AN ANALYSIS OF CHALLENGES FACED BY FARMERS IN PRODUCTION AND MARKETING OF AGRICULTURAL PRODUCTS

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ABSTRACT

The agricultural industry plays an important role in strengthening the economy of the country. The farming is continuously changing its pace and various technological development also affecting to this sector. This becoming a challenge for the farmers as the sector is taking a shape of global market place. The agricultural marketing is gaining importance as the market becoming very volatile and vibrant. The farmers also need to focus on cultivation cost to maximize the profit margin of their produce. The present study is talking about the challenges in production and marketing of agricultural products. It talks about the factors that really making impact on farmers and their income. The study is confined to Ambegaon tehsil of Pune district in Maharashtra. The sample size for the study was 100 and data analysis is done with simple statistical tool and ranking analysis based on the mean. The study reveals the factors that have really making difference in production and marketing of the agricultural products.

Keywords: agricultural marketing, cultivation, agricultural products

Introduction

Farming is an integral part of the Indian economy. In India more than 70% of the population is directly dependent on the agricultural (Statistica.com 2021). The Indian farmers are struggling with much more obstacles. It not only related to production but it also related to marketing and other issues. In spite of several challenges the Indian farming is on grow but it is too slow as compared to other sectors in India. The following histogram shows the annual yield in India.
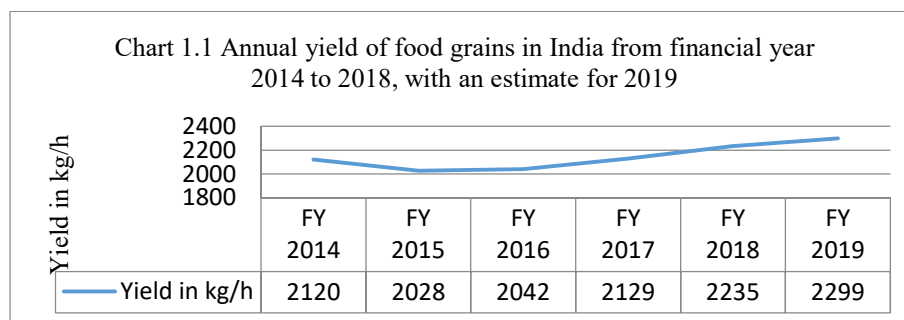

Figure 1: Annual yield of food grains in India from financial year 2014 to 2018, with an estimate for 2019
Source: https://www.statista.com/statistics/764321/india-yield-of-food-grains/

The chart shown above shows that the annual yield is growing but it is growing slowly. Also it got declined in the year 2015 and 2016. The data shown in the graph is before FY2019. Therefore it shows the estimate for FY2019.
The resources for farming are very much rare in the world, viz. water, quality of soil etc. These are majorly associated with the production, but there are limitations on account of marketing of these produce. The Indian government should focus on these factors too, to develop the sector in all around. The Indian farmers particularly those are in Maharashtra are much behind in expanding their business which has ample opportunities for the foreign trade. They are lacking behind as they have very little or no knowledge in marketing their agro products.
The Pune district area is of about 5% of state's geographical area. The population density of

Pune district is 461.85 per square kilometer and has 14 tehsils. The major crops of Pune district are Groundnut, Tur, Corn, Wheat and Sugarcane, rice, onion and potato and in Ambegaon Tehsil are rice, nachani, sugarcane, potato and onion. The following chart shows the land use in Pune district (Government of Maharashtra 2021).
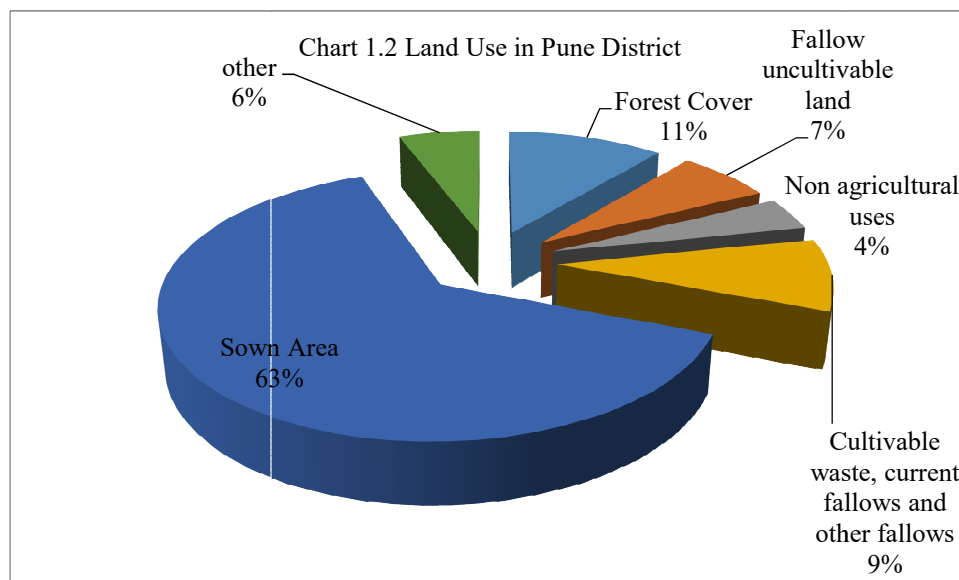

