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To examine the management of paddy seed production program and find out the constraints in the production and marketing of paddy seed production

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Abstract

The aim of the study was to examine the Management of Paddy Seed Production Program and find out the Constraints in the Production and Marketing of Paddy Seed Production, Arang, Raipur District of Chhattisgarh. Raipur district consist of four blocks: Dharshiwa, Tilda, Arang and Abhanpur. A survey of households and paddy seed Growers was conducted using a pre-tested question schedule to obtain both primary and secondary data for the study. A Cross sectional data were collected from selected all 44 Producer and total land holding of growers were 134.81 hectare and average size of land holding were 3.06 hectare. Total Family of selected growers was 44 and total family members were 217, average family size of grower was 4.93 members in overall family. Were found that 50.69 per cent have male and 49.30 per cent have female members. The study concluded that the majority of the growers chose graduation of as level education. The study area's main crop was paddy. The cost of paddy seed cultivation per hectare was estimated to be Rs.56095.67. grower's Net profit was calculated to be Rs.56914.38 per hectare. Paddy seed cultivation's Input-Output Ratio was calculated to be 1:1.98. In Production of paddy seeds problem of heavy infestation of insect pest was ranked first with 95.45 percent score and high labour cost was ranked second with 93.18 percent and electricity problem was observed less severe by the producers.

Keywords: management of paddy seed production and find out the constraints in the production and marketing of paddy seed production

Introduction

Indian economy is a fueled by agriculture with 60% of the Indian population engaged directly or indirectly. Agriculture and its allied sector contribute 17% of the total GDP and provided employment to 53% of the population. India has witnessed multiple revaluations around agriculture, but in the last two decades it is solely dedicated to meet up with demand owing to rapid increment in consumption Major corporate house like JK seed, national seeds corporation ltd. (NSC) are charging with the full force into the seed sector with an estimated contribution of 15-20 % felling on quality of seed. Multiple face of restructuring of the seed industry has been inhibited by the government of India through national seed project (NSP). Seeds are a major contributor to sustainable agriculture. The importance of quality seeds has been recognized since time immemorial. In the ancient scripture, Manu Smriti, it is said that "Subijamkshetra Jayate Sampradaya," that is, good seed is abundant in good soil. Seed quality was considered sacred because it is an important factor in improving agriculture and agrarian society, and every farmer should have access to healthy, genetically pure seeds with high seed strength and good germination rates. Availability of good quality seeds on time at reasonable prices ensures good yields and benefits for farmers. There is genetic potential through the production of quality seeds in compliance with effective certification procedures plays an important role in the growth of food production in our country. To ensure this, the government set standards and implemented seed production methods, testing, certification and marketing processes through the 1966 Seed Act. Through this discussion, light will be thrown on production and distribution of paddy seeds by Seed Corporation in Arang district of Chhattisgarh.

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Research Methodology

Out of 27 district of Chhattisgarh states, Raipur district has been selected purposively for the present study. At present Raipur district includes 4 blocks viz.

1) Dharsiwa 2) Tilda 3) Abhanpur 4) Arang. In order to achieve the main objective of production of seeds of paddy seeds and their marketing at reasonable prices to the farmers.

Cost of cultivation

It includes all inputs and fixed cost in crop production. In inputs cost Human labour has been input at the market wages rate prevailing in the locality @ Rs200 per day for Female labour at the time of Transplanting and weeding and @Rs150 for other working day. @Rs220 per day male labour for Application of fertilizer and spraying chemicals and @Rs200 per day for normal working day. Growers that use bullock power for various agricultural activity. The Price of the seed was calculated at the present market rates. Fertilizers are calculated in current price fixed by the Government. In Plant protection charges included price of chemical (Herbicide, Pesticide, insecticide, fungicide and Growth Hormones) used and also included both Human and machinery labour charges. Irrigation charges are calculated at the canal charge, electricity charge of tube well and Human labour are considered as irrigation charges. Interest on working capital was calculated at @4 Percent per annum. In fixed cost Interest on the fixed capital was calculated @ 7% for the half of the crop period. Rental value of land was calculated on the basis of prevailing rates in the sampling villages. Land revenue is a

tax levied on agricultural production on land. It's a monetary value is fixed on the land to be paid by the farmer.

