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Challenges and opportunities in marketing farm produce: A review

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Abstract

India still retains its status as agrarian economy in the twenty first century too. Along with a proportionate shift in the demographics of the agriculture sector and its output, the marketing of farm produce has gone through many phases from Barter system to internet based online marketing. Implementation of comprehensive marketing strategies is becoming difficult due to vast diversifications which are regional, technological, attitudinal, economical, and political. Studies reveal that Farm Producers have been facing many problems and challenges. Still the decisions taken by the farmers in this regard prove to be ineffective.

The present study is a review article on the evolutionary changes in the field of farm produce marketing in India. Further, an attempt was made to analyse the challenges and problems faced by the farmers with regard to their decisional roles, their affordability towards acquiring knowledge and information, dependency for financial assistance, and their opinion on policy initiatives of government towards marketing of farm produce in India. As most of the agricultural products have no or less shelf period, a systematic analysis on marketing farm produce is presented based on the authenticated information published by various government reports, public journals, research articles, etc.

Keywords: Marketing, farm produce, agriculture, government initiatives

1. Introduction

1.1 Genesis of Marketing of Farm produces

India is fundamentally an agrarian economy where sole dependence has been on agriculture since time immemorial. In the olden days, the farm produce was exchanged on the basis of goods for goods and also against services which was known as Barter system. Gradually the scenario changed with the changing times and farm produce began being sold with an element of commercial value. Trading of agriculture/farm produce began for exchange of money. And from trading to marketing of agricultural produce began although mostly it is a way of traditional selling. Marketing of farm produce in India is still in the evolving stage. Studies reveal that in India, the networks of cooperatives at the local, regional, state and national levels that assist in marketing of farm produce face certain challenges. Though there is a high scope of progress in this regard, the farm produce marketing has not yet attained its full potential. The commodities that are mostly handled are food grains, jute, cotton, sugar, milk, aqua marine products and areca nuts. Usually, most of the farmers rely on co-operative societies to market their products in India.

Due to the impact of globalization, Indian farm produce has great scope not only within the economy but also in international market spheres. Marketing of farm produce means arrangement of physical and institutional set up to perform all activities involved in the flow of products and services from the point of initial farm production until they are reached to the ultimate customer. The activities in the marketing of farm produce includes assembling, handling, storage, processing, wholesaling, retailing, and export of farm produced commodities as well as supporting services such as market information, establishment of grades and standards, commodity trade, financing, price risk management and the institutions involved in performing the above functions.

Agricultural trade policy has long reflected the widely held belief that, because of its importance and vulnerability, the agricultural sector could not be exposed to the full rigours of international competition without incurring unacceptable political, social and economic consequences. This view has led to high and widespread protection of the sector, which has been a cause of depressed and unstable agricultural commodity markets, in their turn, leading to further pressures for protection. In recent years, however, many developing countries have unilaterally taken steps towards the liberalization of overall and agricultural markets. Most of these steps have involved the development of structural adjustment programmes and regional

Correspondence P Lavanya Kumari Scientist (Statistics & CA), Regional Agricultural Research Station, Tirupati, ANGRAU, Andhra Pradesh, India cooperation schemes. In the former centrally planned economies, the systemic reforms underway have also led to greater external openness and this process, in particular the increasingly important role in international trade that China is likely to play, has far-reaching implications worldwide. On the other hand, for a number of developed countries, including such major traders as the United States and the EC, agricultural policy reform induced by domestic or international pressure has led to some reduction in trade distortions but not to significant trade liberalization as yet.

The problems and issues facing agricultural trade and the forces underlying agricultural trade policies can only be appreciated in the light of the major changes that have taken place in world markets during the past decades. The first Section of this chapter presents some basic data illustrating the main changes that have taken place since the early 1960s with regard to: the weight of agriculture in overall trade; the market shares of the different regions and countries; the real value and purchasing power of agricultural exports; and the direction and composition of agricultural trade flows. The second Section examines agricultural trade in the context of the major political and economic transformations that have taken place during the past decades, especially since the beginning of the 1980s. Section III discusses the new agricultural trading rules that emerged in 1994 after the conclusion of the Uruguay Round of GATT negotiations and their likely impact on world agricultural trade. Section IV discusses the movement towards closer regional economic integration through the development of regional trading blocs and the place of agriculture in this process. Finally, Section V examines the interfaces between agricultural trade, the environment and sustainable development and the conditions under which trade and the environment could be made mutually supportive. The article published by Acharva. S.S. (2006) [15] discusses how Strengthening agriculture is critical for facing the challenges of rural poverty, food insecurity, unemployment, and sustainability of natural resources. The objective of this paper is to identify the main problems in agricultural marketing and rural credit systems and suggest policy strategies that can be implemented for strengthening Indian agriculture.

