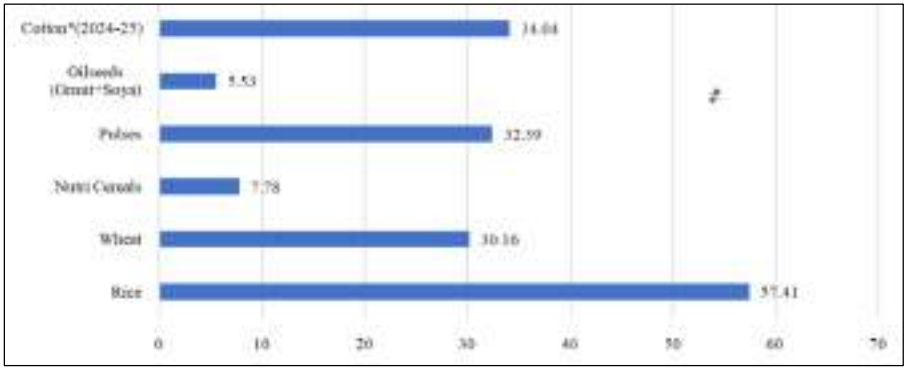
Government interventions in the purchase of agricultural commodities [foodgrains procurement under PSS, MIS, OMP (open market purchase), monopoly purchase of commodities] through different

Market Intervention is another marketing support policy of the government.

corporations and boards have acquired prominence in recent years. quantity of commodities purchased by these agencies depended on the objective and target fixed for purchase to fulfil the defined objective (Acharya, 2004). Central government procurement of paddy and wheat through FCI at MSP is open rmined centres/collection points. The other crops are covered only when market prices are reported below MSP. Besides, a bonus over and above MSP is declared by some states for a particular commodity. Under the Centralised Procurement System, foodgrains are procured by the FCI directly or by State agencies and stocks are transferred to FCI storage. Under Decentralised Procurement (DCP), introduced in 1997 98, the responsibility of procurement operations would invariably be that of State Governments, surplus rice would be taken over by the FCI. Under the DCP system, State Governments or approved agencies purchase /wheat/coarse cereals, store it and distribute it against allocation for the National Food Security Act and Other Welfare Scheme in the hand over the excess stocks to FCI for the Central Pool. The expenditure incurred on procurement, storage and distribution under the DCP, based on the laid down principles by the State Governments, is compensated by the Union Government. At present, 8 states for rice and 7 states for both rice & wheat are under the DCP system.

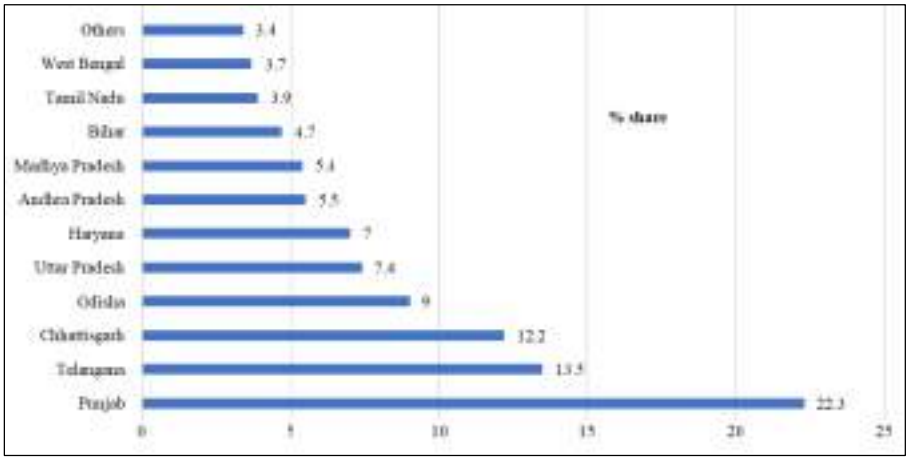
As mentioned earlier, out of 23 commodities covered under MSP, procurement is executed mostly for paddy (rice), wheat, and pulses 2), which is mostly concentrated in a few states. Out of the total production of our country, about 58 per cent of the production of rice, 30 per cent of wheat production is procured by the government (2). In the case of rice, average procurement has increased from 34.8 mt in 17 to 55.7 mt in TE 2023 24. Among the states, Punjab, Telangana, Andhra Pradesh, Odisha, Chhattisgarh, Uttar Pradesh and Haryana (seven states together) accounted for 77 per cent of total procurement in India during TE 2023 3). While out of t rice production in the state, the highest share of 92.4 per cent was procured in Punjab, followed by 74.1 per cent in Haryana and the lowest was in West Bengal (13.1%) (

FCI, CCI, JCI, CWC, NAFED, NCMF, TB, and State Oilseed Federations, etc. https://fci.gov.in/procurements.php?view=86



Share of Quantity Procured to Total Production

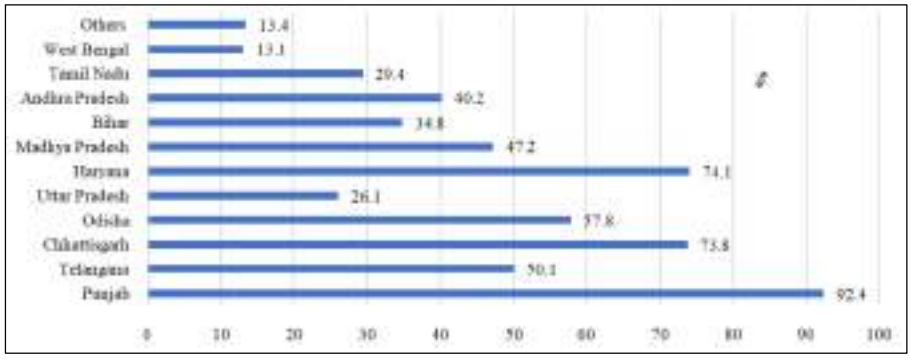
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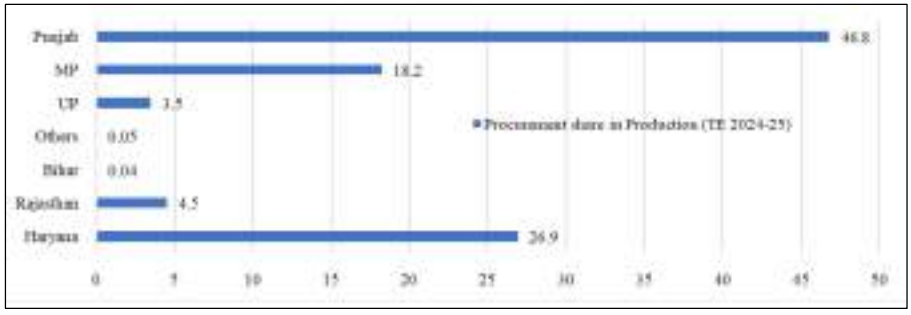
wise Share in Procurement of Rice (TE2023

https://cacp.dacnet.nic

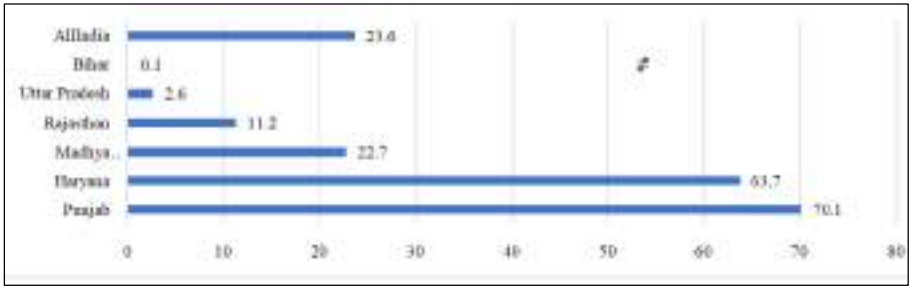
In case of wheat crop output, procurement has increased from 30.8 mt in 18 to 43.3 mt in 2021 22 and then declined to 26.6 mt in 2024 25. Four states (viz. Punjab, Madhya Pradesh, Haryana, and Uttar Pradesh and Rajasthan) together account for 99.9 percent of total procurement 5). While share of procurement in wheat the production of the state was highest in Punjab (70.1%) followed by Haryana (63.7%) and the lowest was in Bihar (0.1%) (



wise Procurement of Rice as % to Production (TE 2023
https://cacp.dacnet.nic



Statewise Share of Major States Procurement of Wheat TE 2024
https://cacp.dacnet.nic



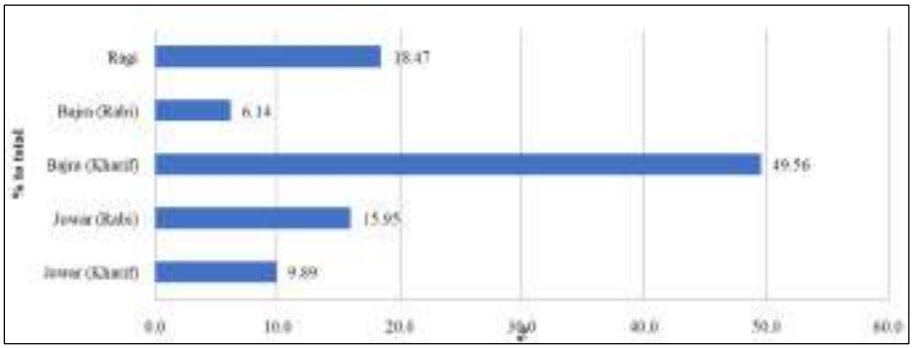
Statewise Share of Quantity Procured to
Total Production (2024
https://cacp.dacnet.nic

In the case of nutri procurement was just 22.7 thousand tonnes 18, which substantially increased to 1255 thousand tonnes of

cereals in 2024 25. Bajra crop accounted for almost half of the cereals procured, followed by Jowar (25.84%) and Ragi (18.47%)

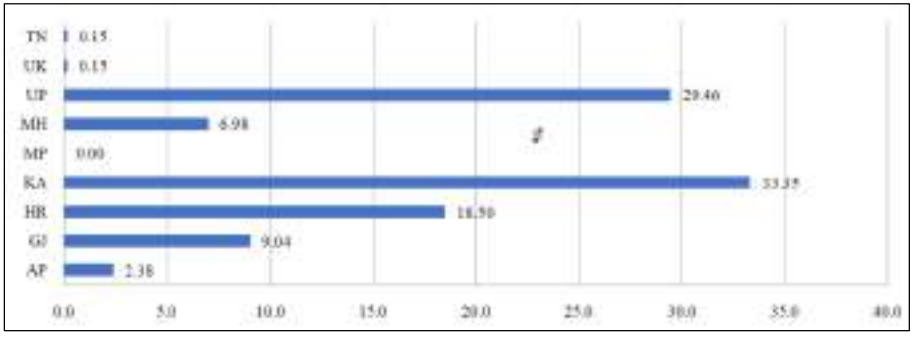
7). Four states, viz. Karnataka, UP, Haryana and Maharashtra together hold about 88% of the total procurement of nutri

8). In the case of pulses, procurement of pulses increased from 16.52 lakh tonnes in 2017 18 to a record 40.53 lakh ton and then declined to 6.94 lakh tonnes in 2023 2024. Procurement of pulses further declined to 2.87 lakh tonnes in 2024



Cropwise share in Procurement of Nutri

https://cacp.dacnet.nic



wise Share in Total Procurement of Nutri

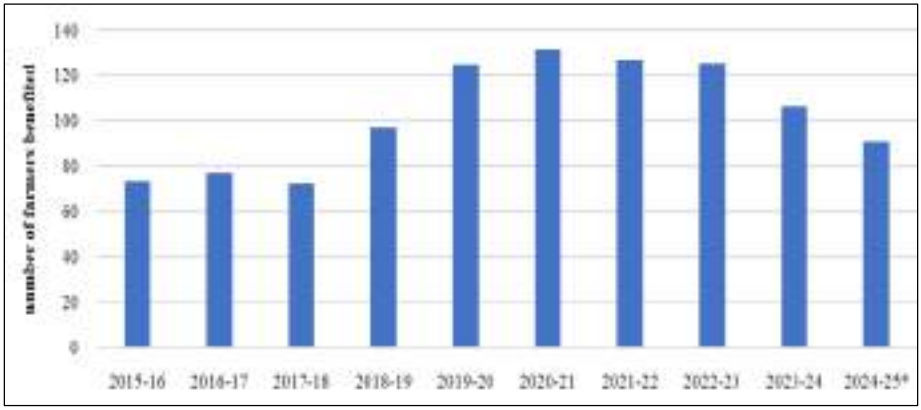
https://cacp.dacnet.nic

One of the objectives in food security under NFSA 2013 is to have geographical diversification in procurement operations. Crop wise numbers of farmers benefited from procurement operations are presented in Table 1 & number of farmers benefited

from paddy and wheat procurement operations increased significantly over the period, while the concentration of the same is observe
few states such as Punjab, Haryana, Madhya Pradesh and Chhattisgarh. Large numbers of small and marginal farmers are benefited with the procurement of paddy in AP, Telangana and Odisha as compared to UP
13). Over the period, a significant increase in procurement under MSP operation has been recorded, which has benefited many farmers across the crops (Table 2).

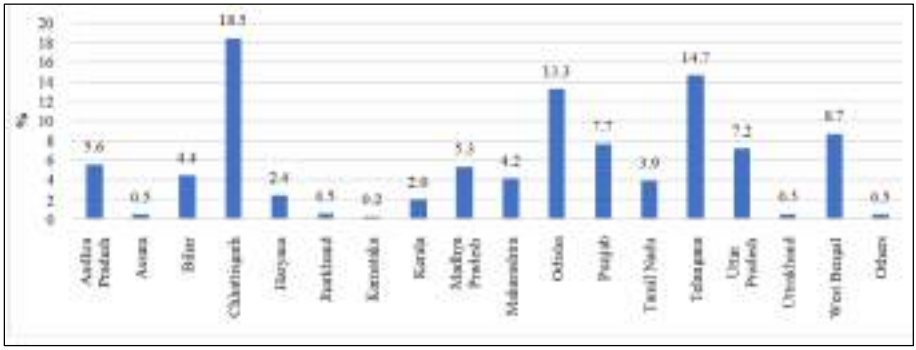
Procurement of Selected Commodities during 2023

https://cacp.dacnet.nic

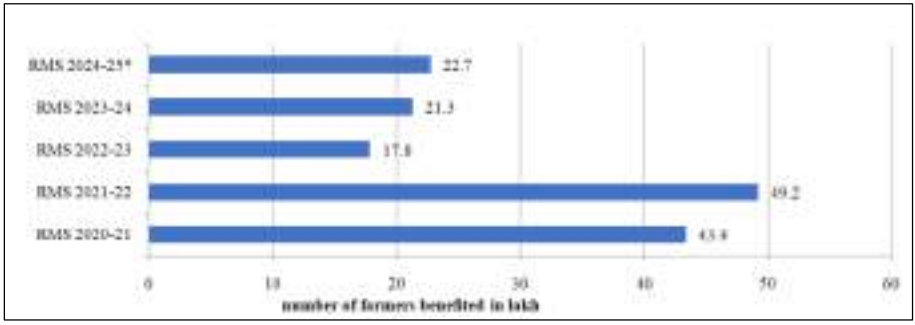


Number of Paddy Farmers Benefited: 2015

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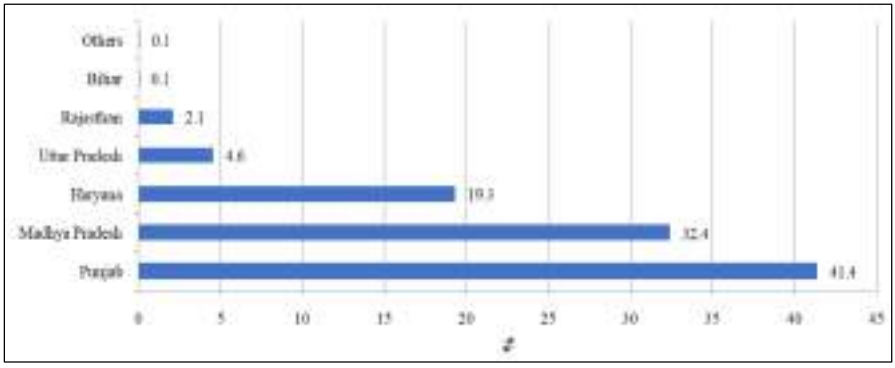


Statewise Share of Number of Paddy Farmers Benefited, TE2023



Yearwise Number of Wheat Farmers Benefitted from Procurement

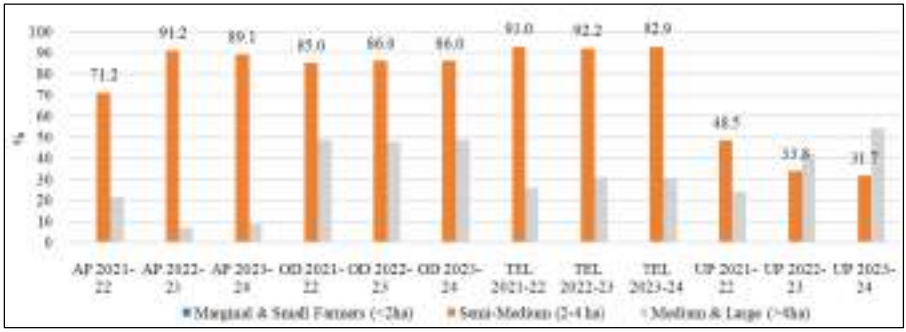
https://cacp.dacnet.nic



Statewise share in Number of Wheat Farmers Benefitted from Procurement Operations

			(As on 09.03.2025)	
	Quantity Purchased			
	Farmers Benefited *			
	Quantity Purchased			
	MSP value (in crores)			
	Farmers Benefited *			
	Quantity Purchased			
	MSP value (in crores)			
	Farmers Benefited *			
	Oilseeds and Copra*			
	Quantity Purchased			
	MSP value (in crores)			
	Farmers Benefited*			
	Quantity Purchased			
	Farmers Benefited (in			

* Data of beneficiaries is being collected from 2016
Lok Sabha Unstarred Question No. 2963, 8th March, 2025, GoI, 2025a.



