

Original Research Article

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Farmers' Crop Selection Preferences in their Farming System in a Village of Murshidabad District of West Bengal, India

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ABSTRACT

Choice factors have been the basis for selecting any crop in any farming situation. Research impacts preference of selecting majority of crops cultivated in different types of farmers. That is why crop choice is an important factor but occupied a small niche on the research agenda. Keeping this in mind the present study was conducted at Dalua village of Beldanga-I block of Murshidabad district of West Bengal. The objectives were to study the varying trends in respect of total area under cultivation as well as yield and price of different crops grown in the study area. The study also analysed the farmers' preference attached to different crops grown in the study area. 60 farmers were selected randomly for the study. It has been found that except Jute, Aman Paddy, Mustard, Lentil and Sesame all other crops like Pointed Gourd, Cabbage, Brinjal, Cucumber, Potato, Chilli, Boro Paddy, Wheat, and Sugarcane have shown a gradual decline in total area under cultivation. There was no such significant improvement or decline in the yield of different crops grown in the study area but prices of the crops increased gradually. Rice crop was given first priority among all others crops because the same is the staple food of that area and farmers keep the crop for consumption throughout the year. The other crops that get preference after rice are jute, mustard, lentil, cucumber, potato & onion, cabbage & cauliflower, pointed gourd. However, the yield of different crops needs to be improved hence, proper extension training programme regarding modern agricultural techniques need to be imparted for better result.

Keywords

Selection of crops,
Crop choice factors,
Farming situation,
Farmers' category

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Introduction

The complexity of the decision-making process has always influenced the farmers' crop choice preferences and is reflected in the widespread literatures. Understanding the farmers' crop choice has wider application in

different domains of agriculture. It not only triggers introduction and selection of crops but also the development of newer varieties and species, package of practices, technological aspects, policies, development of course and curriculums, organization and so on. In this backdrop the present study was undertaken as

an M.Sc study during 2016-2018 to study the changing trends in respect of area under cultivation, yield and price of different crops grown in the study area. The study also analysed the farmers' preference attached to different crops grown in the study area.

Materials and Methods

The study was conducted in the district of Murshidabad, West Bengal during 2016 to 2018. The alluvial flood plain of Gangetic alluvial zone had been selected purposefully for the study considering the crop diversity available as well as considering the fact that maximum of agricultural land happens to fall under this part of Murshidabad district.

Beldanga-I block of the district (consists of 26 blocks in total) was purposively selected for the study. Out of 16 Gram Panchayats, Madda G.P was selected purposively. Finally, Dalua village under Dalua mouza (Madda GP consists of 20 mouza) was randomly taken for the study. The village has a population of 217 famers in total however 60 farmers were selected randomly for interaction.

Results and Discussion

Table 1 shows the area under cultivation in ha for different major crops grown in the said area. It has been found that except Jute, AmanPaddy, Mustard, Lentil and Sesame all other crops like Pointed Guard, Cabbage, Brinjal, Cucumber, Potato, Chilli, Boro Paddy, Wheat, and Sugarcane have shown a gradual decline in total area under cultivation.

The reason behind the same is fluctuation in price, lower prices in local market as well as poor transport and storage facilities. The crop Sesame has shown a greater height, in terms of area under cultivation, during 2010 -2018 due to high demand of white edible oil as well as various other uses like fodder and fuel

hence, it promises the availability of market every year.

Table 2 shows the changing trend in yield of various crops under cultivation in Dalua village of Beldanga I block. It has been seen that there is no such noticeable improvement or decline in the yield of different crops grown in the study area. Among all the crops Potato, Cabbage and cauliflower has shown somewhat an increasing trend in case of yield but the increasing trend is not a considerable one. However, the area under cultivation for all these three crops has shown a declining trend. It may be due to unavailability of proper market in the area as well as fluctuating prices these vegetables fetch every year.