Figure 2: Land Use in Pune District

Source: http://krishi.maharashtra.gov.in/Site/Upload/Pdf/pune_cdap.pdf

From the above chart it is concluded that the total sown area is about 63%. This means that the farming is the main occupation and is a leading factor in the economic development of the district.

Review of Literature

C. Prasannakumaran et al. (2018) conducted a research on farmers' constraints towards agriculture. They have studied the constraints of farmers which specifically related to production, marketing and finance. The study was conducted between August 2017 and December 2017 in the Salem district of Tamil Nadu state of India. The researchers pursued answers to the challenges faced by collecting the opinion of farmers regarding performance along with the personal profile of the farmers in nearby areas. The researchers used multistage sampling method to collect the relevant data. They have concluded that there is need for reform in marketing the agricultural produce which helps the farmers to get the current price of the produce and streamline their produce to the market. This means that there is a lack of marketing information such as price, demand etc. They also concluded that the government at state level should focus on irrigation facilities. The data in the research paper shows that the production factors also need to be considered such as availability of labors, machinery etc. and credit facilities and loan facilities at appropriate rate should be available to the farmers.

G. Karthileyan studied on marketing of agricultural goods. The researcher identified the problems faced by the farmers and offered the reliable solutions to market their products. The researcher concluded that the farmers have very little knowledge about the market and they hardly know the level of demand for their products. The reason for the lack of knowledge stated in the conclusion that there is no proper system that drives the transaction of agricultural produce in the market place.

S.V.Murugesan et al. (2016) conducted a research on problems and prospect of agricultural marketing. The researchers discussed about the shifting of the labor force and utilization of fertilizers and pesticides. They concluded that the labors earlier working in agricultural sector is now shifting towards the unorganized sectors such as construction industry. The researchers also discussed on the challenges faced by the co-operative marketing societies in India.

Namami Gohain et al. (2018), studied on problems and constraints in marketing agricultural produce. The study was conducted in Punjab to research on problems related to marketing of paddy, wheat, maize and cotton. The sample in this study is based on the operational holding of the farm. The researchers from the study said the important problem identified is delay in the procurement of paddy and the deduction of payments by intermediaries due to moisture content in the grain. The lack of remunerative prices is also the biggest constraint for marketing of the grains. The researcher through the study also highlighted the exploitative practices in the market by the intermediaries is also a concern for the farmers.

S. Jerome (2017) conducted a study on agricultural marketing strategies. The researcher adopted descriptive style for the study and the sample size was 100. The research revolves around understanding the awareness of farmers about the agricultural marketing. The present study was conducted in Tiruchirapalli district of Tamil Nadu in India. The researcher concluded that the farmers should be supported with infrastructure of grading, sorting and packaging to market their produce at the quality standards. The research says that the farmers are facing difficulties in providing quality products as per market standards. The another challenge is transparency of transaction take place in the market. The researchers concluded that the market system should be proper and transparent.

Research Methodology

A. Objectives:
1. To study the marketing strategies of agricultural products.
2. To identify the challenges faced by farmers in producing agricultural products.
3. To identify the challenges faced by farmers in marketing agricultural products.
4. To know the awareness level of the farmers about various marketing channels of agricultural products.

B. Area of Study, Sample Design, Sample Unit and Sample Size:
The study is restricted to Ambegaon Taluka, Pune district only. The convenience sampling is used for conducting the survey. The sample unit comprises of individual farmers in the selected area, cultivating various crops. The data is collected from 100 farmers from the selected area.

C. Data Sources:
a. Primary Data:
   A formal questionnaire is prepared and circulated among the population in the selected area for collecting the data. The formal discussions with the farmers were also held to get the relevant information.
b. Secondary Sources:
   The books, national and international journals on related topics have been referred for creating a base for the research article.
D. Statistical Tool used for Data Analysis:
   Simple statistics and rank analysis tool is used for data analysis. The average rank analysis and average score analysis have been used for interpreting the results.