Participation of Small and Marginal Farmers in Procurement of

https://cacp.dacnet.nic

Besides PSS, the Market Intervention Scheme (MIS) is implemented for the procurement of various perishable agricultural/horticultural (on the request of the State/UT Government). Though it is an ad hoc scheme, it also plays a crucial role in food policy by providing a safety net for farmers of perishable agricultural and horticultural commodities when prices drop significantly and protecting growers from distress sales caused by bumper harvests. The details on sanctions during are presented in Table 3. Among vegetables, onion garlic were procured in Rajasthan, and potato in UP and Nagaland, while horticultural crops include apple and mango in Himachal Pradesh, Grapes in Mizoram. Turmeric was procured under MIS in the

Approved Orders under MIS

	Oct 5, 2021 to Nov.				
	June 7, 2022 to July				
	July 27, 2022 to Aug				

	July 27, 2022 to Aug				
	Mar 10, 2023 to				
	Mar 22, 2023 to				
	Oct 3, 2024 to Nov				
	Oct 9, 2024 to Nov				

Market intervention price, covered up to 31.12.2024.
https://cacp.dacnet.nic

The National Food Security Act, 2013, requires the central, state, and local governments to strive to progressively realise certain objectives for advancing food and nutritional security. One of these objectives involves geographical diversification of the procurement operations. In view of the concentration of procurement of crops in a few states under the PSS and MIS scheme, there is a need to incentivise crop diversification. Besides concentration of procurement in few states, it is important know about impact of MSP on market price. The next section discuss about the same.

Market Price, MSP and Impact

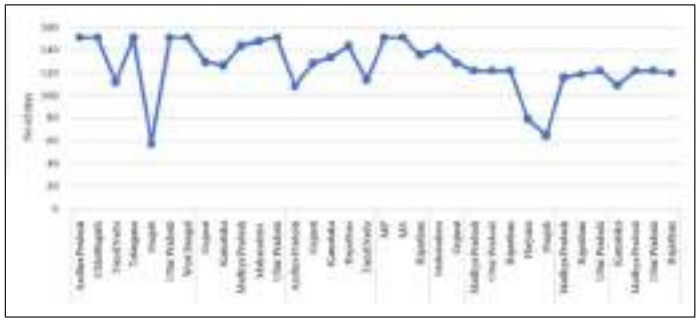
The goal of an increase in farmers income was attempted by raising MSPs. The same was criticised by researchers by mentioning no linkage with the estimated cost of crop production (Rs/qtl) and resulting market . Also, reported by the World Bank (2004), it is a major o problems of mounting buffer stocks and is frequently blamed for spikes in prices of food items that reached their peaks in 2009 (Dev and Rao, 2010). Besides criticism, Union agencies also reported losses in undertaking PSS and MIS operations. Despite con spending on these schemes, farmers are still struggling to get remunerative prices for their output. It has been reported in the CACP report that most of the time, the market price of some commodities prevails below MSP.

Also, high markups by sellers are widening the gap between receipts by producers and payments made by consumers for these commodities.

effectiveness of price support operations can be better understood by comparing market prices and MSP (Kalamkar, 2023).

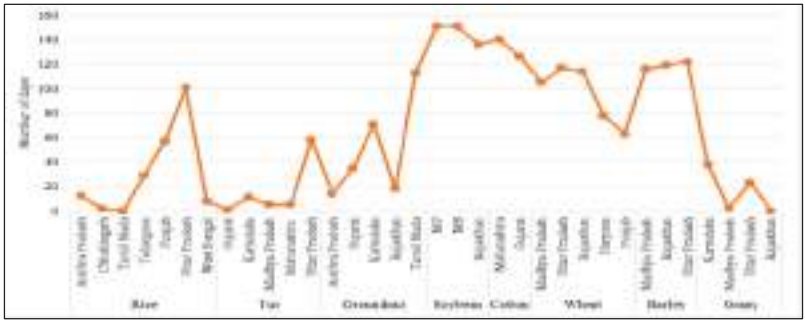
domestic market price trends using the market price data compiled from 3,100 APMC markets (through AGMARKNET) in different States/UTs, and the results of the same are reproduced here (Figs. 14 to 16). All India average market price of paddy remained nally below the MSP during the last five kharif marketing seasons 18 to KMS 2021 22). The difference between MSP for paddy and market price was high in Tamil Nadu (which was high on fourths of total days). Paddy market prices also rem below the MSP on most days in Chhattisgarh and Telangana. The average difference between market price and the MSP was the lowest in Uttar Pradesh. Punjab was the only state where market prices were higher than MSP. Moreover, Punjab was the only State where market prices remained above MSP throughout the period, and the lowest number of reporting days was recorded due to high procurement.

The market prices of tur have remained below the MSP during most of the days for all the major States. The price gap was the highest in Madhya Pradesh, followed by Gujarat, Karnataka and Maharashtra. Despite being a net importer of pulses, the prices of pulses in major markets were highly fluctuating and low. In the case of groundnut, markets in Rajasthan, Gujarat and Andhra Pradesh reported prices below MSP for most of the days. However, the average market price was reported higher by 40.7% than MSP in the markets of Tamil Nadu. The market prices of soybean and cotton crops were reported to be higher than MSP on almost all days. In the case of wheat, in the states of MP, UP, Rajasthan, Haryana and Punjab, the market prices on most of the reported days were observed to be higher than the MSP.
Pradesh, market prices remained above or equal to MSP on most of the days for which the data were available. The highest average di
market prices as compared to the MSP is reported in Rajasthan, followed by Madhya Pradesh. The average di erence between market price of barley and MSP is estimated highest in Rajasthan followed by Uttar Pradesh and Madhya Pradesh. UP has reported market prices equal to or above MSP on 23 days, and on the remaining reported days, the variation is found to be mostly less than 5 per cent of the MSP. A similar trend has been observed in Karnataka. For Madhya Pradesh and Rajasthan, market prices of gram were below MSP on almost all days.



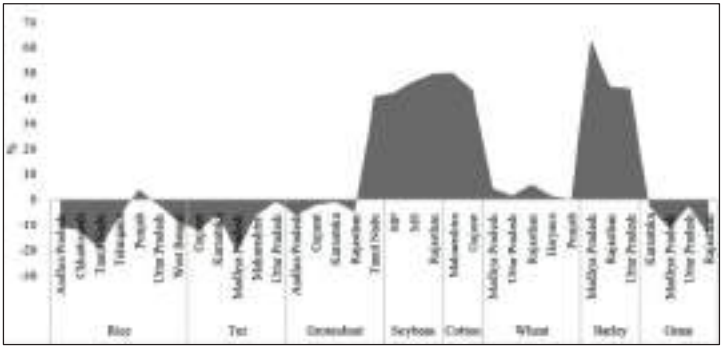
Number of Days Market Prices were Below MSP
(KMS & RMS 2022

https://cacp.dacnet.nic



Days Market Prices were above MSP
(KMS & RMS 2022

https://cacp.dacnet.nic

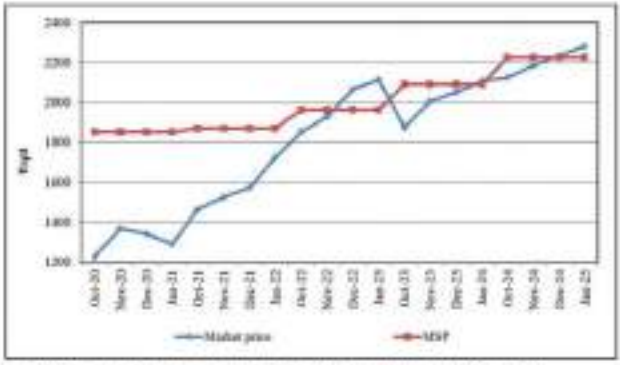


(%) between MSP &
(KMS & RMS 2022

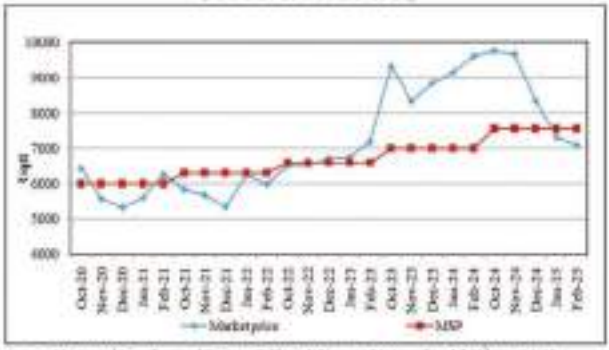
CACP (2022, March), CACP (2022, July),
https://cacp.dacnet.nic as quoted



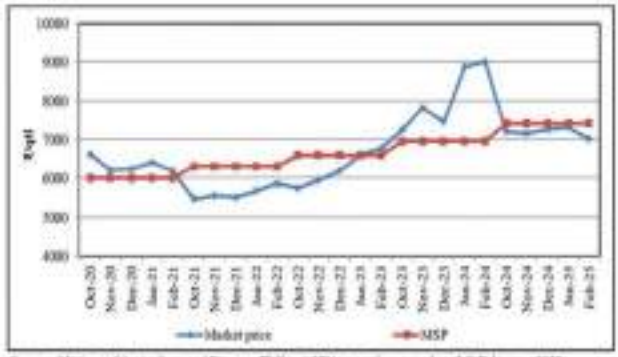
Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed on 24th February, 2023



Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed 24th February, 2023



Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed on 24th February, 2023



Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed on 24th February, 2025



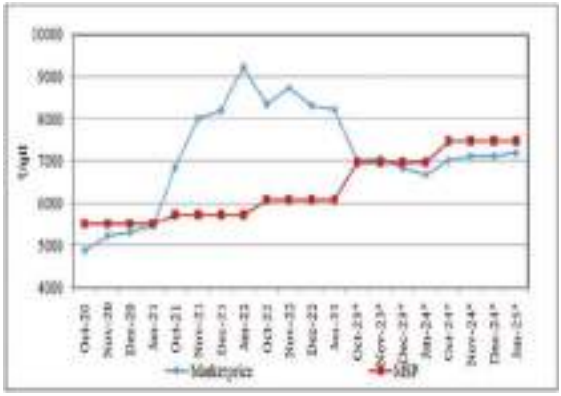
Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed on 24th February, 2025

17.6: Groundnut



Source: Ministry of Agriculture and Farmers Welfare's CEIg portal, accessed on 24th February, 2025





Trends in Domestic Market Prices vis

https://cacp.dacnet.nic.

The trends in domestic market prices vis vis MSP for kharif crops 25) is presented in Figure 17 and for rabi crops 25) in Figure It can be seen that paddy market prices remained above MSP while the same were below MSP for Nov 2024, but then exceeded MSP in Dec 2024 & Jan 2025. Among pulses, market prices of were above the MSP but fell below the MSP in Jan 2025, whereas market prices of the MSP. In the case of oilseeds, groundnut and soybean crop market prices remained much below the MSP, while for cotton, it descended below the MSP in December 2023 and remained below the MSP, which continued ahead. The wheat and barley crop s remained above the MSP for 2024 25RMS (except in

April 2024 for barley). The market prices of gram witnessed a rise from 24RMS, which continued in the next season and remained higher than MSP. The market prices for lentil crop produce went down belo the MSP in March 2023 and remained below for both marketing seasons. The market prices of R&M were below the MSP in 2024 narrow gap, while the market prices of safflower stayed well below the MSP in the same year.

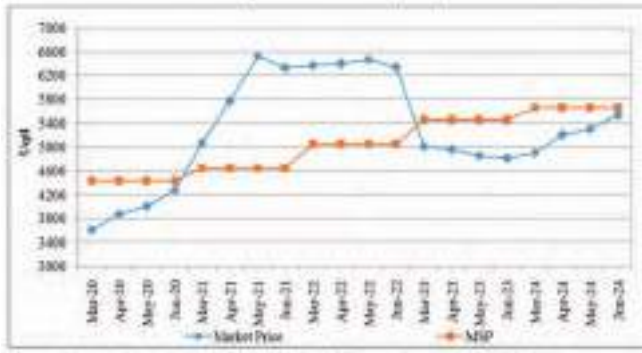




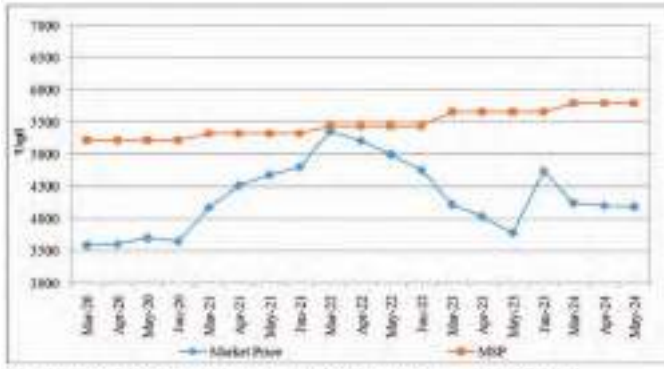




18.5: Rapeseed & Mustard (R&M)



Source: Ministry of Agriculture and Farmers Welfare's UMIg portal, accessed on 3 July, 2024



Source: Ministry of Agriculture and Farmers Welfare's UMIg portal, accessed on 3 July, 2024

Trends in Domestic Market Prices vis

Thus, the above discussion clearly indicates volatile market prices prevailing in domestic markets, which affect the level of income of farmers. Volatility and instability in the prices of agricultural produce have always been a major concern for producers. NABARD (2019 survey) indicated that 18% sample households had faced problems due to fluctuations in the market price of crops, etc. Thus, it required discussion policy issues and reforms in marketing administered by the governments, which is presented in net section.

Policy Issues

It has been acclaimed that rice and wheat producers have benefited due to the price policy, as prices were well above production cost. It seems to have also encouraged farmers investment in yield enhancing technolo to increase production and enable sufficient procurement for buffer stocks (Dev and Rao 2010). Several scholars have discussed the problems encountered while considering the cost of production for the purpose of MSP (Kahlon and Tyagi 1983; Acharya 2001; Acharya and Agarwal 1994; Deshpande and Naika 2002; Mittal and Mukherjee 2008; Haque 2015; Chand 2018; Mittal 2018). Also, poor marketing and implementation mechanism was cited as another reason for making it ineffective for the farmers. Many committees were constituted in recent years to review the current price policy format. These include Abhijit Sen Committee 2000, Y.K. Alagh (2005); National Commission for Farmers 2006 (M.S. Swaminathan), etc. As per the recommendations of the vari Committees, MSP policy, buffer stocking and distribution of subsidised food grains are continued.