Gurupanch Kuber Singh, Virulkar Shreelekha (2016) ^[7], in their survey on marketing of agricultural produce stated that the producer was subjected to innumerable levies and charges, without having any say in the judicious utilization of the amount paid by him. He was also denied a large part of his produce by manipulation and defective use of weights and scales in the market. Many commissions and committees were set up by the Government of India to recommend measures to rectify the situation. There are a number of marketing situations which are either semiprivate or semi govt. However, India has been experiencing different forms of

marketing systems time to time with changing nature of economic policies, pattern of production and marketing situation. Hence, there is a need to focus issues in the studies of agricultural marketing in India.

2. Marketing of Farm Produce

Marketing of Farm Produce has more significance in the agrarian economy like India. It is a well-known fact that India is still defined as a developing country in all its spheres. A. Mc D. Livingstone (1938) [13] stated that all the farm produce marketing that was going on in India at that time owes its origin to the Royal Commission on Agriculture. The Commission held that the prosperity of the cultivator and his progress in agricultural efficiency depends upon sound marketing, and recommended that provincial government should appoint a whole-time senior officer to investigate marketing conditions. Acharya. S.S (2006) [3] has rightly pointed out that rural credit plays crucial role in strengthening Indian agriculture. A. Vadivelu, B.R. Kiran (2013) [2] has identified problems and prospects of Agricultural marketing in India. S.S. Acharya, N.L. Agarwal (2004) in a book on Agricutural marketing in India discussed the "Ideal Marketing System" for India, as agricultural product marketing services plays a pivot role in fostering and sustaining the tempo of agricultural and rural development. The "Ideal Marketing System" has been defined by Moore, Johl and Kushro in the following words: "The Ideal Marketing System" is one that maximizes the long-run welfare of society. It must be physically efficient, otherwise the same output could be produced with fewer resources; and it must be allocatively efficient, otherwise a change in allocation could increase the total welfare where income distribution is not a consideration.

3. Declining importance of agriculture in world trade

The relationship between trade and output in general underlies the growing interdependence and integration of the world economies. This is the case also for agriculture. On a global basis, the long-term growth rate of agricultural trade has tended to be significantly greater than that of production. This pattern was reversed during much of the 1980s, reflecting depressed exports and imports in the developing countries, particularly in Latin America and the Caribbean and in Africa. By contrast, the growth in agricultural trade continued to generally exceed that of production in the developed countries

Despite its relative dynamism, however, trade in agricultural products has tended to lag behind trade in other sectors, particularly manufactures, as industrialization proceeds. On a global basis, agricultural exports now account for less than 10 percent of merchandise exports, compared to about 25 percent in the early 1960s.

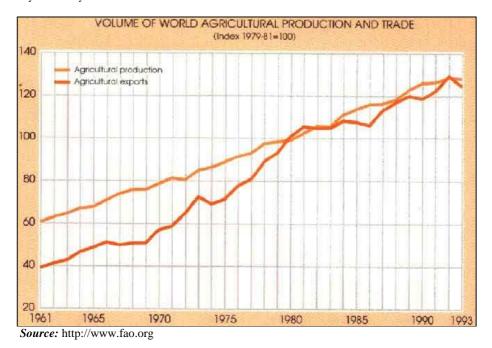


Fig 1: Volume of World Agricultural Production and Trade

In figure-1 it is implicitly understood that though there is an increasing trend in the volume of agricultural production, the exports seem to be rapidly increasing. This can be attributed to the enhanced developmental schemes. Implementation of technology, etc. which might have had impacted the domestic

markets of the nation's making them sustainable. Further, the very widespread protectionism and deep structural problems in the world agricultural trading system were overcome by the Uruguay Round of GATT negotiations and creation of a new World Trade Organization (WTO).