Table 3 shows the changing trend of price of different crops grown in the said study area. It has been found that there is a gradual increase in the price of the crops but not proved to be very significant one. However, the increasing trend in price of Aman Rice is comparatively better compared to other crops. It might be due to the reason that it is the staple crop of the area as well as due to the fact that the cost of production has been increased considerably. Table 4 shows that among the all the crops, rice crop was given first priority followed by jute, mustard, lentil, cucumber, potato & onion, cabbage & cauliflower, pointed gourd. Choice of crops, by the farmers revolves around different factors. Previously vegetables were grown there. Due to decreasing fertility of the soil, growing of vegetables became unsuitable. Maximum cultivable area here is classified as medium land which is suitable for almost all crops. Rice was mainly cultivated in medium land. Farmers opted for rice cultivation mainly for sale and consumption purpose. People also prefer to grow Jute as they get enough profit from the produce. Farmers opted for vegetables less often when compared to rice, jute, lentil, mustard.

Table.1 Changing trends in area (ha) under cultivation for different crops grown in the study area

Year Crop	Area in ha			
	1950-1970	1971-1990	1991-2010	2010-2018
Jute	13.33	13.33	16	20
Aman paddy	26.66	26.66	33.33	33.33
Pointed Gourd	6.66	6.66	5.33	5.33
Cabbage	9.33	10	8	5.33
Cauliflower	8.66	9.33	8	5.33
Brinjal	10.66	10.66	9.33	4
Cucumber	13.33	16	9.33	6.66
Potato	16	20	13.33	8
Chilli	26.66	26.66	13.33	5.33
Mustard	9.33	10.66	13.33	20
BoroPaddy	26.66	26.66	20	5.66
Wheat	26.66	26.66	20	13.33
Lentil	10.66	10.66	13.33	20
Sugarcane	20	17.33	13.33	1.33
Sesame	6.66	6.66	5.33	30

Table.2 Changing trends of yield (t/ha) of different crops

Year Crop	Yield in t/ha			
	1950-1970	1971-1990	1991-2010	2010-18
Jute	0.8	1.2	1.7	2
Aman Rice	1	1.6	2	2.14
Pointed Gourd	8	12	15	18
Cabbage	10	20	16	20
Cauliflower	8	15	17	22
Brinjal	7	16	18	22
Cucumber	5	8	9	10
Potato	25	27	35	40
Chilli	0.45	0.94	1.32	1.82
Mustard	0.7	0.65	1.2	1.5
Boro Rice	1.5	2	2.7	3.2
Wheat	1.2	1.8	2.2	2.8
Lentil	0.35	0.8	1	1.4
Sugarcane	35	40	45	47
Sesame	0.45	0.8	1.2	1.48

Table.3 Changing trends of price (rs./ton) of different crops

Year	Price Rs. /ton			
	1950-1970	1971-1990	1991-2010	2010-2018
Crop				
Jute	900	1100	1250	1400
Aman Rice	650	800	900	1250
Pointed Gourd	400	550	700	850
Cabbage	300	450	550	650
Cauliflower	350	450	600	750
Brinjal	400	500	650	800
Cucumber	300	400	550	700
Potato	300	450	600	700
Chilli	350	400	450	550
Mustard	1200	1300	1450	1550
Boro Rice	1000	1200	1350	1450
Wheat	950	1100	1250	1370
Lentil	1100	1250	1350	1420
Sugarcane	350	450	600	750
Sesame	750	800	950	1100

Table.4 Distribution of crop chosen or preferred by the farmers

(N= 60)

Analysis Crops selected	Frequency	Percentage	Rank
Jute	30	50	2
Rice	44	73.33	1
Lentil	25	41.67	4
Onion	9	15	6.5
Okra	7	11.66	8
Cucumber	11	18.33	5
Sesame	3	5	9
Cabbage & Cauliflower	2	3.33	10.5
Pointed Gourd	2	3.33	10.5
Potato	9	15	6.5
Mustard	26	43.33	3
Total	60	100	

These led to a decrease in total cultivated land area of vegetables and increase in land area of rice, jute, lentil, mustard. Maximum farmers of this area are middle aged but educated only upto primary level. They are suitable for intensive labour however; they need lot of training and exposure about new trends in agriculture in order to improve the yield as well as fetch better prices for their farm produce. Which further can influence their choice of crops considered for cultivation and can surely secure them better livelihood.

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