Marketing Reforms

The Agricultural Produce Marketing (Regulation) Act (APMRA) is administered by the respective State Government to operate agricultural marketing in the state. APMRA implemented in various states during the 1960s and 1970s brought radical changes and significant improvement in almost all aspects of marketing of farm produce (Acharya, 2004; Chand, 2012). Though agriculture is a state subject, the Central Government has attempted to reform the marketing system through all possible interventions and suggestions guidelines. Very few states have adopted the same. Some experts suggest moving agricultural marketing to the

concurrent list, so that the required changes can be implemented quickly and smoothly (Chand, 2012). In recent times, new initiatives, either in terms of new MSP or new marketing models, have been introduced 2018). These are as follows:

The Union Government has introduced a Central Sector Scheme for Promotion of National Agriculture Market through Agritech Infrastructure Fund with a budget allocation of Rs. 200 crore on 1 through a common electronic market platform, called the electronic National Agricultural Market (e August, 2025, about 1522 APMCs of 22 States and 4 Union Territories have been integrated with this platform. In May 2018, the Government formulated and released a Model Act UT Agricultural Produce & Contract Farming and Services (Promotion & Facilitation) Act, . The Union government had passed three bills in 2020, which were repealed in 2021 due to protests by farmers. A market assurance scheme was also proposed to safeguard producers from sale a harvest prices than MSP. Several other reforms in the market have been adopted by the Central and State governments. However, markets are still not as efficient as they should be. The failure of APMC market in achieving its mandate has a significant negative effect on the income of farmers in India.

Status of Farm Income

The grave condition of farmers income from crop production has been reported by many researchers. The aggravating crisis condition of farming households can be seen from large number of farmer suicides in some pockets of the country (Kalamkar, ., 2017) and recorded response of 40 percent of farmers households that they did not like farming because it is not profitable, risky and it lacks social status (NSSO, 2005a & b, Narayanamoorthy, 2016). While 40.3% of total cultivators have reported owing an average debt of Rs. number of cultivators (by 7.1%) and increasing number of agricultural labourers (by 3.5%) during 2001

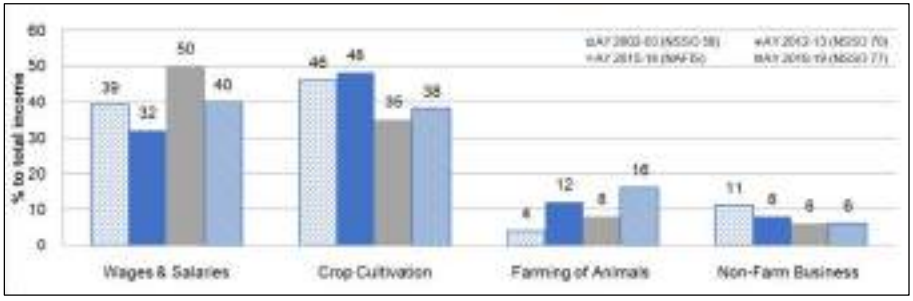
Although India has been an agrarian economy, the issue of farmer income has not been recognised as an issue among policymakers and researchers till the late 1990s (Deshpande ., 2004; Sen & Bhatia, 2004).

were considered the default unattended mechanism to produce crop output for a nation without paying any attention to its . The distress sale in agriculture and suicides by farmers have brought out a serious state of agriculture (Kalamkar and anamoorthy, 2003; Narayanamoorthy and Kalamkar, 2005; Sainath 2010). The pitiable condition of the farm households has also been clearly narrated using SAS data by the Expert Group on Agricultural Indebtedness under the Chairmanship of Prof. R. Radhakrish 2007). Comprehensive studies directly focusing on farm income at the macro level in India were not available till the publication of Situation Assessment Survey (SAS) data (NSSO, 2005a, b). In view of having the proper required data, terms of trade computations between agriculture and other sectors were used to judge the performance of the sector (& Tyagi, 1980; Gulati &Rao, 1994; Misra & Hazell, 1996; Misra, A large number of scholars have studied the trends in farm income Cost of Cultivation Scheme (CCS). Sen and Bhatia (2004) & . (2015) found that income per farmer was tiny and scanty to pay even for fundamentals. Few researchers reported that remunerative support the farmers in rationing limited resources among crops (Schultz, 1964; Acharya, 1997; Deshpande, 1996; Rao, 2001). Gulati (2012) argued that a hike in MSP is necessary to get positive returns and to propel the agricultural gross domestic product (GDP). But Bhalla (2012) countered that increasing MSP of paddy is dirty economics and dirtier politics . With the focus on the impact of MSP on farm income, Dev and Rao (2010) found that the value of output has been more than the costs in both paddy and wheat throughout the period of analysis. anamoorthy (2013) found an insignificant increase in the profitability of food grain crops at constant prices, mainly because of a increase in the cost of cultivation. questioned the validity of the estimates made based on Cost of Cultivation

The goal to double farmers income was set by the government for the fiscal year 2022 23. As there were no concrete statistics on farmers income, the Doubling of Farmers Income Committee (Dr Ashok Dalwai Committee) extrapolated NSSO data and estimated the income of Rs. per year for the year 2015

https://pib.gov.in/PressReleasePage.aspx?PRID=1737287.

see the datasets of the last four NSSO rounds survey on composition of of agricultural households (19). The average monthly agricultural household income has increased from Rs. 2115/ 13) and then to Rs. 10084/ 19 in absolute terms. Across the sources of income, income from wage labour was prominent, contributing roughly half of the income). Crop cultivation income contributes around 35 38%, followed by farming of animals and non farm business. The annual income level



Change in Source wise Share in Total Income
of Agriculture Households

Compared data without taking into account the definition of households in these reports
NSSO (2005, 2014, 2021) and NABARD (2018

presented by NSSO SAS survey data results (2003 19) and NABARD NAFIS survey data are presented in Figure 20. The annual income of agriculture households estimated by NABARD (2018) was Rs. 122616/ , which was close to the NSSO (2021) figure of per household.



Annual Income for

NSSO (2005, 2014, 2021) and NABARD (2019

It was disheartening to note that the share of income from wages has increased from 32 per cent in 2012 13 to 40 per cent in 2018 implies that farmers are turning into daily wage l households are engaged in wage labour and rearing animals to overcome the low and declining incomes from crop production. The reduced incomes from crop production would become more pronounced if the imputed costs (of inputs and family labour) are also considered for incomes. The current state of agricultural incomes shows that the policy measures must go beyond income support to address the structural issues, such as the increasing cost of cultivation and the lack of e prices received by farmers.

Conclusions and Policy Implications

During the last seven decades, different agricultural economic policies and various interventions have been pursued by the government. However, even with many interventions, the struggle of farmers still continues, and farming has become an unremunerative activity/business in India. Only the enhancement of MSP for selected crops may not assure higher returns for cultivators without strengthening the infrastructure procurement. Procurements should be done immediately after harvesting is over. The farmers need to be supported with inputs and technology, smart credit, and an efficient market to motivate for quality produce. The cold chain and agricultural processing need to be improved to reduce post harvest losses. Speedy and proper dissemination of market needs to be focused which helps farmers in production, planning and taking marketing decisions regarding crop produce. There is a need to focus on crop diversification, post production activities to enhance agricultural growth and reduce rural

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Minimum Support Price in India: Challenges and Alternative Policy Pathways

R.S. Pundir and Remalli Anthony

The Minimum Support Price (MSP) provides a safety net by guaranteeing minimum remunerative rates for 23 major crops, helping protect farmers from price volatility. However, its effectiveness is limited as high procurement remains largely confined to paddy , resulting in regional imbalances, ecological strain, and rising fiscal costs. This study examines the limitations of the MSP framework and explores alternative interventions such as direct benefit transfers, procurement, price deficiency payments, and market intelligence systems. A key focus is placed on the Anand Agricultural s Centre for Agricultural Market Intelligence (under CAAST), which leverages machine learning, AI, and satellite data to craft multivariate forecasting models and real The findings suggest that combining MSP with predictive, data strategies offers a more equitable, efficient, and sustainable agricultural

Minimum Support Price (MSP), Agricultural Po Support, Price Fluctuations

Introduction

The total Food grain production in the country during 2023 estimated at record 3322.98 LMT which is higher by 26.11 LMT than the production of food grains of 3296.87 LMT achieved during 23. Food grain production witnessed record increase due to g production of Rice, Wheat and Shree Anna (Ministry of Agriculture & Farmers Welfare, 2024.) Despite the optimistic outlook, farmers are not rising as anticipated, and widespread distress persists. Even though the government announces the Minimum Support Price (MSP)

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for 23 crops, the procurement is very low for most crops, with the exception of paddy and wheat (Narayan and Saha, 2020). MSP is the minimum rate at which farmers sell their crops to the government. This price prevents farmers arket fluctuation and offers stability and income security. The CACP (Commission for Agricultural Costs and Prices) established in 1965, recommends the MSP based on various factors and the Cabinet Committee on Economic Affairs, headed by the Prime , takes the final call on the MSP. Although MSP could serve as a valuable tool to shield farmers from distress sales and price fluctuations, its effectiveness is often questioned due to issues with its implementation and the way it is calculated. Against this backdrop, this article titled **Minimum Support Price in India: Challenges and Alternative Policy** attempts to address some pertinent issues and suggest possible alternatives to the MSP.

Discussion

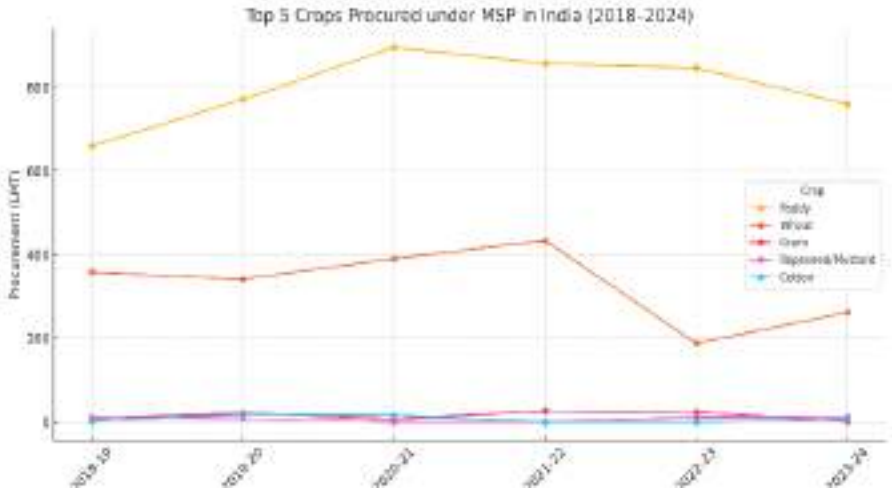
The Commission for Agricultural Costs & Prices (CACP) is the major institution under the Ministry of Agriculture and Farmers Welfare, Government of India established in January 1965, plays a crucial role in recommending Minimum Support Prices for agricultural produces. The Commission consists of a Chairman, Member Secretary, one Official Member, and two Non Official Members, who are typically representatives from the farming community. The primary goal of the CACP is to suggest MSPs for various crops, ensuring that farmers are encouraged to adopt modern farming technologies and improve productivity, while meeting the growing demand for crops in the country. MSPs are intended to provide a stable price environment for agricultural products, which is essential given the volatility of market prices. The uncertainty in the marketplace often leads to significant losses farmers, even when they follow advanced agricultural practices. To mitigate this, the government sets MSPs for key agricultural commodities based on the Commission s recommendations each year. Currently, CACP recommends MSPs for 23 major commodities, which include 7 cereals, 5 pulses, 7 oilseeds, and 4 commercial crops. When determining MSPs, the CACP considers several important factors outlined in its Terms of Reference from 2009. These include: 1) the demand and supply dynamics, 2) production costs, 3) price trends in domestic and international markets, 4) inter crop price parity, 5) the terms of trade

between agriculture and non agriculture sectors, 6) ensuring a margin of at least 50 per cent over the cost of production, and 7) the potential impact of MSP on consumers. While production costs are an important , they are not the only consideration when setting MSPs (Commission for Agricultural Costs & Prices, 2024). The minimum price (MSP) for agricultural produce is calculated by considering the cost of production, supply and demand, and market price trends. The Swaminathan Commission recommended a formula for calculating MSP 50%. C2 is the comprehensive cost of production, which includes: out costs, Family labour, Imputed rent on owned land, Interest on owned capital. is the cost of production that includes direct costs incurred by farmers, plus the value of unpaid family labour. The government sets the MSP at a level that is at least 1.5 India weighted average cost of production of A2 + FL.

Table 1 provides the MSP for various Kharif and Rabi crops in India 24. The MSP for Kharif crops like paddy, maize, and cotton has shown a consistent upward trend, with significant increases in crops like jowar and ragi. Rabi crops like wheat, gram, and mustard also exhibit steady growth in MSP. The MSP for o pulses, and other crops like copra and jute reflects rising prices over the decade, ensuring farmers interests are safeguarded. Overall, the MSP reflects the government s effort to support agricultural income amidst inflation and changing market

Figure 1 below shows how the Government of India procured the top five crops under the Minimum Support Price (MSP) scheme from 2018 to 2024. Among all, paddy had the highest procurement in every year, reaching a peak in 2020 21 and then gradually declining by 2023 Wheat was the second most procured crop, with a steady increase until 22, followed by a dip in 2022 23 and a small rise in 2023 Gram (chana) showed sharp fluctuations, with a big increase in 2019 22, but a major drop after that. Cotton also showed variation, rising sharply in 2019 21, dropping to zero for two years, and again increasing in 2023 24. Mustard had very low or no procurement for two years, but its number improved notably in 2022 24. Overall, the graph highlights how procurement under MSP has been highest for paddy and wheat, while other crops show changing trends based on market needs and government policies.

wise Minimum Support Price (MSP) of Kharif and
i Crops in India 2014 24 (Rs. per Quintal)



Five Crops Procured under MSP in India (2018

The data on the (MSP) in Table 1 and the quantity of procurement under 1 are closely linked, reflecting the government to support farmers through price guarantees and procurement mechanisms The rise in MSP for crops like paddy, maize, and cotton, as shown in Table 1, aligns with significant procurement levels for these crops in Table 2, particularly for paddy, which consistently tops procurement figures. However, while MSP has steadily increased for several crops, the ata reveals variability in the quantities purchased by the government. For instance, despite an increase in MSP for crops like gram and groundnut, procurement figures for these crops have fluctuated, with some years showing a sharp decline (e.g., 2023 for gram and groundnut). This suggests that procurement is not solely driven by MSP increases, but also by factors such as production levels, market conditions, and policy adjustments. Overall, while MSP increases aim to ensure fair prices for farmers, the actual procurement reflects the complex dynamics between government policies, crop production, and market demand.

Table 2 presents the number of farmers benefitting from the MSP scheme across various crops from 2018 to 2024, paddy consistently he highest number of farmers, reflecting its importance in India agricultural economy, with over 12 million farmers benefitting annually. crops like cotton, gram, and wheat also show substantial

participation, although their figures fluctuate across the years. Certain crops, such as safflower, sesamum, and Niger seed, have minimal or no participation in the MSP scheme. The total number of beneficiaries peaked 2020 at over 20 million, before slightly declining in subsequent years, indicating possible shifts in government support or crop priorities.

wise Number of Farmers Benefitted under Minimum Support Price (MSP) in India (2018

The implementation of the Minimum Support Price (MSP) system faces several challenges and controversies, as highlighted in recent reports. While MSP is designed to protect farmers from distress sales and price fluctuations, its coverage is limited, primarily benefiting crops like paddy and wheat, with other crops receiving minimal support. This has resulted in significant regional disparities, where some states receive substantial benefits, while others are left out. Additionally, the MSP system has tently encouraged the rice wheat cropping pattern, leading to environmental concerns such as water scarcity, soil degradation, and burning. The financial burden of MSP on the government is also a key issue, with food and fertilizer subsidies accounting for a large portion of the national budget. Furthermore, India s MSP system has faced scrutiny from the World Trade Organization (WTO), as the government has often had to invoke the Peace Clause to exceed permissible subsidy limits. These challenges underscore the need for a comprehensive review of the MSP system, with a focus on ecological sustainability, equitable for all crops, and fiscal responsibility.