Data Analysis and Interpretation
Table 1: Factors influencing the cultivation of crops

Table: 1.		Rank I	Rank II	Rank III	Rank IV	Rank V		
Sr. No.	Factors	5	4	3	2	1	Total	Mean
1	Suitability of soil	29	30	13	11	17	100	
		145	120	39	22	17	343	3.43
2	Climate condition	29	30	13	11	17	100	
		145	120	39	22	17	343	3.43
3	Availability of Water	30	29	13	11	17	100	

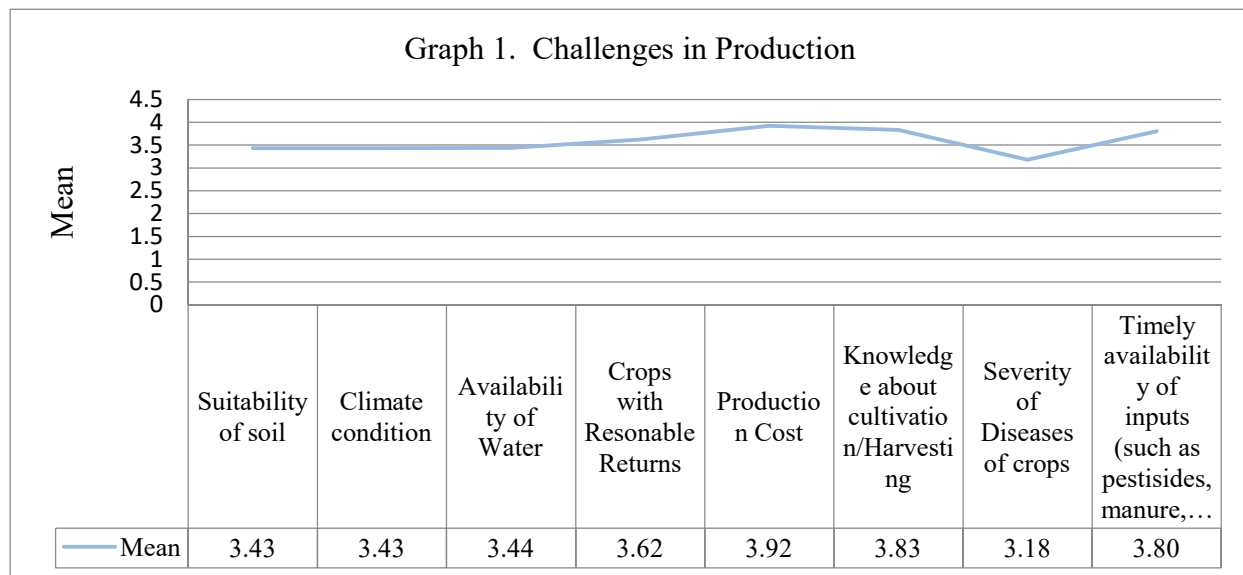|								
		150	116	39	22	17	344	3.44
4	Crops with Reasonable Returns	34	25	19	13	9	100	
		170	100	57	26	9	362	3.62
5	Production Cost	37	36	14	8	5	100	
		185	144	42	16	5	392	3.92
6	Knowledge about cultivation/Harvesting	38	33	11	10	8	100	
		190	132	33	20	8	383	3.83
7	Severity of Diseases of crops	18	31	22	9	20	100	
		90	124	66	18	20	318	3.18
8	Timely availability of inputs (viz. pesticides, manure, fertilizers, irrigation systems etc.)	39	36	5	6	14	100	
		195	144	15	12	14	380	3.80

Graph 1. Challenges in Production

	Suitability of soil	Climate condition	Availability of Water	Crops with Resonable Returns	Production Cost	Knowledge about cultivation/Harvesting	Severity of Diseases of crops	Timely availability of inputs (such as pestisides, manure,…
Mean	3.43	3.43	3.44	3.62	3.92	3.83	3.18	3.80

Figure 3: Challenges in Production

The graph is shown here related to challenges faced by the farmers in producing their crops. The factors taken for analysis of challenges in production are suitability of soil, climate condition, water availability, crops returns, cultivation knowledge, disease severity and availability of inputs. The simple rank analysis is used and calculated the mean for the same. The datasheet and chart is shown here. The chart shows the equal rank to soil suitability and climate condition. The farmers have given higher weightage to the production cost and knowledge about the cultivation followed by availability of inputs. The production cost includes cost of seeds, labour charges, cost of pesticides, fertilizers etc. The farmers of Ambegaon tehsil elaborated that they are facing challenges in getting labour for the cutting of crops, threshing etc. They also iterated that the cost of fertilizers and pesticides are high and the government should frame the policies to minimize the prices to get it affordable. The cultivation knowledge is important according to them. The next important factor for the farmers in Ambegaon tehsil is availability of inputs. The farmers facing problems in getting the inputs for farming at the right time. These inputs include fertilizers, seeds, pesticides etc. There should be availability of these inputs as per the farming schedule of the local area.