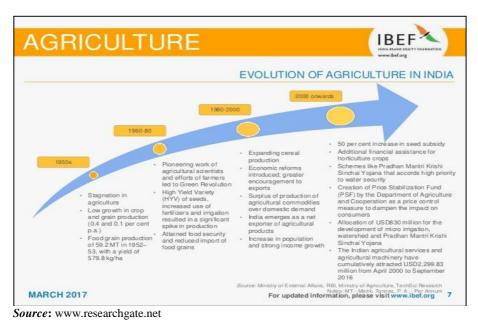


Fig 2: Evolution of agriculture in India

The evolution of agriculture in India has many landmark contributions to make it to this day. To state few it was the establishment of agriculture departments and agriculture colleges, initiation of all-India coordinated crop improvement projects, reorganization of the Indian Council of Agricultural Research (ICAR), the development of agricultural universities were some of the many initiatives Indian government has taken in that period. The figure-2 indicates that 1950s were featured to be stagnation in agriculture. No progress has been counted. 1960-1980 is the period of green revolution. There was a significant increase in the farm produce in that period. 1980 to 2000 periods was the phase of development with the advent of many reforms in agriculture sector. Year 2000

onwards, there was an immense financial assistance to the farmers to produce more of farm produce. Remarkably, the Indian agricultural services and agricultural machinery have cumulatively attracted USD 2.278.30 million from April 2000 to March 2016.

Markets for Farm Produce are special types of markets that have special characteristics that differ from other markets. These are mainly due to factors affecting supply of farm products, and the situation of producers in this business. First of all the agricultural market is very competitive because the producers are all very small and large in number. Therefore, they don't have a great influence on the price of their

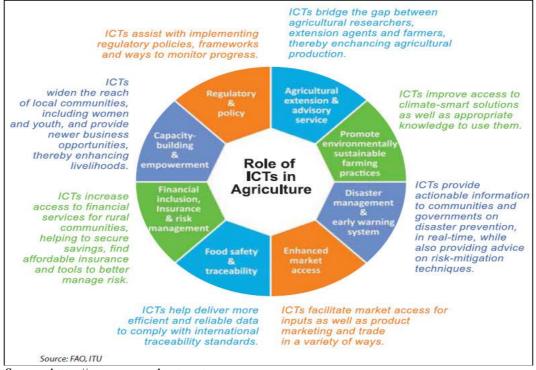
products. Usually, the farmers don't have significant role in fixing the market prices for the produce.

The Annual Report, 2016-17 of Department of Agriculture, Co-operation & Farmers Welfare stated that in India the 'Operational Holding' is higher than 'Ownership Holding' in Farm production. Hence, most of the decisions related to farm produce marketing and other aspects are taken by persons who operate land not by those who own it.

4. Distinguished Studies on Farm Produce Products and their marketing

The study conducted by Pranabh K. Bardhan (1973) [13], put

forth the factors that may have contributed to the immense relation, some of these involving production uncertainty in agriculture & some others involving the interlinked phenomenon of land and labour market imperfections. There is also a survey taken up by N.H.Rao (2007) [12] indicating that knowledge is an increasingly significant factor of production of modern agriculture. It further stated that significant policy, institutional networking and capacity building initiatives will be required at various levels to overcome the constraints and effectively integrate Information and Communication Technologies (ICTs) into the agricultural development process in India.



Source: https://www.researchgate.net

Fig 3: Role of ICTs in Agriculture

The above figure clearly manifests the key role that is played by ICTs (Information and Communication Technologies) in Agriculture sector. The ICTs have revolutionized the way the conventional agricultural practices had been with many short comings such as lack of information, integration, expansion, development and change. ICTs have made the things very simple, accurate and faster. Indeed, these characteristics are very much essential in agricultural sector. The factors identified through the study by Steven Were Omamo, (1998) [17] states that in the absence of risk, the tension between gains from specialization and corresponding increases in transaction costs may lead to enterprise diversification on small farms.

The article by Uma J Lele (1967) [19], examines the regional prices differences that are caused by speculative elements in trade in developing countries. The analysis emphasizes the high degree of interdependence between wholesale markets in the process of price formation. Regional price differences often result from differences in varieties of the grain traded. Prices further differ due to transport costs, transport bottlenecks and government control on movement of goods. The paper presented by Haque. T (2000) [8], reviewed the nature and impact of contractual agreements in land and

The paper presented by Haque. T (2000) [8], reviewed the nature and impact of contractual agreements in land and labour markets in various regions and also analyses the role of such contractual agreements in the context of market reforms, economic growth and equity.

5. Challenges and Problems of Farm Producers

The Government reports and surveys identify a number of problems and challenges faced by farm producers in marketing their products.