Alternative Policy Interventions to MSP in India

Price Deficiency Payment (PDP) Schemes

The government pays farmers the difference between MSP and market price without physical procurement. the Rabi 2023 24 season, the Government of India procured 6.41 Lakh Metric Tonnes (LMT) of pulses worth Rs. 4,820 crores at Minimum Support Price (2.75 lakh farmers. This included 2.49 LMT of Masoor (lentil), 43,000 Tonnes (MT) of Chana (gram), and 3.48 LMT of Moong. In addition, 12.19 LMT of oilseeds valued at Rs. 6,900 crores were procured from 5.29 lakh farmers. At the beginning of the Kharif 2024 season, market prices of soyabean were significantly lower than the MSP, creating financial stress for farmers. To address this, the Government of India intervened under the Price Support Scheme (PSS), a component of PM AASHA, and by December 11, 2024, had procured 5.62 LMT of soyabean worth Rs. 2,700 crores, benefiting 2,42,461 farmers. (PIB,

Bhavantar Bhugtan Yojana (BBY) in Madhya Pradesh (2017): Provided compensation for select crops like soybean, maize, and pulses.

to the NITI Aayog (2018) report titled *Evaluation Study on Efficacy of* , one of the key advantages of alternative procurement mechanisms is the reduction in procurement and storage costs, which eases the financial and logistical burden on the government. These mechanisms also encourage crop diversification by motivating farmers to move away intensive or overproduced crops. Additionally, they help in avoiding market distortions that typically arise due to excessive government intervention. However, the study also highlights certain limitations. The effectiveness of such systems depends heavily on the availability of accurate and transparent market price data. There is also some risk of price reporting or cartelisation by traders, which can undermine the intended of the system and reduce the income security for farmers.

Direct Income Support to Farmers

Direct cash transfers to farmers regardless of crop prices, to ensure income stability under Pradhan Mantri Kisan Samman Nidhi (PM KISAN), income support of ₹ 6,000 per year is provided to all land farmer families in three equal installments. As on 30th June, 2025, the benefits of the scheme worth more than ₹ 3.69 Lakh Crore have been provided to beneficiary farmers families. This scheme helps substantially to mainly small and marginal farmers who account for some 86 per cent and constitute core production system in the country.

The Rythu Bandhu scheme in Telangana has been one of the largest direct benefit transfer programmes for farmers in India. Since its launch, the scheme has provided financial assistance to over 70 lakh land farmers, offering ₹ 5,000 per acre per crop ₹ 5,000 for Kharif ₹ 5,000 for Rabi ₹ 10,000 per acre per year to help with input costs. As of March 2024, around 64.75 lakh farmers received ₹ 5,575 crore for the Yasangi (Rabi) season, covering over 1.11 crore acres. Earlier, during the 11th tranche in Kharif 2023 government disbursed ₹ 7,624.74 crore to 68.99 lakh farmers for 1.52 acres. In total, by that point, the scheme had distributed over ₹ 72,815 crore. With the upgraded version, called Rythu Bharosa, the payment was increased to ₹ 6,000 per acre per season. By February 2025, this version had supported 34.69 lakh farmers, disbursing ₹ for nearly 37 lakh acres.

The Government of Andhra Pradesh announced the Scheme 2024 25 under the Super Six programme to provide financial assistance to farmer families, including tenant farmers, each farmer receives Rs. 20,000 per year, including Rs. 6,000 from the PM KISAN Scheme of GOI for landholder farmers. The scheme, the predecessor to the Annadatha Sukhibhava programme, was a comprehensive farmer welfare initiative implemented by the Government of Andhra Pradesh. Unlike the central PM ich provides benefits only to landholding farmers, YSR Rythu Bharosa extended financial assistance to both land owning and tenant farmers, including oral lessees and cultivators with valid records. Under this scheme, approximately 52 to 53 lakh farmer families received annual ₹ 13,500, which included ₹ 6,000 from PM KISAN and the remaining amount from the state government. By early 2024, the state had disbursed a total of ₹ 34,288 crore under this scheme. In February 2024 alone, ₹ 1,294 crore was transferred to over 53 lakh farmers, benefitted from the scheme, highlighting the state s inclusive and sustained support for the agricultural community (Socio Economic Survey, AP, 2024.)

The income support model of agricultural assistance, such as direc transfers, offers several advantages and limitations. One of its key strengths is its simplicity in administration, making it easier for to implement and monitor. It also ensures a predictable and timely income for farmers, which helps them plan their cultivation and expenses better. Importantly, this model decouples support from actual crop production, thereby avoiding the distortions in market and overproduction often caused by input subsidies or price support schemes. However, it also has notable limitations. These payments are not linked to real time market conditions or the actual costs of cultivation, which can vary widely by region, crop, and season. As a result, the fixed support amount may be inadequate for high during years with poor harvests. *ICRIER, 2018, Policies in India*

Strengthening Market Infrastructure and E

As of 31st December 2024, the Government of India had successfully integrated 1,410 mandis with the electronic National Agriculture Market

NAM) across 23 States and 4 Union Territories. The platform has registered around 1.79 crore farmers and 2.63 lakh traders, facilitating wider participation in digital agricultural trade. Since its launch, e has recorded a total trade volume of 11.02 crore metric tonnes and 42.89 crore units (including bamboo, betel leaves, coconut, lemon, and sweet corn), amounting to an estimated trade value of ₹ 4.01 lakh crore. This reflects a growing shift toward digital and transparent market systems for Indian agriculture.

These efforts aim to improve farmers access to competitive markets, enhance price discovery, and reduc dependence on MSP based procurement. By modernizing mandis, promoting e NAM, and enabling private markets and contract farming under the Model APMC Act, the government is encouraging greater private investment in agri infrastructure. However, key challenges remain, including inadequate digital infrastructure in rural areas and resistance from traditional mandi operators who are hesitant to embrace market reforms. (*Agriculture & Farmers Welfare, 2020, NAM Progress Report*

op Insurance and Risk Management

To mitigate price and yield risks faced by farmers, the government has implemented several key initiatives, including insurance schemes and harvest financing mechanisms. One major programme is the Pradhan Mantri Fasal Bima Yojana (PMFBY), launched in 2016 to address issues such as high premium rates and reduced sum insured due to capping under earlier schemes. Over the past eight years, 63.11 crore farmer applications have been enrolled under PMFBY, and more than crore (provisional) applicants have received insurance claims ₹ 1.65 lakh crore. During this period, farmers contributed ₹ 32,482 crore as their share of premiums. For every ₹ as premium, farmers have received approximately ₹ 508 in claims, showcasing the scheme s significance in protecting farmers from crop losses and climate

In addition, the Warehouse Receipt Financing system enables farmers to delay distress sales and access institutional credit by pledging th produce. On 16 December 2024, the Government of India launched the Credit Guarantee Scheme for e NWR Based Pledge Financing (CGS

NPF) with a ₹ crore corpus, aimed at supporting post . This scheme allows farmers to obtain loans against electronic negotiable warehouse receipts (e NWRs) issued by WDRA warehouses. The initiative helps bridge the financial gap in agriculture and promotes the development of storage infrastructure closer to farms. risk management tools encourage rational crop choices and offer protection against market and weather uncertainties. However, challenges such as low enrolment rates and delays in claim settlement still persist. *(CACP Reports, NABARD, 2022, Report on Agricultural Risk*

Decentralized Procurement with Crop Diversification

Encourage states to procure underutilized crops like pulses, millets, and oilseeds, suited to agro climatic conditions.

Decentralized Procurement (DCP) for rice/wheat has expanded to 17 es for rice and 9 for wheat as of 2023 24. In the procurement year 22, DCP states procured 317.3 LMT of rice (out of 522.7 LMT total), contributing 60.7 per cent, and 186.2 LMT of wheat (out of 468.4 LMT), contributing 39.7 per cent to the national po procuring DCP states included Chhattisgarh (61.7 LMT), Odisha (53.5 LMT), and Telangana (54.3 LMT), while Madhya Pradesh (128.2 LMT) led wheat procurement. The scheme has led to improved cost and operational efficiency, with DCP states like Odisha and Chhattisgarh achieving lower procurement costs per quintal due to better infrastructure and logistics. It has also reduced the burden on the Food Corporation of India (FCI) and enhanced local accountability, enabling states to manage nt and distribution based on regional needs. This decentralization supports a more responsive and resilient food security system (PIB, 2024).

cereal procurement under Poshan Abhiyaan
POSHAN Abhiyaan (formerly Mid Day Meal Scheme),
of India has taken steps to integrate nutri cereals (millets) into school meals to enhance the nutritional intake of children. As of 2021 approximately 6.07 lakh metric tonnes (LMT) of millets were procured by various States and Union Territories for distribution through schemes such as PM POSHAN, Targeted Public Distribution System (TPDS), and Integrated Child Development Services (ICDS). This marked a

shift toward improving dietary diversity and combating malnutrition among schoolchildren by including traditional, nutrient rich grains like millets in daily meals. The initiative supports both nutritional goals and millet farmers by ensuring a stable demand through institutional procurement.

Decentralized Procurement with Crop Diversification helps promote dietary diversity and agroecological balance by encouraging states to procure locally suited crops like millets, pulses, and oilseeds. It also reduces pressure on central storage and transport systems. However, its success depends on states having adequate procurement and distribution , which can vary across regions. *(FAO & Government of India,*

Contract Farming and PPP Models

Under contract farming, private buyers enter into agreements with farmers for assured purchase and support. Agriculture and agricultural marketing fall under the jurisdiction of state governments in India. As of now, 15 States and Union Territories have introduced enabling provisions for contract farming within their respective Agricultural Produce Committee (APMC) Acts. These provisions establish an institutional framework that includes registration of sponsoring companies, formal recording of contract farming agreements, and legal safeguards to protect land. Additionally, any disputes between farmers and contracting parties are addressed through a specified arbitration and dispute resolution mechanism, ensuring a structured approach to resolving conflicts within the framework of the agreement.

Such models offer benefits like price assurance, technical guidance, and reduced exposure to market volatility. However, challenges persist, in terms of power imbalance between large corporates and small or marginal farmers. Therefore, strong regulatory safeguards are to ensure fair terms and protect farmer interests. *(World Bank, Enabling the Business of Agriculture India Country Report*

Market Intel

Market intelligence plays a critical role in strengthening agricul value chains by enabling informed decision making among farmers,

policymakers, and market players. In a sector vulnerable to frequent price volatility, erratic supply demand fluctuations, and climatic risks, access to timely and accurate market information is essential. Yet, India agricultural policies and reforms such as the modified APMC Act and have historically paid limited attention to structured, real market intelligence. Most farmers continue to rely on post harvest prices mal sources, leading to income uncertainty, inefficient cropping decisions, and distress sales. Bridging this information gap with robust analytical tools is vital to achieving sustainable agricultural development farmer empowerment.

The Centre for Agricultural Market Intelligence at Anand Agricultural University (AAU), established under the NAHEP CAAST project, serves as a model initiative in this direction. This centre has attempted to integrate machine learning, AI, and satellite data to develop mult forecasting models for price and demand, supply projections using different methods for food crops, dairy, and fisheries. However, there is further need to refine and standardise these models. It conducts training, workshops, and certificate programs in data analytics, while providing farmers with real time advisories through platforms like the mobile app developed in association with Western Sydney University of Australia and the App has six modules namely my farms, my crops, ommunity, market intelligence and feedback available in English, Hindi and Gujarati. The centre also conducted rigorous study linked APMCs. Its success has demonstrated that predictive, enabled market systems can improve farm level decision which eventually enhance farmers income substantially.

Market intelligence generated based on rigorous analysis of data of all possible factors and disseminated timely to the farmers and policy makers can go a long way in enhancing famers income and reducing dependence on MSP. Further, it empowers farmers before sowing with better insights, reducing their dependence on post harvest procurement. Therefore, it is suggested that similar Market Intelligence Centres be established across India. These centres can transform Indian agriculture into more paying and attractive proposition by providing real backed price and market forecasts, supporting better crop planning, risk mitigation, and ultimately ensuring more resilient and self reliant farming communities.

CAAST, Anand Agricultural University (AAU))

Way Forward

To improve agricultural marketing and price support mechanisms, India should adopt a phased transition from physical procurement to alternatives like direct benefit transfers (DBT) or price deficiency payments, ensuring farmer income support while reducing fiscal and logistical burdens. This shift must be accompanied by targeted procurement interventions, focusing MSP only on key food security crops in deficit or vulnerable s. At the same time, robust market reforms are needed strengthening APMC reforms, scaling up Farmer Producer Organizations (FPOs), and promoting private mandis and rural aggregation platforms to improve price discovery and market access. Crucially, the suc these reforms hinges on the integration of market intelligence systems that offer real time, price forecasting, demand supply analytics, and timely advisories to farmers. Establishing such centres nationwide would empower farmers with data ecisions. Finally, to ensure long sustainability, policy support must be aligned with environmental and nutritional goals, incentivizing crop diversification, reduced resource use, and the inclusion of climate resilient crops like millets and pulses i procurement and food systems.

Conclusion

The MSP system continues to be a cornerstone of India s agricultural policy, but its scope is constrained by fiscal pressures, limited coverage, and environmental trade offs. Greater emphasis is needed on alternatives such as direct income support, price deficiency payments, decentralized vate aggregation models, market intelligence, and decentralized decision making aided by technology. While traditional MSP and contract farming are important, the market intelligence approach empowers farmers to take informed crop production and selling cisions in advance. Establishing Market Intelligence Centres nationwide would enable farmers to access localized, data driven insights, facilitating better crop planning, risk reduction, and improved income, thereby complementing and enhancing the MSP para

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Agricultural Marketing Reforms in India

Shrikant Kalamkar and Hemant Sharma

Introduction

Food and nutrition security has remained one of the top priorities of policy planners in post Independence India. In the 1960s, food exchange shortages led to major political challenges after the United States had decided to use food exports as an instrument of foreign policy (Birner 2011). As a consequence, the Government India (GoI) had adopted policies that aimed at making the country sufficient in food grains production (Subramaniam, 1995). Over the last seven decades, India has made significant advances towards achieving goals of rapid agricultural growth, improving food security, and reducing rural poverty. Since independence, major strides have been made in production of food grains, not only due to increase in cultivated but also due to technological development in agriculture. As a result, the food grains production has increased from 50.82 million tonnes (mt) 51 to 357.73 mt in 2024 25 (GoI, 2025[1]

sufficiency in food grains was met, the policy makers realized the need for diversification of agriculture to achieve higher growth rates. It also wanted to address the changing consumption pattern of the population which was experiencing urbanization and rising per capita . Thus dairy, horticulture, poultry and other allied sectors were given impetus and were being promoted through various policy measures. production strategies, public investment in infrastructure, research and extension for crops, livestock and fisheries have significantly contributed in increasing the agricultural productivity (Kumar and Mittal, 2006) and improvement in performance of agriculture (Chand and Srivastva, 2016). These policies were immensely successful and by seventies and India had become virtually self production of food grains along with impressive gains in the production

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GoI (2025), https://www.pib.gov.in/PressReleasePage.aspx?PRID=2192315&reg=3

of milk and sugar. During last seven decades, it has set new milestones in its progress. India now ranks first in the world in production of pulses (25.68 mt) and milk (247.87 mt), second in wheat (117.95 mt), rice (150.18 mt), groundnut (11.94 mt), sugarcane (454.6 mt), cotton (29.72 m bales), fruits (118.8 mt) and vegetables (215.7 mt) and third in production of total cereals (332 mt), rapeseed (12.67 mt), tea (1.39 mt) and eggs (249.1 billion) (GoI, 2025). This increased production has brought in its wake new challenges to handle in terms of huge marketable surplus. A dynamic and vibrant marketing system with adequate supply chain infrastructure has been felt necessary to keep pace with the changing agricultural production and growing marketable surplus. In addition, there has been increasing pressure on agriculture produce economy to respond to the challenges and opportunities that the global markets pose in the era of globalization and liberalization. Markets play a vital role in the farm economy, and the marketing process does not ecessarily support farmers but hinders the entire livelihood of the farm household. However, agricultural marketing did not receive the required and adequate attention during these years. The marketing system and marketing institutions were plagued by inefficiencies, excessive bureaucratic control, and politicization. The post harvest management and development of efficient markets and supply chains have also largely been neglected in policy making. Besides, existing agricultural marketing system suffers from inefficiency, disconnect between prices received by producers and the prices paid by consumers, fragmented marketing channels, poor infrastructure & policy distortions (Chand, 2012). Also, there were several regulatory measures that hamper efficient fu
of the domestic market for agricultural commodities and adversely affect both the growers and the consumers (Acharya, 1998).