Input-output Ratio

Input Value of purchasing input materials such as paddy processing – Raw paddy, packaging materials, machinery or equipment charges, storages, transportation, labour and other cost (electricity cost and other maintenance cost). The quantity of product sold by the growers or processer was treated as the output values.

Constraints

Sample farmers opinion on multiple limitations on different technology parts at their farm were obtained through reaction research in order to achieve the remaining portion of the fourth goal, namely, to examine the biophysical, socioeconomic, and other limitation. Using percentage distribution, descriptive statics were used to evaluate the nature and magnitude of various types of limitation faced by farmers in order to increase the profitability of their farm produce during trading.

Results and Discussion

1). Average land holding size of Paddy seed growers (ha./grower)

The data regarding total grower from the Maa Vidya seeds are presented in the table 1 it shows that total land holding of Paddy seed growers were 134.81 hectare and average size of land holding were 3.06 hectare.

Table 1: Average land holding size of Paddy seed growers (Hectare)

S. No.	Particular	Land holding
1	Total no. of Paddy seed growers	44
2	Total cultivated land	134.81
3	Average land holding size	3.06

Average family size of paddy seed grower

As shown in table 2 total 44 grower's family was selected and total family members was 217. Average family size of grower

was 4.93 members in overall out of which 50.69 per cent Male and 49.30% Female members.

Table 2: Average family size of paddy seed grower

S. No.	Particular	Member	Per cent (%)
1	Male	110	50.69
2	Female	107	49.30
3	Total family member	217	100
4	Average family size	4.93	-

Note: Figures in the parentheses indicate the percentage

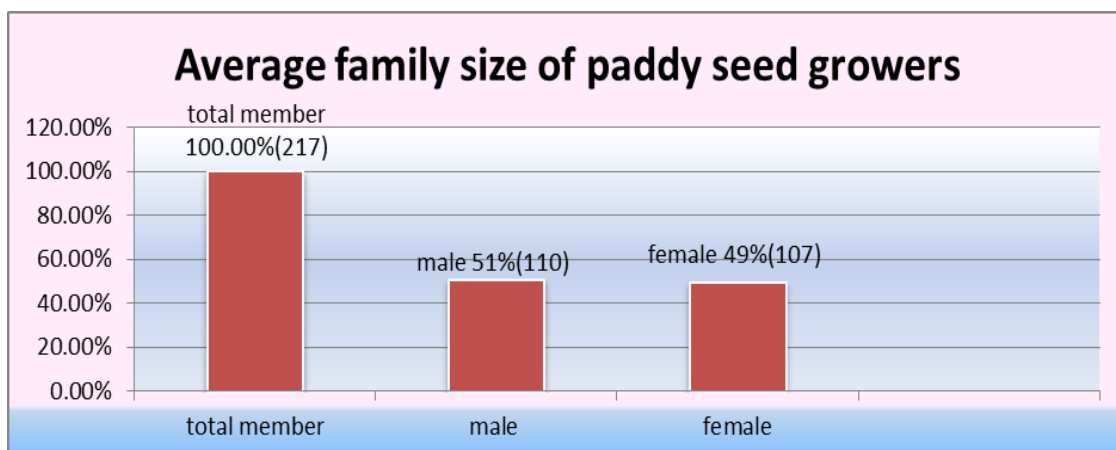


Fig 1: Average family size of paddy seed grower

2). Educational status of Paddy seed growers family

Education is a most important factor for individual growth as well as culture community and nation. It will be relatively easy to disseminate to farming technologies and ideas if Paddy seed growers are educated. Table 3 shows that majority of the grower and family member are graduates (29.03%),

25.80 per cent members had higher school level of education followed by 17.97 per cent were high school level of education, 12.44 per cent had middle school of education and 9.21per cent of members are found illiterate. Whereas 5.52 per cent had primary school level of education.