- A well established and channelized market to sell the products is not available in India.
- The practices followed regarding the marketing of goods are very uncertain and monopolistic in nature.
- The role of intermediaries is quiet dominating in the field.
- Access to global markets to the farmers is still an ongoing challenge in enhancing the scope for marketing of farm produce.
- The wastage in the post-harvest market is immense.
- The markets are not well organized in terms of information, technology, quality accessibility to markets at wider range, etc.
- There is no scope for the direct role of the producer or farmer in fixation of prices for the produce rather middle men or intermediaries act key role in determining the prices.
- Farm produce is easily perishable. A well-equipped warehouse facilities are required which is not available in adequate.

- There is also the problem of transportation in India in expanding the markets for farm produced goods.
- The markets are subjugated by certain malpractices false weights and measurements, adulteration, black marketing and hoarding, etc.
- There is no standardization of farm produce so that the farmers gain good profits.

Extensive involvement of government in farm produce marketing has created restrictions in internal and external trade, resulting in high-cost marketing and transport options for farm produce commodities in India. There is also a potential growth of private sector investment in farm produce marketing. World Bank reports exhibit that it supports the Indian farm produce marketing by providing farmers with alternative market opportunities. Besides all these government of India plays an important role in developing farm produce marketing. The Marketing Division of Department of Agriculture, Co-operation & Farmers Welfare (DAC & FW) is concerned with policy and programme implementation of Agricultural Marketing Reforms and Schemes of Integrated Scheme for Agricultural Marketing (ISAM), and National Agricultural Market (NAM) through Agri-Tech Infrastructure Fund (ATIF).

6. A Brief view on the Statistics of Indian Farm Produce Sector

The economic contribution of Farm Produce to India's GDP is slowly declining with the country's broad based economic growth. Farm Produce including fisheries and forestry, is one of the largest contributors to the Gross Domestic Product (GDP). According to the Central Statistics Office (CSO), the share of Farm Produce and allied sectors (including agriculture, livestock, forestry, and fishery) is estimated to be 17.3 per cent of the Gross Value Added (GVA) during 2016-17 at 2011-12 prices. The Gross cropped area is 195 million hectare, Net sown area is 141 million hectare agricultural irrigated land (% of total agricultural land), Animal husbandry output constitutes about 32 per cent of country's agricultural output, and agricultural growth is about 4.1% in the current year from 12% in 2015-16 (Economic Survey). India stands first in the production of milk and second highest producer of fruits and vegetables. Horticulture comprises 10% of Gross cropped area and producing 10.75million tonnes. Total production of fruits is 49.36 million tonnes and vegetable are at 93 million tonnes. India accounts for 57% of the world's buffalo population and 14% of cattle population and holds 6th place with 7% world's market share in medicinal and aromatic plants.

7. Recent Reformative Steps Initiated by the Government

In view of the above discussed challenges, the Government taking in to account the above discussed challenges at farmer level and national level has initiated remarkable programmes and schemes such as, Niti Ayog Marketing and Farmer Friendly Reforms Index. These reforms come under the model APMC Act, joining e-NAM initiative, and special treatments to fruits and vegetables for marketing and level of taxes in mandis. Towards enhancing the transparency in transactions and make the farmers' reach to larger number of markets to sell their produce, the Government launched National Agriculture Market (e-NAM) scheme on 14-04-2017. Under the scheme a National web based unified agrimarketing portal for inter market and inter-state trading of agri-produce was created. 585 wholesale regulated markets

have been integrated with e-NAM by March, 2018. The refer to the following http://www.enam.gov.in/NAM/home/index.html to get the assistance. In order to market the farm produce effectively, the Department of agriculture & Co-operation formulated a Central Sector scheme for Promotion of National Agriculture Market through Agri-Tech Infrastructure Fund (ATIF) through provision of the common e-platform. More information can be drawn from the website https://sarkariniti.com/agri-tech-infrastructure-fund/. It is rightly mentioned in many studies Agriculture sector in India is very unstructured and dysfunctional. The progressive reforms undertaken by the Department of Agriculture, Cooperation & Farmers' Welfare includes new Model Agricultural Produce and Livestock Marketing. An Act was enforced by name - "Model Agricultural Produce and Livestock Marketing (Promotion and Facilitation) Act, 2017" and directed the states to adopt it on 24-04-2017. The provision includes guidelines for inter alia private markets, direct marketing, farmer - consumer markets, special commodity yards, declaring warehouses/silos/cold storages, etc. These provisions are meant to reduce the number of intermediaries between producer and buyer and increase the share of the farmer in consumer's rupee. C.H. Hanumantha Rao & Ashok Gulati (1994) [4] have presented the emerging perspectives and policy issues in Indian Agriculture.