Issues in Agricultural Marketing in India

Marketing of agricultural produce serves as a link between the farm sector ne hand and rest of economy on the other hand. An efficient agricultural marketing system helps in the optimization of resource use, output management, increase in farm incomes, widening of markets,

These include levy on rice millers; statutory rationing of rice and wheat in Calcutta; monopoly procurement of raw cotton in Maharashtra; levy on sugar mills, and system of state advised prices of sugarcane prevalent in some states.

growth of agro based industry and addition to national income through value addition and employment creation (Acharya & Agrawal, Acharya, 2006).

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spread and success of the green revolution during the 1970s led to an increase in the political power of the farming community and their clout in policy making. This shift was reflected in the creation and strengthening of farmer friendly institutions and a policy environment favourable to farmers. Marketing institutions like market committees, state level marketing boards and many others in the public and cooperative sectors served the interests of the farming community. The system has undergone several changes during the last seventy

the increased marketed surplus; increase in urbanization and income levels. Consequent changes in the pattern of demand for marketing services, increase in linkages with distant and overseas markets; and changes in the form and degree of government interv witnessed (for details, see Kalamkar, 2015). However, over the period of time, after achieving sufficiency in food grains, public policy began losing its focus and targets.

gricultural marketing system in India has made notable pro since independence but many challenges still remain. It is widely understood but rarely articulated that a farmer is the only consumer or producer who enters the market as a price taker and never has the opportunity to set the price (Deshpande, 2025). The farmer remains the sole client at the receiving end in both input markets; when the farmer buys fertilisers, seeds, irrigation water, electricity, or even hires labour, the suppliers decide the price and the farmer has to pay the dictated price.

larly, in the product market, when the farmer takes the produce for selling, the buyer dictates the price, and the farmer is a silent recipient. In these essential markets, the farmer only accepts the conditions set by market operators, which include buyers, officials, input sellers, and other market functionaries (Barrett & Emelly, 2005). Professor Acharya, the leading intellectual and a consistent researcher in agricultural marketing, in his monumental book on the subject, done for the mega study at the Millennium , remarked from his decades of experience that

However, several practices, which were prevailing in the wee years of independence, still continue to a large extent, and new problems h in. These include (a) continued post immediate sales; (b) continued interlocking of credit and commodity markets; (c) lack of proper grading and ackaging at the farm level; (d) e slips to the farmers; and emerging monopoly of APMCs in providing marketing service
2004, p. 36, mentioned by Lele, 1971).

Spread of APMC Markets and Infrastructure Available therein

Efficient marketing is a pre requisite in the development process of any economy as it ensues remunerative process to the production and a reduction in marketing costs and margins, to provide commodities to consumers at reasonable prices and promote the movement of surpluses for economic development (Acharya and Agrawal, 1999). The National Farmers Commission (NCF 2004) had recommended that a regulated rket should be available to farmers within a radius of 5 km (corresponding market area of about 80 square km[3]

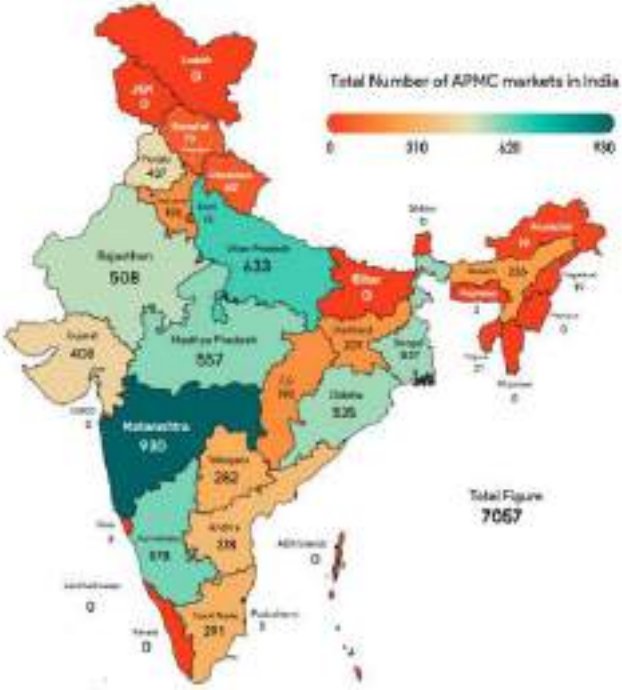
India average area served by a regulated market is 487.40 square km. The number of commodity specific markets with requisite infrastructure is also limited. In its third report, Serving Farmers and Saving Farming, the NCF (2006), identified several gaps in the agricultural marketing sector. These include the uneven and sparse distribution of regulated markets across different states and limited progress in traditional village markets over time. Noticeably, a significant increase in total number of regulated markets in India was observed. In the country, during 1971, there were 2,754 regulated markets, which increased to 705 averaging about 80 new markets annually (1.1 and Map 1.1). However, the growth of market facilities did not keep pace with the growth in market arrivals, forcing producers to seek help from middlemen (Chand, 2012). The expansion of regulated markets in India has been slow, especially after 1991, when market reforms became a priority. Notably, between 1971 and 1991, an average of 192 markets were added each year, but from 1991 to 2024, this pace slowed significantly to about 25 markets annually. Between 1972 to 1991, the total number of regulated markets in the country increased by 125.7 percent, while agricultural (foodgrains) production increased by 67.9

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https://www.pib.gov.in/newsite/printrelease.aspx?relid=137359.

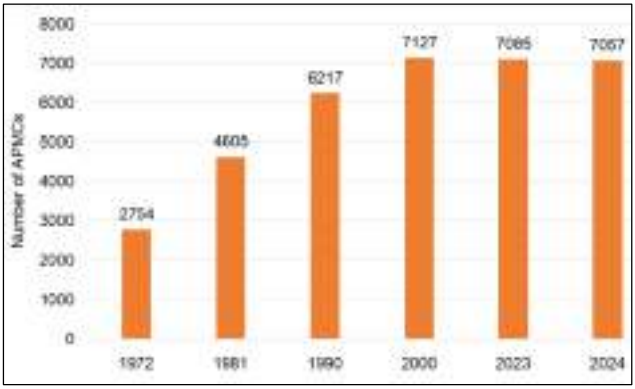
percent. However, after 1991, the number of regulated markets grew only by 13.96 percent in 33 years till 2023, while volume of production increased by 86.8 percent. Thus, marketing infrastructure did not grow with the same pace as the output, which resulted in crowdedness, putting sellers in a disadvantaged position and providing advantage middlemen. Moreover, with small surplus to sell, most of the farmers try to evade these markets (Chand, 2012).

wise number of markets and their growth from 1971 to 2024 is presented in Table 1. Changes are unlikely to be uniform; some states experienced significant growth (Odisha 873%, West Bengal 790%, Rajasthan 213%), but the modest increase in Gujarat (33.3%), Punjab (57.8%), and Uttar Pradesh (75.9%) remains concerning. Actual buying and selling of commodities mainly take place in market and rural periodic markets functional markets (Swaminathan Commission reiterated the point the Royal Commission on Agriculture raised initially, a concern echoed by nearly every expert group formed after 1992.



wise Number of Regulated Markets in India (2024)

GoI (2024). Directorate of Marketing & Inspection, GoI.



Growth in Number of APMCs in India

Directorate of Marketing & Inspection (DMI), Ministry of ure and Farmers Welfare, GoI

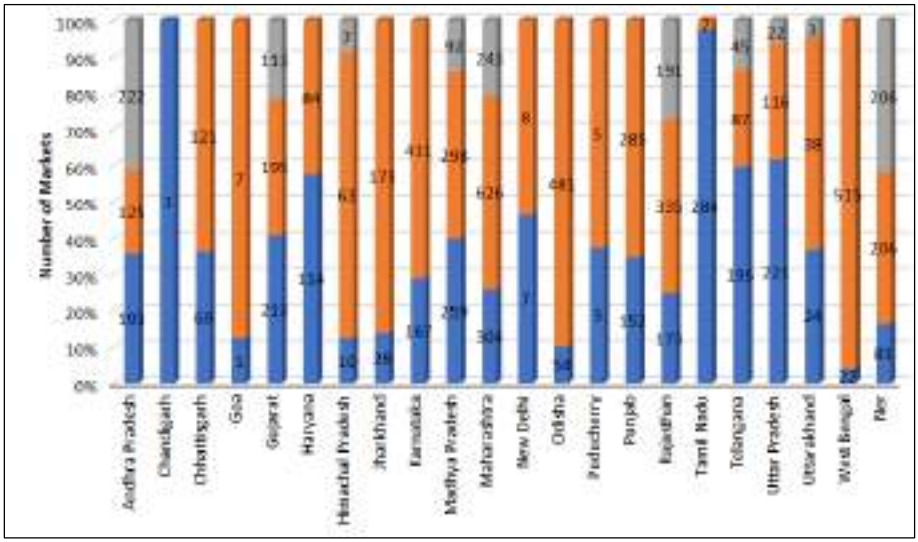
Total Regulated Markets the Major States in India

	Number of Regulated Markets Across the Major States in India						

1,2,3 the data for these states are before reorganisation for creating Telangana, Jharkhand, and Uttarakhand

Directorate of Marketing & Inspection, Govt of India, Reports for various years GoI (2024), (Deshpande (2025).

wise Number of Market Yards (Principal Markets, sub market & non

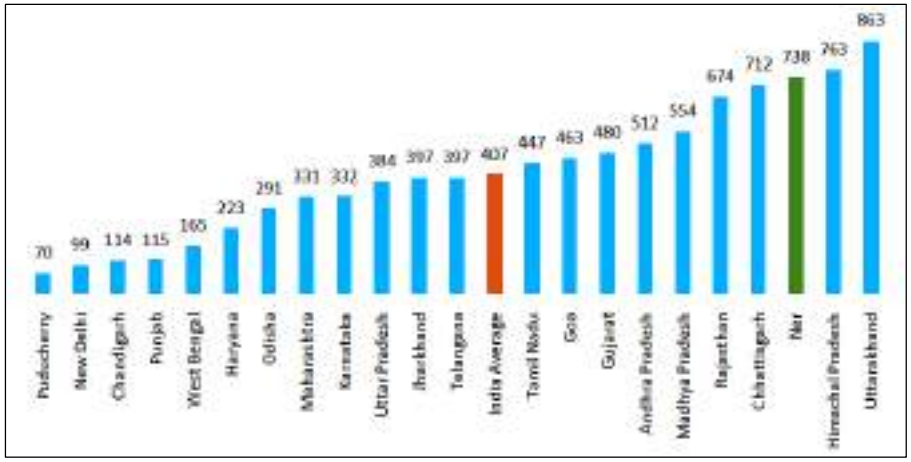


wise Number of Principal Market
Market Yards (SMYS) and Non Functional Market

While the total number of markets does not fully reflect the inadequacy, the density of markets per million hectares of gross cropped area and per square kilometre highlights the ongoing shortfall even in 2023 and 2024. Though there is significant expansion in the number of regulated markets, the area served per market yard is quite high. The farmers are, therefore, required to travel long distances to reach a market place. The low density of markets also discourages farmers from reaching the APM and selling their produce locally, to aggregators, or Adatyas (intermediaries or aggregators). This market density is illustrated in Figure 1.3 and 1.4.

average area served by each market in 2024 was estimated to be 407 sq kms. The high density of markets is reported in Punjab (115 sq/km), West Bengal (165 sq.km) and Haryana (223 sq km), while the lowest of market is reported in Uttarakhand (863 sq km), Himachal Pradesh (763 sq km) and Chhattisgarh (738 sq km). The changes in the density of regulated markets 1971 to 2023 indicate that in 1971, there were 166 markets per million hectares of gross cropped area which has now increased to 338 markets in 2023. Using the average productivity of foodgrains per hectare, we see that in 1971, regulated markets (166 per

hectare) have handled 6024 tonnes of grains per market. By 2023, with the number of regulated markets increasing to 338 per ctares, but now each market is expected to handle 7968 tonnes food grains. This growth undoubtedly exerts additional pressure on the existing marketing system. In addition, the arrivals are seasonal and uneve and there are sudden peaks, with the market facing a glut and prices



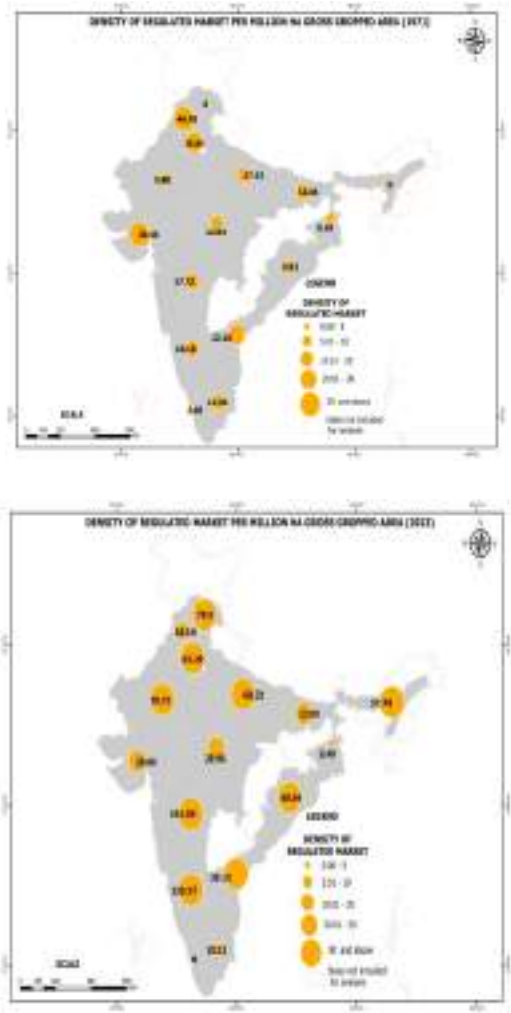
Area Served by one APMC (in sq.km.) as on 31.03.2024

GoI (2024), Draft Regulations.

Over time, these APMC markets have become restrictive and . They have failed not only to achieve their basic objectives owing to restrictive provisions of Acts but have also prevented a seamless integration of farmers and buyers through an efficient supply chain. The supply chain of agriculture produce also remains very fragmented with a large number of intermediaries.

Secondly, Indian agriculture has become increasingly market and commercialized. During the last six decades of planned development in India, there has been continuous increase in Marketed Surplus Ratio (MSR) for all important non cash crops like rice, wheat and maize, and crops like sugarcane, cotton and jute. Particularly, the ratio of marketed surplus in case of rice and wheat have gone up from 30 percent 51 to 81.51 and 77.49 percent in 2012 13, respectively. The increase was more significant in maize (from 24 per cent to 84.32

) followed by jowar (24 per cent to 64.14 percent) during corresponding period. In the early 1950s, about 30 35% of food grains output was marketed, which increased to more than 70% in recent years (Sharma and Wardhan, 2015).



Changes in the Density of Regulated Markets 1971 to 2023

The maps are based on data from the Directorate of Agricul
Ministry of Agriculture and Farmer Welfare, Government of India. Data for Jammu and Kashmir and a few states were not available

Agricultural Statistics at a Glance, 1980 and 2025.