Table 2: Factors influencing the marketing of agricultural products

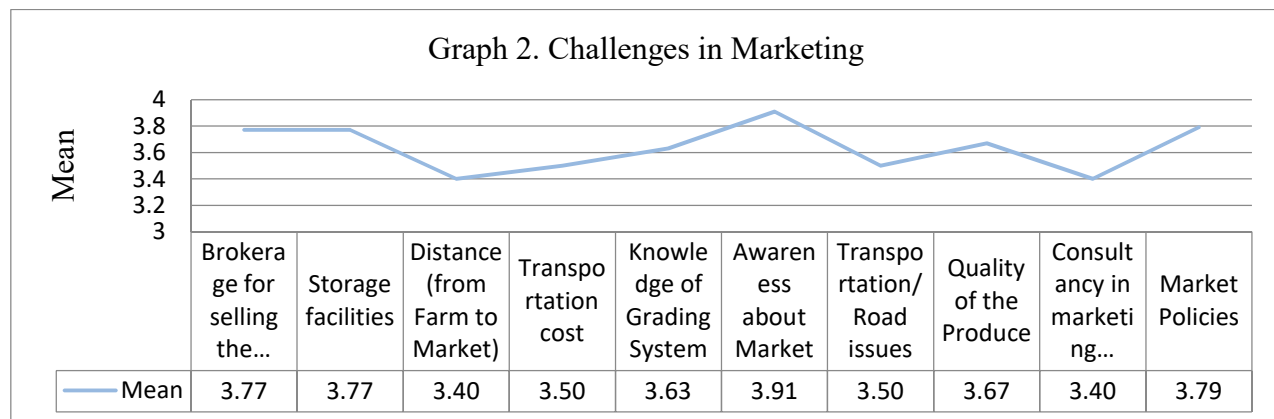| Table 2		Rank I	Rank II	Rank III	Rank IV	Rank V		
Sr. No.	Factors	5	4	3	2	1	Total	Mean
1	Brokerage for selling the products	40	28	11	11	10	100	
		200	112	33	22	10	377	3.77
2	Storage facilities	35	30	20	7	8	100	
		175	120	60	14	8	377	3.77
3	Distance (from Farm to Market)	17	36	28	8	11	100	
		85	144	84	16	11	340	3.40
4	Transportation cost	30	20	31	8	11	100	
		150	80	93	16	11	350	3.50
5	Knowledge of Grading System	35	25	19	10	11	100	
		175	100	57	20	11	363	3.63
6	Awareness about Market	42	31	11	8	8	100	
		210	124	33	16	8	391	3.91
7	Transportation/ Road issues	30	20	31	8	11	100	
		150	80	93	16	11	350	3.50
8	Quality of the Produce	36	25	20	8	11	100	
		180	100	60	16	11	367	3.67
9	Consultancy in marketing agri products	28	28	11	22	11	100	
		140	112	33	44	11	340	3.40
10	Market Policies	40	28	11	13	8	100	
		200	112	33	26	8	379	3.79

Graph 2. Challenges in Marketing

Mean	Brokerage for selling the…	Storage facilities	Distance (from Farm to Market)	Transportation cost	Knowledge of Grading System	Awareness about Market	Transportation/ Road issues	Quality of the Produce	Consultancy in marketing…	Market Policies
Mean	3.77	3.77	3.40	3.50	3.63	3.91	3.50	3.67	3.40	3.79

Figure 4: Challenges in Marketing

The challenges of marketing agricultural produce includes brokerage, storage facilities, transportation cost, grading system, market awareness, road issues, product quality, consulting charges and market policies. The chart shows the higher weightage to market awareness. This includes the current demand and supply analysis to set the pricing of the produce so that the farmers can plan for the delivery of such produce at the market. It helps them analyze the cost and set the margin of the profit. The market policies play an important role in marketing the agricultural products. These policies include setting the price level for the produce, transparent public sale, and transparency in making payments. The farmers also gave weightage to the grading system and quality of the produce. The grading system is important in agricultural sector as it classifies the products based on various dimensions such as size, color, shelf life etc. The brokerage and storage facilities are having equal weightage. The farmers iterated that there should be good storage facilities for storing the products before

it get into the market. These challenges need to be considered to get good returns on the investment for each of the crops.

Conclusion

The farmers are the backbone of the society and it is the basic part in the economic system of the country. The challenges faced by the farmers might be same through put the world; but it differs in the intensity which depends on various factors. The present study reiterated the challenges but it studies the challenges particularly Ambegaon tehsil of Pune district. The present study reveals the factors that are particularly challenging for the said region. The major challenge the farmers are facing is production cost and knowledge about the cultivation. There should be awareness campaigns at the gram (every village) level to cater the need of the farmers regarding information about cultivation. The production cost also affects the farmers and it drastically reduces the profit margin for them. This is also a major challenge for the farmers to keep the cost level at the minimum. The marketing challenge includes the awareness about the market. The farmers have given a high weightage to this factor as they are little or not aware about the current market situations. There should be proper dissemination of the market information through the proper channel at village level.

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