Central schemes such as Integrated Scheme for Agricultural Marketing (ISAM) and its sub-scheme Agricultural Marketing Infrastructure (AMI) was also created during the XIIth plan period. There were also one-time schemes such as Grameen Bhandaran Yojana (GBY) for creating storage infrastructure, the scheme for Development/strengthening of Agricultural Marketing Infrastructure, Grading and Standardization (AMIGS) for enabling agricultural marketing infrastructure along with a subsidy @ 25% and 33.33% is provided on the capital cost of the project for general and special categories of beneficiaries. Few more schemes were introduced towards venture capital assistance; Small Farmers Agribusiness Consortium (SFAC), Venture Capital Assistance (VCA) to qualifying projects. The outlay of the scheme has been fixed at Rs.500 crore for the XII plan period. The assistance thus provided is refundable without interest.

For informational assistance, the government has initiated Marketing Research and Information Network (MRIN). This is to support the states to set up and maintain connectivity with Agmarknet portal to serve the farmers with agricultural marketing information. To strengthen the Agmarknet, the scheme called Strengthening of Agmark Grading Facilities (SAGF) to upkeep the Central Agmark Laboratory and Regional Agmark Laboratories was created. (http://agritech.tnau.ac.in/amis/food_agmark.html).

National Institute of Agriculture Marketing (NIAM) an autonomous institute was also been initiated for capacity building activities for farmers and other stakeholders in the agriculture marketing sector. NAIM carries out training, research, extension, education and consultancies. More information can be discovered from the website http://www.ccsniam.gov.in/.

This article spells out an agricultural strategy that can boost the product of food and fibre in a cost effective manner and generate productive employment while protecting the environment. Ramakrishnan. P.S (1992) [14] has conducted an interdisciplinary study from north-eastern India. There is study taken up by Garry Pursell and Ashok Gulati (1992) which briefly summarizes previous research on the nature and

degree of government interventions in agricultural markets, and what impact these interventions had on the overall incentives for agricultural production and on the relative effective incentives for the cultivation of different crops during the 1980s.

8. Benefits of the Schemes to Farm Produce Marketers through the initiatives undertaken by the government

 The farmers can sell the produce without the interference of any middlemen or brokers thereby making competitive

- returns out of their investment.
- Traders will be able to do secondary trading policy from one APMC to another one anywhere in India. Local traders will also have the opportunity to have access to larger national market.
- The buyers, processors & Exporters will be able to source commodities from any mandi in India by reducing inter-0mediation cost.
- Consumers will also be benefitted by these schemes with stable prices and availability of produce to the consumers. Figure -4 indicates these initiatives.



Fig 4: Major Government initiatives

9. A Bird eye view on Budget 2017 on Farm Produce Marketing

According to the article published by Times of India Newspaper on Budget: 2017, Highlights of the Budget for Agriculture are presented;

- 1. Farmers' income to double in five years.
- Rs 10 lakh crore allocated for agricultural credit; J&K along with states in east and north-east to get special attention.
- 3. Cropped area coverage under Fasal Bima Yojana increased to 40% and 50% in FY 18-19.
- 4. Rs 1,900 crore allocated to computerisation and integration of 63,000 Public Agriculture Societies (PACS) for loan distribution
- National Agricultural Market (e-NAM) to double from the existing 250 to 585 APMCs; Rs 75 lakh allocated to each e-NAM
- Rs 2,000 crore allocated as corpus for new fund Dairy and Infrastructure Development Fund to be established under NABARD; allocation to increase to Rs 8,000 crore in three years.
- 7. 1,000 Mini Labs to be established in Krishi Vigyan Kendras (KVK).
- 8. Five lakh farm ponds to improve water availability for irrigation.

10. Implications of the announcement on the agriculture sector

The Union Budget 2017-18 is perhaps the most significant budget for the Narendra Modi-led NDA government and will define the path forward on how the economy will perform. Coming in the backdrop of demonetisation, slowdown in

global economy, forthcoming elections in UP, Uttarakhand, Goa, Punjab and Manipur, and the fact that general election is due in early 2019, the implications of this budget on the economy and political outcomes, is being closely analysed by all. This budget is special for other reasons as well, most important of all being the focus on agriculture and rural development. This budget has given both the interrelated sectors a major boost with significant increase in allocation, which is bound to show significant results going forward. With agriculture growth expected at 4.1%, this budget presents the best opportunity for transforming the rural economy. Let's look at the major announcements.