Third, despite significant increase in quantity of marketed surplus and increase in market income through market fee charged, there has been huge gap in marketing infrastructure. The Working Group on Agricultural Marketing for the XII FYP noted that there has been virtually no progress in setting wholesale markets (except Kerala) and highlighted the gaps in the marketing infrastructure (Planning Commission, 2011).
indicate that covered and open auction platforms exist only in 2/3
regulated markets, while only 1/4 of the markets have common drying yards. Cold storage units exist in only 9% of the markets and grading
in less than 1/3 of the markets. Electronic weigh
available only in a few markets (NABARD, 2020). Rural periodic markets
are basically primary assembly markets such as *Haat, Bazzar*
most neglected. There is wide variation in their governance. Most of them do not have even basic amenities. Due to the glaring gaps in marketing infrastructure, existing markets operate very inefficiently and the transaction costs are high. Thus, one third of regulated markets
country do not have a common auction platform. The infrastructure
marketing perishables like fruits and vegetables which require special facilities for storage and processing are very inadequate (Planning Commission, 2007). Also marketing system suffers from multiple tax regimes and multiple licensing systems which increase transaction cost and reduced marketing efficiency.

Besides, multiple handling by various players in the fragmented supply chain and the lack of warehouse and cold storage facilities also result in
harvest losses. There are huge post harvest losses (10
perishables like milk, meat, fish and eggs). The estimated losses in frui
and vegetables are even higher (30 40%). These adversely affect the Indian economy (Hegazy 2013). Another estimate indicates an annual loss of Rs. 92,651 crores (Jha The loss is almost three times as high as the budget for agriculture sec 17 (Molony, 2016).

Government Interventions in Agricultural Marketing

markets in India have traditionally been marked by heavy government interventions since independence due to the fact that our demand had often exceeded supplies to start with. Government intervention in India had the twin objective of price support and buffer stocks. Further, with not so open borders in the case of globally traded

commodities, there were always inconsistencies towards governments policy on international trade in many of the primary commodities and more specifically in the agricultural commodities. It often leads to artificial (policy created) price fluctuation (Shanmugam, 2009). The problems being faced by the farmers received the attention of the government, which took several measures including regulation of marketing practices, creation of infrastructure, provision of price support, promotion of cooperative organizations, and provision of technology transfer and input supply support systems including credit delivery to the farmers Acharya, 2004). Due to the efforts put by various organizations, interventions by the government, as well as the creation of awareness among the farmers towards marketing of farm produces, significant s in the farmers marketing practices and agricultural marketing were introduced (Kalamkar 2014). The objectives and forms of government interventions however changed over time with the intention of protecting the interest of producers and co number of government organizations such as Food Corporation of India FCI) are involved in agricultural marketing mainly to procure food grains at MSP from producers and maintain a public distribution system. Similarly, government corporations also exist for other crops such as cotton and jute. There are also specialized marketing boards for rubber, coffee, tea, tobacco, etc. and a network of cooperatives at the local, state and national level. The National Agriculture Cooperative Marketing ation (NAFED) of India handles domestic as well as export marketing for its member organizations.

Among the different agricultural economic policies pursued by the government of India, the agricultural price policy has been playing a significant role in bringing about noticeable changes in production and productivity of the agricultural sector. It also plays an important role in achieving growth and equity in the Indian economy in general, and the agriculture sector in particular. The major underlying obje Indian governments price policy is to protect both producers and consumers (Dev and Rao, 2010). Before 1960, major preoccupation of agricultural price policy used to be with the problem of high prices in periods of shortage. Associated with that was the problem of ensuring the availability of agricultural products, especially food grains, to the consumer at fair prices. Since the adoption of a package approach to bring about improvements in agricultural productivity, the question of

the agricultural producer against an undue fall in prices came to the fore. In fact, the provision of guaranteed floor prices forms part of the package (Narain, 1973). Currently, the food security system and price policy basically consist of three instruments: procurement prices/MSPs, buffer stocks and Public Distribution Systems (PDS). Currently, MSPs are announced for 24 farm products that include cereals, pulses, oilseeds, raw cotton, raw jute, sugarcane and copra (dried coconut). Buffer stocks are operational for rice, wheat and to some extent for sugar. Commission for Agricultural Costs and Prices (CACP) is the advisory body of GoI for all matters related to agricultural price policy. The quantities that the government agencies need to purchase prices depend on the behaviour of market prices and private trade, and fluctuate from year to year. Agricultural price policy is one of the important instruments in achieving food security by improving production, employment and incomes of farmers. Therefore, there is a need to provide remunerative prices to farmers in order to maintain food security and increase the income of farmers.

Agricultural Marketing Reforms in India

Agricultural marketing is a as per constitution of India. Agricultural marketing in India is handled both by private trade as well as government intervention though major part of the agricultural produce is handled by private traders. In order to improve the marketing system of products, wholesale agricultural produce markets began to be regulated in the 1950s and 1960s, when each state began implementing Agricultural Produce Marketing (Regulation) Act (APMRA) Agricultural Produce Marketing APMCs) was establi each state by the respective state governments with a view to regulate the marketing of agricultural produce in market areas. All primary wholesale assembling markets were brought under the ambit of these Acts. Well laid out market yards and sub rds were constructed and for each market area, an Agricultural Produce Market Committee (APMC) was constituted to frame the rules and enforce them. Thus, the organized agricultural marketing came into existence through regulated markets. The regulation of markets had several positive features such as sale through auction method, reliable weighing, standardized market charges,

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Heavily based on Bisen and Kumar (2018).

payment of cash to farmers without undue deductions, dispute settlement mechanism, reduction in physical losses of produce and availa several amenities in market yards. The Union Government has intervened in the agricultural marketing from time to time to strengthen the system in the country. The APMRA brought radical changes and significant improvement in almost all aspects of marketing of farm produce (Acharya, 2004).

Agricultural market regulation in India has come a long way since its humble beginnings in 1886 when the British rulers set up first regulated market at Karanjia under the then Hyderabad residency order (Paty and Gummagolmath, 2015). The Berar Cotton and Grain Market Law of 1897 were the first legislation on market regulation for agricultural commodities. However, the legislation was highly biased towards the commercialization of cotton in India to ensure the stable supply of cotton as a raw material to the textile mills at Manchester at below world price (Rajagopal 1993). By its genuine intent, the aforesaid marketing legislation was purely regressive in the sense that the farmer aspirations and development of marketing infrastructure were brutally defied. Therefore, this marketing board was an inefficient marketing arrangement (Knight 1954; Lele 1971; Bhattacharya 1992). The then Bombay Government was first to enact the Cotton Market Act in 1927. as the first law in the country that attempted to regulate market a view to evolve fair marketing practices. Thereafter, Agricultural Produce Marketing (Commission) Act was enacted by the Ministry of Food and Agriculture, GoI and subsequently the state level agricultural market regulations were enacted. But the spread of regulated markets was highly biased towards the cotton growing states and not much progress was made until independence of the country in 1947.

The policy emphasis in the 1960s and 1970s on government intervention to resolve market failures gave way in the 1980s to market liberalization to get prices right and more recently, to a focus on institutions right (Barrett and Emelly, 2005). However, many gains APMRA to improve competitiveness of agricultural markets got diffused over time and market infrastructure did not keep pace with of market arrivals. The facilities provided in markets remained not only inadequate, but also deteriorated in many cases. The regulations had lost the relevance with change in economy and agriculture in terms

of production and diversification (NIAM, 2015). Excessive intermediation worked to the disadvantage of producers and consumers and has favoured only middlemen (Chand, 2016). Some of the major problems with the current system include, insufficient number of APMC markets and their inadequate infrastructure, limited access to market for (small) farmers, less remuneration to the farmers and high intermediation cost, lack o market information information asymmetry, need to physically bring the produce to mandi, high incidence of market fee charges, fragmentation of markets, requirement of multiple licenses for trading, multiple point levy of market fee, existence of opaque
bidding and lack of emergence of alternative channels of marketing.

1960s, market regulations were primarily meant to facilitate smooth functioning of markets and to keep a check on activities that
d inimical to producers and/or consumers. Subsequently, the country opted for a set of direct and indirect interventions in agricultural markets and prices, initially targeted at procurement and distribution of
and paddy. This gradually expanded to cover several other products and aspects of domestic trade in agriculture.

As a consequence of trade liberalization after economic reforms of 1991 and need to adjust to WTO (1995) agreements had serious repercussions on Indian agriculture. The economic reforms have divulged Indian agricultural markets to cut throat international competition which necessitated domestic trade liberalization to improve domestic competitiveness. Subtle changes in non agricultural sector due to the
reforms at the same time sheared the necessity of reforms in agricultural trade too. Thereafter, series of trade restrictions have been eased for smooth conduct of trade in agricultural commodities all across the country. But these were not agricultural marketing reforms
sense in that the farm level transactions were not part of any of them.

The literature on regulation of agricultural markets and the actual regulatory policies put forward two ideologies of agricultural marketing among the policymakers. The first reflects that the agricultural markets in
functioning and thus requires State intervention to stabilize prices. Contrast to it, the second ideology reflects that these markets are so competitive that new kind of institutions is required to m
challenges. Not only are these two approaches to regulation in constant tension, one may be subordinated to the other, and both to yet other

interventions (Harriss, 1984). With the onset of liberalization, the latter concept has become increasingly ascendant, with market intervention now seen as the main impediment to development, shifting the debate from the older question about the type of intervention to be adopted to one about a simple binary of intervention, with latter as the ultimate goal (Bernstein 2010).

In view of the uneven development of regulated markets, the inability to fight the vested interests of traders, the persistence of traces of collusion amongst traders even in regulated markets deprived the farmer of his due share in the final consumer s rupee, besides facing other hardships during sale of his produce (Shroff 2014). Therefore, due to these bottlenecks in the APMC Act and also new challenges and opportunities with agricultural marketing, across all states, the Government of India felt it was necessary to undertake market reforms through a change in market legislation. This matter has been under continuous scrutiny as agricultural marketing and exports of agricultural commodities were assuming increasing importance due to liberalization of trade, need for better supply management and need to improve infrastructure and market information. An Expert Committee on *Strengthening and Agricultural Marketing* under the chairmanship of Shri Shaknerlal Guru (December 2000) reviewed the entire system of marketing of agricultural commodities and recommended requirement of a vibrant and dynamic marketing structure and system to meet the emerging out of globalization in the post WTO period (GoI, June 2001). An Inter Ministerial Committee (with Shri R.C.A. Jain, Additional Secretary, Ministry of Agriculture as the Chairman) examined the report and the legislative changes required for the implementation of this report and recommended the formulation of a Model APMC Act to improve the efficiency of the marketing system and to encourage private sector investment in agricultural marketing (GOI, 2001). The amended Act aimed at complete transformation of agricultural marketing in India to make it more market and growth oriented. The Expert Committee in its report (in GoI, 2002) noticed that the regulated markets have helped in mitigating market handicaps of producers/sellers at wholesale assembling level but the monopolistic practices and modalities of regulated markets have prevented the development of free and competitive trade in agricultural markets. The Committee recommended various reforms in State Agricultural Produce Marketing Regulation Act and the Essenti

Commodities Act to root out the restrictive provisions coming in the way of efficient and competitive trade. After deliberate discussion on these recommendations, a Standing Committee of State Ministers was constituted for the purpose under the chairmanship of Hukmdev Narayan Yadav, the then Union Minister of State for Agriculture, on 29 2003. Thereafter, Model Law on Agricultural Marketing was framed with consultation of States under the chairmanship of Shri K.M.

The Model Agricultural Marketing (Development and Regulation) Act (2003) was circulated among states to implement and to incentivize states to amend their APMC Acts on the lines of the Model Act. Some subsidy on market infrastructure development projects was ded under central assistance. These economic incentives were thought of providing thrust to adjust to the provisions of model law (Chand, 2016). However, many states are either slow or reluctant to implement various reforms and legislations related to mark though they are considered necessary for developing the market, trade and for improving the welfare of producers and consumers. After a decade, there existed variation in adoption of the contents and coverage of reforms under the APMC Acts/Rules across the states (Subramanian, 2014). Contrary to these, Sharma (2017) reported that, entry of private players in agricultural marketing benefitted farmers by increasing competition.

APMC Acts were passed by the states during socialist past (Patnaik 20 and restricted the choice of farmers to sell their produce in terms of place as well as person by creating regulated barriers. Some states have created entry barriers for private players to establish the markets by prescribing either prohibitive license fees for setting up such markets, or the minimum distance between private markets and APMC markets. The transaction of trade at private market was less than 10 per cent. The Model Act prohibits commissions in any transaction of agricultural produce from farmers; however, in practice, these range from 1 to 2.5 per cent for food grains and 4 to 8 per cent for fruits and vegetables. There are also wide variations in market fees, from 0.5 to 2.0 per cent of the sales. The market fee and commissions add 15 20 per cent to the farm gate price. In addition, there are 5 6 intermediaries between the primary producer and the consumer. The total mark up in the chain adds 60 (Patnaik 2011). These result into higher transaction costs and lower price ization by farmers.

It is evident that these legal provisions have created a fragmented and monopolistic agricultural market with high entry barriers. The basic objectives for setting up a network of physical markets, namely, ensuring reasonable gain to the farmers by creating an environment of fair play of supply and demand forces, regulating market practices and achieving transparency in transactions, have not been achieved. In some cases, new conditions have been attached to reforms which defeated the v purpose of the reforms. Later, some of the legislative reforms prior to Model Act were repealed by central government rules like licensing requirements, stock limits and movement restrictions in respect of purchase, sale, supply, distribution or storage for sale of agricultural commodities, which were removed in 2002. Subsequently, the changes in rules of game have given opportunities to unorganized market like commission agents and traders to organize themselves forcing the changes in process guidelines ultimately favoured themselves.

Union Government of India is actively pursuing states to amend their marketing laws to provide suitable legal framework and policy atmosphere to facilitate such developments. In order to keep pace with he changing production pattern and growing marketable surplus, the Government advocates development of adequate number of markets equipped with modern infrastructure, with increased private sector participation and development of other marketing channels l marketing, contract farming, etc. Some state governments have evolved various reforms in their marketing sector to meet the challenges. agenda of the Government focuses on seven vital areas for reforms and status on adoption by states as on February 25, 2016 is presented in Table 2). Table 3 presents status on adoption of reforms by states as on March 31, 2024.

In 2003, the Department of Agriculture, Cooperation & Farmers' Welfare (DAC&FW) formulated a Model Agricultural Produce Marketing (Development and Regulation) Act, followed by Model Rules 2007 for the States/UTs to adopt. The unified National Agricultural Market and the model APLM Act, 2017 are the precursors to further reforms in the agricultural marketing system.

Reference to Seven Key Areas vis Model APMC

		Adopted the Suggested Area of Marketing Reforms
	managed by a person other than a market	Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Gujarat, Goa, Himachal Pradesh, Mizoram, Nagaland, Orissa (excluding for paddy Telangana, Tripura, Punjab, UT of Chandigarh, Jharkhand, Uttarakhand, West Bengal
	agricultural produce (Direct Purchasing	Andhra Pradesh, Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Goa, Haryana (for specified crop through establishment of Collection Centres) Himachal Pradesh, Karnataka, Madhya Pradesh, Maharashtra, Mizoram, Nagaland, Rajasthan, Telangana, Tripura, Punjab (only in Rule), UT of Chandigarh (only in Rule), Jharkhand, Uttarakhand and West Bengal U.P. (Only for bulk purchase under executive order issued
		Andhra Pradesh, Chhattisgarh, Gujarat, Jharkhand, Haryana, H.P., Karnataka, Rajasthan, Sikkim, Goa, Madhya Pradesh, Maharashtra (has to Commodity Exchanges registered under FMC), Telangana, Uttarakhand.
	market managed by a person other than a market committee	Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, Goa, Himachal Pradesh, Karnataka, Maharashtra, Nagaland, Rajasthan, Sikkim, Tripura, Jharkhand, Uttarakhand and West Bengal.
	Sponsor shall register Committee or with a prescribed officer in	Andhra Pradesh, Arunachal Pr Chhattisgarh, Goa, Gujarat, Haryana Himachal Pradesh, Jharkhand, Karnataka, Maharashtra, Madhya Pradesh, Mizoram, Nagaland, Orissa, Punjab (separate Act), Rajasthan, Sikkim, Telangana, Tripura,

		Adopted the Suggested Area of Marketing Reforms
	Single point levy of	Andhra Pradesh, Rajasthan, Gujarat (for processor, grader, packer, value addition and exporter), Goa, Himachal Pradesh, Chhattisgarh, Karnataka, Madhya Pradesh, Nagaland, Jharkhand, Sikkim, UT of Chandigarh, Punjab, Mizoram,
		Andhra Pradesh, Goa, Gujarat, Haryana, Himachal Pradesh, Karnataka (in Rules only), Rajasthan, Mizoram Nagaland,

http://pib.nic.in/newsite/PrintRelease.aspx?relid=137359

		Adopted the Reform Provision	
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, H.P., Jharkhand, Karnataka, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, U.P., Chandigarh…….26 states/UT	A.P., Chhattisgarh, H.P., Karnataka, Maharashtra, Telangana, Tripura, U.P., Uttarakhand, W.B. and
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, H.P., Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, U.P., d, W.B. & Chandigarh	Haryana, H.P., Karnataka, Sikkim, Telangana, U.P.,
		Karnataka, Manipur, Meghalaya, Nagaland, Tamil Nadu, Telangana, Tripura and U.P., ….14 states/UT	Telangana and U.P……4

		Adopted the Reform Provision	
		A.P., Arunachal Pradesh, Assam, Goa, t, Haryana, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, U.P.,	
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, H.P., Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, U.P., Uttarakhand, W.B. Chandigarh 27 states/UT	A.P., Chhattisgarh, Goa, Gujarat, Haryana, H.P., Rajasthan, Sikkim, Tamil
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, Haryana, H.P., Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, disha, Punjab, Rajasthan, Sikkim, Tamil Nadu, Telangana, Tripura, U.P., Uttarakhand, W.B. & Chandigarh..27 states/UT	A.P., Chhattisgarh, Goa, Gujarat, Haryana, H.P., Rajasthan, Sikkim, Tamil
		A.P., Arunachal Pradesh, Assam, Goa, Gujarat, H.P., Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Rajasthan, Si Telangana, Tripura, U.P., Uttarakhand, W.B., NCT of Delhi and	
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Goa, Gujarat, H.P.(partial), Jharkhand, Karnataka (partial), Manipur, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Tamil Nadu, Telangana, Tripura, U.P., Uttarakhand, W.B., and	
		Arunachal Pradesh, Assam, Gujarat, Jharkhand, Manipur, Meghalaya, Nagaland, Tripura and U.P(rules)..9 states (Note: Neither any states has notified the rules nor entered into MoU.)	
		A.P., Arunachal Pradesh, Assam, Chhattisgarh, Gujarat, H.P., Jharkhand, Karnataka, Madhya Pradesh, Maha Meghalaya, Nagaland, Odisha, Rajasthan, Sikkim, Tamil Nadu, Tripura, U.P., W.B. and NCT of Delhi	

		Adopted the Reform Provision	
		Karnataka, Maharashtra, Rajasthan, U.P. and NCT of Delhi	
		A.P., Arunachal Pradesh, Chhattisgarh, Goa, Karnataka, Rajasthan, Tamil Nadu, Telangana, U.P., Uttarakhand	

Recent Agricultural Marketing Reforms in India

In recent years, the Union Government of India has initiated a number of reform measures related to agriculture marketing which are likely to have far reaching positive impact on farmers income. As mentioned , many states carried out partial reforms only (2003), on a pick choose basis, wide variation in adoption of content and coverage of reforms, thereby defeating the objective of creating a uniform trade environment across the country. However, in some states some alternative marketing systems (direct marketing, contract farming, private market, organised retail, producers organisation, cooperatives in marketing, food processing, etc) have developed. Year 2007 witnessed circulation of model APMC rules across the states for implementation but there was wide variation in adoption of content and coverage of reforms. Later, Ministry of Agriculture, Government of India set up an Empowered Committee of State Ministers in Agricultural Marketing on 2 March, 2010 to persuade various states to implement the reforms in agriculture marketing through adoption of Model APMC Act. The Model Act suggests reforms necessary to provide a barrier free national market for the benefit of farmers and consumers. It also suggests measures to effectively disseminate market information and to promote grading, standardization, packaging, and quality certification of agricultural produce. Committee in its report (in 2011) recommended for

herence of state APMC Acts and rules in line with Model Act and

Provision of multiple and competitive marketing channels to farmers
Integration of mandis with electronic spot exchange;
Private investment in agricultural markets;
nfrastructure project status for agricultural markets;
Waiving off marketing fee on perishables like fruits and vegetables;
Promotion of direct marketing as well as contract farming, etc.

Recent Agricultural Marketing Reforms in India

Committee of State Agriculture Marketing to Promote Reforms		Speed up the process of reforms
National Agricultural		National level market by _____ market operations in selected markets to facilitate integration of markets and different services and function
Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017		Regulations confined to _____ _____ _____
Model Act the State Agricultural Produce & Livestock Contract Facilitation) Act, 2018		Enacted by only two states namely Tamil Nadu and Punjab. In these two cases also repealed Mostly states having provision in the
		Covered three farm laws with provisions for trade outside regulated markets, contract farming and essential commodities. Repealed in Focus was to make system nly by supporting trade outside regulated market yards
National Policy Framework on Agricultural marketing		A comprehensive system

Table 4 provided the recent reforms adopted in agricultural marketing in india. Recent Indian agricultural marketing reforms focus on unified national market, empowering farmers with choices beyond through laws like the Produce Trade and Commerce Act, enabling contract farming via the Act, amending the Essential Commodities Act (ECA) to ease stocking norms, promoting digital platforms like e NAM, and boosting infrastructure with schemes like the Agri Infrastructure Fund (AIF) and , all aiming for better price realization, reduced middlemen, and seamless trade.

National Agricultural Market (eNAM)

To enhance efficiency in agricultural marketing and improve price discovery, the government has introduced the e NAM Scheme. The Union Government introduced a Central Sector Scheme for Promotion of National Agriculture Market Agritech Infrastructure Fund. It had a budget allocation of Rs. 200 crore on 1 July 2015. It provided electronic market platform, called the electronic National Agricultural Market or This initiative provides free software and financial assistance of ₹ 75 lakh per Agricultural Produce Market (APMC) Mandi for essential hardware, which includes quality assaying equipment and the development of infrastructure for grading, sorting, and packaging. Additionally, to support FPOs and empower farmers, the government launched a scheme in 2020 with a ₹ 6,860 crore. As on December 2025, eNAM website reported integration of 1522 mandis on eNAM from 22 states and 4 UTs. As of October 31, 2024, over 1.78 crore farmers and 2.62 lakh traders have registered on the e NAM portal. As of the same date, 9,204 FPOs have been registered, and 4,490 of these organisations have received equity grants amounting to ₹

https://enam.gov.in/web/

Status on States and Mandis



https://enam.gov.in/web/dashboard/stakeholder

NAM aims to integrate all the agricultural markets of the country and envisages a common national market for agricultural commodities with seamless movement across state boundaries. This is envisioned as a solution to marketing issues of all stake ho farmers, traders, retailers consumers and logistic providers. The e NAM Portal provides a window service for all APMC related information and services, including commodity arrivals, prices, bids and offers. Some of the expected NAM (see Box 1) include accessibility of farmers to a common agriculture market; real time price discovery; transparency in the agriculture marketing system; reduces the transaction costs of buyers and sellers; real time information on prices, market arrivals etc; bidding on parameters of commodities; online bidding for more transparency; online payment system to reduce the payment risk and ensure timely payments to farmers, cleaning, sorting, grading and weighing facilities and additional services such as soil testing laboratories at the e Agribusiness Consortium (SFAC) is designated as Lead Agency, partnership with a Strategic Partner (SP), which will be responsible for developing, running and maintaining the proposed marketing platform. The features of eNAM are as mentioned below:

market platform for transparent sale transactions and price discovery in regulated markets, kisan mandis, warehouses and private markets. Willing states to accordingly enact provision for e trading in their APMC Act.

Liberal Licensing of traders buyers and commission agents by state authorities without any pre condition of physical presence or premises in the market yard.

license for a trader valid across all markets in the state.

Harmonization of quality standards of agricultural produce and provisions of assaying (quality testing) infrastructure in every market to enable informed bidding by buyers.

Restriction of APMC jurisdiction upto the APMC market yard yard instead of a geographical area (the market area) at present.

Single point levy of market fees i.e. on the first wholesale purchase

In order to facilitate both unification of market and online trading, it is necessary for the states to undertake reforms prior to seeking assistance under the scheme in respect of (i) a single license to be valid across the , (ii) single point levy of market fee and (iii) provision for electronic uction as a mode for price discovery. Only those States/UTs that have these three pre requisites are eligible for assistance under the scheme. The States must ensure that the reforms are carried out both in letter and spirit through appropriate and unambiguous provisions in the APMC Acts and rules. Besides the State Marketing Boards/APMCs must the promotion of the e auction platform. The States will need to ensure that the mandis that are integrated with NAM make provision for ine connectivity, hardware and assaying equipment.

Advantages of Linking Farmers to Market



UT Agricultural Produce & Livestock Marketing (Promotion & Facilitation) Act, 2017/2018

In order to provide better marketing facilities to the farmers, the Government has released a new model The Agricultural Produce and Livestock Marketing (Promotion & Facilitation) Act, 2017 in April 2017 for its adoption by States/Union Territories (UTs). The provisions therein provide for alternative marketing channels other than APMCs to farmers in marketing their produce at competitive & remunerative prices.

In order to optimise the use of scarce resources and mitigate the uncertainty in price and marketing, the Government has formulated and released a progressive and facilitative Model Act Produce & Livestock Contract Farming and Services (Promotion & Facilitation) Act, 2018 in May, 2018 for its adoption by states/Union Territories (UTs). The aforesaid Model Contract Farming Act covers the entire value and supply chain from pre to post harvest marketing including services contract for the agricultural produce and livestock.

Farmer Producer Organisation/Company

Collectivization of producers, especially small and marginal farmers, into producer organisations has emerged as one of the most effective pathways to address the many challenges of agriculture but most importantly, improved access to investments, technology and inputs and markets. Department of Agriculture and Cooperation, Ministry of Agriculture, GoI has identified Farmer Producer Organisation registered under the special provisions of the Companies Act, 1956 as the most appropriate onal form around which to mobilize farmers and build their capacity to collectively leverage their production and marketing strength (GOI, 2013). A producer company is a corporate body registered as a Producer Company under the Companies Act, 1956 (As amen 2002). The same provisions have been retained for FPO after the amendment of the Companies Act in 2013. FPOs offer a wide range of benefits compared to other formats of aggregation of the farmers. FPO members can leverage collective strength and bargaining power to access financial and non financial inputs and services and appropriate technologies, leading to reduced transaction costs. Members can also value markets and enter into partnerships with

private entities on equitable terms. Its main activities consist of production, harvesting, processing, procurement, grading, pooling, handling, marketing, selling, and export of primary produce of the or import of goods or services for their benefit. It also provides sharing of profits/benefits among the members (BIRD, 2021).

The Government of India had launched the scheme to form and promote 10,000 FPOs in 2020 with a budget outlay of ₹ 6.86 Thousand Crore till 28. As of 29 February 2024, 8,195 FPOs have registered under the new FPO scheme, and equity grants of ₹ 157.4 Crore were released to 3,325 FPOs. Credit guarantee cover worth ₹ 278.2 Crore was issued to 1,185 FPOs (GOI, 2024, Economic Survey). However, there are multiple entities promoting these FPOs in the state under various legal provisions. As a result, there is no consolidated record of the FPOs functioning in the State, neither any uniform law governing them making it difficult to implement any beneficial schemes or making available the benefits of budgetary interventions of the State or Union Government uniformly and effectively for these producers

Three Farm Laws 2020

In order to have a liberal, transparent, efficient and competitive, barrier free marketing system providing alternatives to farmers, the Government of India had passed three Farm Laws in September, 2020 namely (i) the Farmers (Empowerment and Protection) Agreement on Price Assurance and Farm Services Act, 2020, (ii) the Farmers Produce Trade and Commerce (Promotion and Facilitation) Act, 2020, and (iii) the Essential Commodities (Amendment) Act, 2020. Though, the Farm Laws have been repealed with the introduction of Farm Laws Repeal Bill, 2021 in the parliament in the month of November, 2021, it would be important to ferent aspects of these bills to have an understanding of the intent of the government and requirement of the sector.

The new laws were aimed at creating market environment providing choices to farmers and traders to buy or sell agricultural commodities. he concept of trade area introduced under the Act suggested that rules of APMC Act will be applicable only on the transactions taking place within the physical premises created under APMC Act whereas trade transactions taking place outside the market yard will have to be completed as per the provisions suggested in Act on trade and commerce

by the Central Government. Which suggests the co existence of both the with common interest of supporting farmers in true spirits of cooperative federalism. Farm Acts were also expected to have a major impact on stimulating farm sector growth by encouraging investment, facilitating creation of required post harvest infrastructure and expansion of markets to help farmers realise competitive and remunerative prices of their produce. These reforms may have proved to be a significant step towards making Indian agriculture more demand driven, accessible and competitive both at domestic and global level. The repeal of the Farm Laws will definitely slow down the reform process in agricultural marketing (David and Shalendra, 2022)

National Policy Framework on Agricultural Marketing (

Various States have established Agriculture Produce Market Committees (APMCs) as per local needs to support farmers, including small and marginal farmers as agricultural marketing is a state subject. Department of Agriculture and Farmers Welfare (DA&FW), Ministry of Agriculture and Farmers Welfare, Govt. of India on 25th June, 2024 constituted a Drafting Committee under the chairmanship of Shri Faiz Ahmed Kidwai, IAS, Additional Secretary (Marketing), DA&FW. The Drafting Committee has prepared a draft National Policy Framework on Agricultural Marketing . The vision of said policy was articulated as,

To build a vibrant marketing ecosystem in the country wherein farmers of all category find a market of their choice to realise best price for their produce, to be accomplished through improved efficiency, enhanced competition with multiple marketing channels & no monopsonic market structure

Supportive Schemes by Central Government and other Models:

The Government of India has been playing an important role in developing agriculture marketing system in the country. The marketing division of the Department of Agriculture, Cooperation & Farmers Welfare is entrusted with the implementation of policy and programme related to agricultural marketing. The agriculture sector needs competitive and well functioning market for farmers to sell their

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https://agriwelfare.gov.in/Documents/HomeWhatsNew/Draft_National_Policy_framework_AgriMarketing_25112024.pdf

produce. In order to remove restrictive and monopolistic practices of present marketing system, to reduce the intermediaries in supply chain, to reduce wastage by way of promoting integrated supply and value chain and to benefit farmers through access to global markets, reforms i agricultural markets have to be an ongoing process.

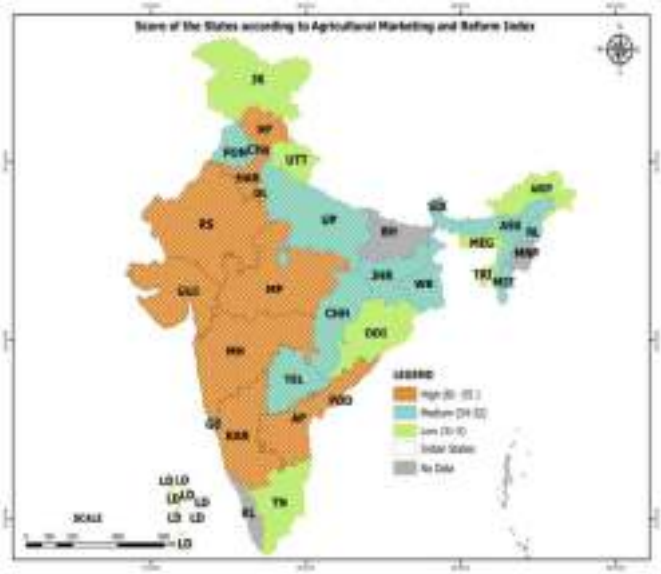
- Ministry of Agriculture and Farmers Welfare, Marketing Division is also implementing ongoing Central Sector Schemes from XII plan, which have been integrated into a new scheme viz. the Integrated for Agricultural Marketing.