A. Rs 10 lakh crore allocated for agricultural credit

The agricultural sector has been suffering on account of several factors – poor monsoons, lack of farm insurance, rising input costs, low remuneration to farmers, lack of storage facilities and low investment in irrigation facilities.

The agricultural credit target for FY 16-17 is Rs 9 lakh crore. The allocation for FY 17-18 is targeted at Rs 10 lakh crore. That's an increase of Rs 1 lakh crore or over 10%! This is expected to be a game changer for farmers who have been looking towards getting relief from the government to bail them out of the financial cesspool that many of them find themselves in. Short-term loans of upto Rs 3 lakh are already available to farmers at 7% interest. In December 2016, the government had announced a 60-day interest waiver to them. If the farmers avail of the 3% additional interest waiver by returning loans within the stipulated time, their actual interest comes down to only 4%. So the increase in total allocation of Rs 1 lakh crore for credit to farmers is a major boost.

B. Cropped area coverage under Fasal Bima Yojana increased to 40% and 50% in FY 18-19

The Pradhan Mantri Fasal Bima Yojana was launched in 2016 with 30% of the cropped area brought under this scheme. In FY 17-18, this area has been increased to 40% and by FY 18-19, the area will further increase to 50%. In 2016, the budget allocation was Rs 5,500 crore and was increased to Rs 13,240 crore to settle arrears. In FY 17-18, Rs 9,000 crore has been allocated. This will hugely benefit farmers who are vulnerable to erratic monsoons.

C. Rs 1,900 crore allocated to computerisation and integration of 63,000 Public Agriculture Societies (PACS) for loan distribution

Various co-operative societies under NABARD have been in the forefront of releasing loans to farmers in rural areas. With Rs 1,900 crore allocated to computerizing all 63,000 PACS, the increase in total loan distribution will be efficiently distributed and better monitored.

D. National Agricultural Market (e-NAM) to double – from the existing 250 to 585 APMCs; Rs 75 lakh allocated to each e-NAM

Farmers lose a lot of their produce in the post-harvest phase due to poor cleaning, packaging and storage facilities. The government plans to improve farmer's returns by investing in modern cleaning, packaging and storing of agricultural produce at each APMC. Towards this, Rs 75 lakh has been allocated to each e-NAM.

E. Rs 2,000 crore allocated as corpus for new fund – Dairy and Infrastructure Development Fund to be established under NABARD; allocation to increase to Rs 8000 crore in 3 years

Milk and cattle rearing is an additional income for the farmer and therefore, this move at establishing a fund dedicated to dairy development is going to transform the farmer's livelihood as also increase the percentage contribution of milk and processed milk items to the overall agricultural output of the nation.

F. 1000 Mini Labs to be established in Krishi Vigyan Kendras (KVK)

Lab-to-land knowledge and technology will now be better facilitated at the local level with more of these mini-labs being set up at KVKs. Farmers will have better access to relevant seeds, soil analysis and suitable plant varieties, all of which will optimise output in their respective areas.

G. Five lakh farm ponds to improve water availability for irrigation

From the existing 5 lakh farm ponds, the government plans to implement an additional 10 lakh farm ponds this year and add another 5 lakh ponds in FY 17-18. This will contribute to increasing farm output and is in line with the government's overall target to doubling farmer income in three years.

11. Overall view

The Finance Minister has given the agriculture sector the attention and investment boost that it deserved and the impact will be seen in coming times. The above article by Times of India on the prospects of agricultural sector in the forthcoming budget is expected to give impetus to the farm produce goods. It is clear that there is a more prospective

growth and expansion opportunities for marketing of farm produce products.

12. Conclusion

Marketing of Farm Produce is of great significance in the present Indian economic scenario. Approximately, three quarters of India's farms depend on rural income. Majority (more than 70 per cent) of India's poor are found in rural areas. In view of the above mentioned challenges and problems faced by farmers, and authenticated data from various scientists and researchers makes it more imperative that farm produce marketing reformations and strategies are more required to tap and utilize the fullest potential of rural India. The initiatives of the government do carry certain loopholes which are to be closely scrutinized and implemented effectively.

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