  Agricultural Marketing Infrastructure (AMI): The government has started several programs to encourage private investment in agricultural marketing infrastructure. One such initiative is the Agriculture Marketing Infrastructure (AMI) sub in 2014. The subsidies support the establis range of agricultural marketing infrastructure projects, including storage facilities, rural haats, common facilitation centres for , market yard infrastructure, direct marketing facilities, harvest operations, cold storage facil value chain projects up to the primary processing stage
  Marketing Research and Information Network (MRIN)
  Strengthening of Agmark Grading Facility (SAGF)
  Training, Research and Consultancy through Choudhary onal Institute of Agricultural Marketing (
  business Development through Venture Capital Assistance

  Project Development Facility
- ***AASHA (Pradhan Mantri Annadata Aay SanraksHan Abhiyan*** A scheme to ensure farmers get remunerative prices through Price Support, Price Deficiency Payment, and Private Procurement
- Dedicated trains for transporting perishable goods, improving market access and reducing transportation costs.
- ***ure Fund (AIF)*** Providing financial support for developing storage, processing, and cold storage facilities.
- ***Support for Agri*** Encouraging innovation and new market solutions in the agriculture sector through financial and mentorship

Agricultural Marketing Reform Index (NITI Ayog)

The Agricultural Marketing and Farmer Friendly Reforms Index (AMFFRI) is a ranking by NITI Aayog (launched 2016) that assesses reforms in agricultural marketing, land leasing, and scores states from 0 (no reforms) to 100 (complete reforms) based on implementing provisions from the Model APMC Act, eNAM, and other farmer centric changes, aiming to foster healthy competition and efficiency in agriculture markets, with Maharashtra often
Since agrarian structures and marketing histories differ across Indian with varied landholding patterns and levels of marketable surplus 2015). APMC Acts needed to be adapted to changing circumstances. As a result, states responded differently to reforms, with little in common (see Figure 6, based on Chand and Singh, 2016). The state of Maharashtra achieved first rank in implementation of various reforms. The state has implemented most of the marketing reforms and it s best environment for doing agribusiness among all the states and Gujarat ranks second with a score of 71.5 out of 100, closely followed by Rajasthan and Madhya Pradesh. Almost two third states could not reach even halfway mark of reforms score. Majo U.P., Punjab, West Bengal, Assam, Jharkhand, Tamil Nadu and J&K are



Agricultural Marketing Reform Index (Chand and Singh, 2016)

Conclusions

The production focused policies of the government have resulted in impressive growth of Indian agriculture over years. A shift is now being from production to welfare and income enhancement.
significant market reforms have already been initiated by the Union and the State governments. These reforms provide more options to farmers for selling their produce, allowing the private sector, including cooperatives, to develop markets, promote direct sales to consumers, processors and retail chain suppliers exporters and restrict corruption and harassment. , still the markets are not that efficient as should have been.
Government has, accordingly, introduced various reforms in agricultural marketing to improve the system and help farmers having better access to market. The better market access is expected to facilitate farmers realising better income. This will improve their ability to investment in new . The cumulative effects of technology are expected to change the face of Indian agriculture in the days to come and will see investment ivate players and participation of rural youth in different agribusiness activities. Although, the agricultural sector is facing several constraints making it difficult to calculate the returns, still the sector exhibits a huge untapped potential. Many individuals, big companies, ups, & entrepreneurship ventures are investing heavily in innovations, inventions, research and development as well as other business
to ideal weather and soil conditions. Food is in high demand; there are tapped opportunities and the government is offering various incentives to help farmers and other stakeholders avail these opportunities This process is the key to the future of Indian agriculture

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Glimpses of Meet

National Level Seminar / Interaction Meet on

Minimum Support Prices (MSP): How Can We Solve this?

May 21, 2024




















































3:13
89%
Ramesh Chand

कृषि एवं किसान कल्याण मंत्रालय
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
सत्यमेव जयते



National Level Seminar/Interaction Meet on

Minimum Support Prices (MSP): How Can We Solve this?



May 21, 2024

Jointly Organized *by*

Agro-Economic Research Centre (MOA&FW, GOI),
Sardar Patel University, Vallabh Vidyanagar
&
National Council for Climate Change Sustainable Development & Public Leadership (NCCSD), Ahmedabad, Gujarat

Venue:
Seminar Hall, 2nd Floor,
H.M. Patel Institute of Rural Development,
Agro-Economic Research Centre, Sardar Patel University, VVN

Tentative Programme: May 21, 2024

09.30 am : Breakfast, Registration and Networking

10.00 am to 11.15 am :

- **Prof. Vijay Sharma,** Chairman, Commission for Agricultural Costs and Prices, Ministry of Agriculture and Farmers Welfare, Govt. of India
- **Dr. B.K. Singhal,** Chief General Manager, NABARD, Ahmedabad, Gujarat
- **Dr. Kirit Shelat, IAS (Rtd),** Former Principal Secretary, Government of Gujarat & Executive Chairman, NCCSD, Ahmedabad
- **Prof. Dr. Niranjan Patel,** Vice Chancellor, SPU, Vallabh Vidyanagar
- **Dr. Bhailalbhai Patel,** Registrar, SPU, Vallabh Vidyanagar

Session I: Opening Session

- Welcome and about the interaction meet/seminar by **Prof. S. S. Kalamkar**, Director, AERC, SPU, Vallabh Vidyanagar
- About the theme by **Dr. Kirit Shelat**, **IAS (Rtd),** Former Principal Secretary, Govt of Gujarat & Executive Chairman, NCCSD, Ahmedabad
- Address by **Dr. Niranjan Patel,** Vice Chancellor, Sardar Patel University, Vallabh Vidyanagar
- Release of Book on "**Water Security for Agriculture'** & booklet on '**Agriculture Schemes in Rajasthan''**
- Address by **Dr. B.K. Singhal**, Chief General Manager, NABARD, Ahmedabad, Gujarat
- Address by **Prof. Vijay Sharma,** Chairman, Commission for Agricultural Costs and Prices, Ministry of Agriculture and Farmers Welfare, Govt. of India

Rapporteur: Dr. Hemant Sharma, Asst. Prof. AERC, SPU, VVN
Shri Manish Makwana, AERC, SPU, VVN

Master of Ceremony: Ms. N**isha Shah,** Chief Executive Officer, NCCSD

11.15 am to 12.30 pm : **Session II: Roundtable Interaction—Policy Makers/ Expert Observations**

(5-6 minutes for each speaker)

- **Dr. B.K. Singhal,** Chief General Manager, NABARD, Ahmedabad, Gujarat
- **Dr. C.K. Timbadia**, Vice Chancellor, Gujarat Natural Farming Science University, Halol, Dist. Panchmahal /Anand, Gujarat
- **Shri S.J. Solanki**, Director, Directorate of Agriculture, Government of Gujarat, Gandhinagar, Gujarat
- **Dr. Umakant Dash, Director,** Institute of Rural Management, Anand (IRMA), Gujarat. India
- **Dr. A.R. Pathak**, Former Vice Chancellor, Junagadh Agricultural University, Junagadh
- **Dr. K.G. Mehta,** Gujarat Association for Agricultural Sciences, Ahmedabad
- **Dr. Suresh Acharya,** Former Director of Research, SDAU, SK Nagar & R&D Vertical, AGROCEL Industries Pvt. Ltd. Koday, Mandvi, Kachchh
- **Prof. R.S. Pundir,** Director, International Institute of Agribusiness Management, Anand Agricultural University, Anand
- **Dr. K.C. Supekar**, Former Managing Director, National Cooperative Dairy Federation of India (NCDFI), Anand
- **Shri Vallabh Vadiya and Mr. N.R. Zala**, Shree Vivekanand Research and Training Institute (VRTI), Mandvi Kachchh
- **Prof. B. Swaminathan,** Assistant Professor, Junagadh Agricultural University, Junagadh

Rapporteurs: Dr. Kalpana Kapadia, AERC, SPU, VVN
Ms. Aditee Sharma, AERC, SPU, VVN

12.30 pm to 1.30 pm : **Session III: Farmers, NGOs, Collectives (FPOs) Observations**

(5-6 minutes for each speaker)

- **Ms. Megha Desai** (Senior Coordinator) & **Ms. Sunitaben** (Rudi), Self Employed Women's Association (SEWA), Ahmedabad/Anand
- **Mr. Shivlal Bhai Kakadiya**, Mansrover FPO, Lathi, Amreli
- **Mr. Hasmukhbhai Hapani**, Liliya, Mota Amreli
- **Mr. Hemraj Bhai**, Kalubhar FPO Umrala Bhavnagar
- **Smt. Kusum Rajgor,** Vama FPC Limited, Amirgarh, Banaskantha/ Founder and Managing Trustee, Mamta Charitable Trust, Ahmedabad
- **Shri Jayesh Patanvadiya,** Farm Pick Producer Company Limited, Vijay Bharti, Nandod, Narmada
- **Shri Kushikbhai Ramanbhai Patel,** Director, Gauekta Agri Organic Producer Company Limited, Bharuch
- **Mr. Mahipat Sinh Gohil**, Amar Krishi FPO Shihor, Bhavnagar
- **Mr. Sardarbhai and Ms. Jalpaben, ATAPI**
- **Shri Sureshbhai S. Patel,** Multi State Institute of Skill Development and Research, Gandhinagar

Rapporteurs: Dr. Jaydeepsinh K. Chauhan, AERC, SPU, VVN
Dr. Deep Patel, AERC, SPU, VVN (Compile for Proceedings)

1.30 pm to 1.45 pm : **Session IV: Concluding Session**

- **Dr. B.K. Singhal,** Chief General Manager, NABARD, Ahmedabad, Gujarat
- **Dr. Kirit Shelat, IAS (Rtd),** Former Principal Secretary, Government of Gujarat & Executive Chairman, NCCSD, Ahmedabad
- **Prof. Vijay Sharma,** Chairman, Commission for Agricultural Costs and Prices, Ministry of Agriculture and Farmers Welfare, Govt. of India

01.45 pm : Vote of Thanks by **Dr. Hemant Sharma**, AERC, SPU, VVN

01.47 pm : National Anthem

1.50 pm : **Lunch at First Floor, Room No. 22**

कृषि एवं किसान कल्याण मंत्रालय
MINISTRY OF AGRICULTURE AND FARMERS WELFARE
सत्यमेव जयते

National Level Online Interaction Meet on



Minimum Support Prices (MSP): How Can We Solve this?



November 28, 2024
(01.30 pm onward)

Jointly Organized by

Agro-Economic Research Centre (MOA&FW, GOI),
Sardar Patel University, Vallabh Vidyanagar
&
National Council for Climate Change Sustainable Development & Public Leadership, Ahmedabad, Gujarat

Online Link: https://us02web.zoom.us/j/81197361751?pwd=B47K45HaxCBuKaSDyvbSxqXz3Hqhh0.1

Meeting ID: 811 9736 1751, Passcode: 970624

Tentative Programme: November 28, 2024

01.20 pm : Opening of Zoom meet link

01.30 pm
02.30 pm :

- **Prof. Ramesh Chand**, Hon. Member, NITI Aayog, Government of India
- **Shri Parshottam Rupala**, Member of Parliament (Lok Sabha) and Former Union Cabinet Minister of Fisheries, Animal Husbandry and Dairying, GoI
- **Shri Dileep Sanghani**, Chairman -IFFCO & (Gujarat State Co-operative Marketing Federation Ltd (GUJCOMASOL)
- **Dr. (Ms) Neelam Patel,** Senior Advisor (Ag), NITI Aayog, GoI, New Delhi
- **Dr. Kirit Shelat, IAS (Rtd),** Former Principal Secretary, Government of Gujarat & Executive Chairman, NCCSD, Ahmedabad
- **Prof. Dr. Niranjan Patel**, Vice Chancellor, SPU, Vallabh Vidyanagar
- **Dr. Bhailalbhai Patel**, Registrar, SPU, Vallabh Vidyanagar

Session I- Opening Session

- Welcome and about the interaction meet/seminar by **Prof. S.S. Kalamkar**, Director, AERC, SPU, Vallabh Vidyanagar
- About the theme by **Dr. A.R. Pathak, Former VC, JAU & NAU.**
- **Prof. Dr. Niranjan Patel**, Vice Chancellor, SPU, Vallabh Vidyanagar
- Address by **Shri Parshottam Rupala**, Member of Parliament (Lok Sabha) & Former Union Cabinet Minister of Fisheries, Animal Husbandry & Dairying, GoI
- **Shri Dileep Sanghani**, Chairman, IFFCO & GUJCOMASOL

Rapporteur: Dr. Hemant Sharma, Asst. Prof. AERC, SPU, VVN

2.30 pm to 3.30 pm : **Session II: Roundtable Interaction—Organised Marketing Models**

(5-6 minutes for each speaker)

- **Dr. (Ms) Neelam Patel,** Senior Advisor (Ag), NITI Aayog, GoI, New Delhi
- **Shri Ashwin C. Shroff,** Chairman, Excel Industries & Chairman, VRTI
- **Shri Srinivas Sajja,** Managing Director, National Cooperative Milk Marketing Federation (NCDFI), Anand
- **Dr. Ashok Krishnan,** Senior Consultant, IFPRI & Former Director.
- **Dr. Amrender Reddy,** Joint Director – Policy Support Res. NIBSM, Raipur.

Rapporteur: Shri Manish Makwana, AERC, SPU, VVN

03.30 pm to 4.30 pm : **Session III- Views of Policy Makers**

- **Dr. Kirit Shelat, IAS (Rtd),** Former Principal Secretary [Agri]. Govt of Gujarat & Executive Chairman – NCCSD.
- **Prof. Ramesh Chand, Hon. Member, NITI Aayog**, Government of India
- **Dr. Meenesh C. Shah**, Chairman, National Dairy Development Board (NDDB), Anand
- **Chief General Manager/General Manager,** National Bank for Agriculture and Rural Development, Regional Office, Ahmedabad
- **Dr. Jyen Mehta,** Managing Director, Gujarat Cooperative Milk Marketing Federation (GCMMF), Anand
- **Dr. C. Shambu Prasad,** Professor, Strategic Management and Social Sciences, Institute of Rural Management, Anand

Rapporteur: Dr. Kalpana Kapadia, AERC, SPU, VVN

04.30 pm to 5.00 pm (5-6 minutes for each speaker)	:	**Session IV- Farmers, NGOs, Collectives (FPOs) Observations** • **Shri Devesh Patel,** Agripreneur, Satva Organic, Boriavi, Anand • **Smt. Kusum Rajgor**, Vama FPC Limited, Amirgarh, Banaskantha/Founder and Managing Trustee, Mamta Charitable Trust, Ahmedabad • **Shri Jayesh Patanvadiya,** Farm Pick Producer Company Limited, Vijay Bharti, Nandod, Narmada. • **Summarising by Dr. V.V. Sadamate,** Former Advisor—Planning Commission, Delhi. *Rapporteur:* Dr. Thansingh Parihar, AERC, SPU, VVN
05.05 pm	:	Vote of Thanks by **Dr. Hemant Sharma**, AERC, SPU, VVN
05.10 pm	:	National Anthem

Agro-Economic Research Centre, Sardar Patel University, Vallabh Vidyanagar, Anand, Gujarat, India

The Agro-Economic Research Centre (AERC) for the states of Gujarat and Rajasthan was established in July 1961 at the Sardar Patel University, Vallabh Vidyanagar 388120, Anand, Gujarat by the Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi. AERC is mandated to provide feedback on the ground reality to the Ministry of Agriculture and Farmers Welfare, Government of India for policy formulation in the areas of agriculture and rural development. AERC has done this work very effectively over a period of last six decades and has emerged as a leading research Centre of its kind in the country. AERC has been providing independent and objective feedback to the GOI and it has been serving as its eyes and ears. Centre has prepared 211 impact evaluation reports covering almost all major aspects and programs on agricultural and rural development. These research studies have emerged with useful findings and policy implications for agriculture and rural development in Gujarat and Rajasthan.

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National Council for Climate Change Sustainable Development & Public Leadership (NCCSD), Ahmedabad, India

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