Table 3: Educational status of paddy seed grower’s family

S. No.	Education	Members	Per cent (%)
1	Illiterate	20	9.21
2	Literate	197	90.79
3	Primary school	12	5.52
4	Middle school	27	12.44
5	High school	39	17.97
6	Higher school	56	25.80
7	Graduate	63	29.03
8	Total	217	100

Note: Figures in the parentheses indicate the percentage

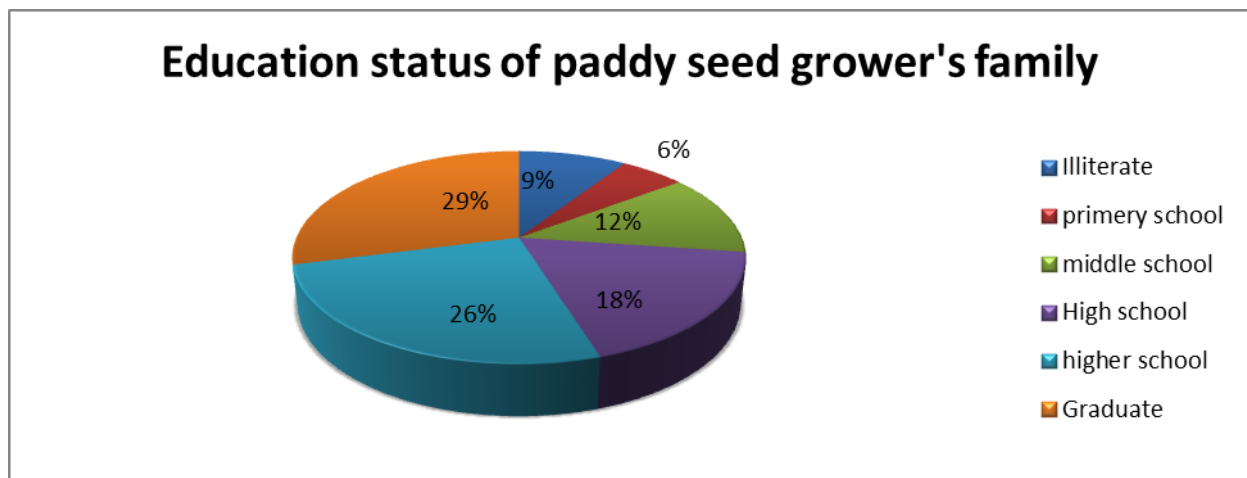


Fig 2: Education Status of paddy seed grower’s family

3). Cost of Paddy Seeds Cultivation

The average cost of paddy cultivation is presented in table 4. It was discovered that the average cost of paddy cultivation per hectare was calculated to be 56095.67, with machinery and bullock charges accounting for 29.42 percent of the total cost of paddy cultivation and having a value of Rs. 16503.00. The cost of human labour (family and hired) was found to

be 6.95 and 20.91 percent of the total cost, with value of Rs.3900.00 and 11728.00 respectively. The third major cost plant protections (herbicides, pesticides, hormones etc.) accounted for 11.20 percent of the total cost, while fertilizer and manure accounted for 9.32 percent. The total Rental value of owned land was Rs. 8000 it accounts for 14.26 percent of the total cost of the cultivation of paddy.

Table 4: Cost of cultivation of paddy (Rs/ha)

S. No	Particular Variable cost (A)	Average cost (Rs./ha.)	Percent (%)
1.	Labour cost		
a.	Family labour	3900.00	6.95
b.	Hired labour	11728.00	20.91
c.	Machine labour	16503.00	29.42
d.	Bullock labour	00.00	00.00
	Total labour cost	32131.00	57.29
2.	Input cost		
a.	Seed	2100.40	3.74
b.	Fertilizers and manure	5229.00	9.32
c.	Plant protection	6286.00	11.20
d.	Irrigation charges	415	0.74
e.	Miscellaneous Charges	900	1.60
f.	Interest on working capital	627.48	1.11
	Total input cost	15557.48	27.74
	Total variable cost	47688.48	85.03
	Fixed cost (B)		
a.	Rental value of land	8000	14.26
b.	Land revenue	5.00	0.008

c.	Depreciation	210.50	0.37
d.	Interest on fixed capital	191.69	0.31
	Total fixed cost	8407.19	14.96
	Cost of Cultivation	56095.67	100%



Fig 3: Labour cost of paddy Seed cultivation (in Percent)

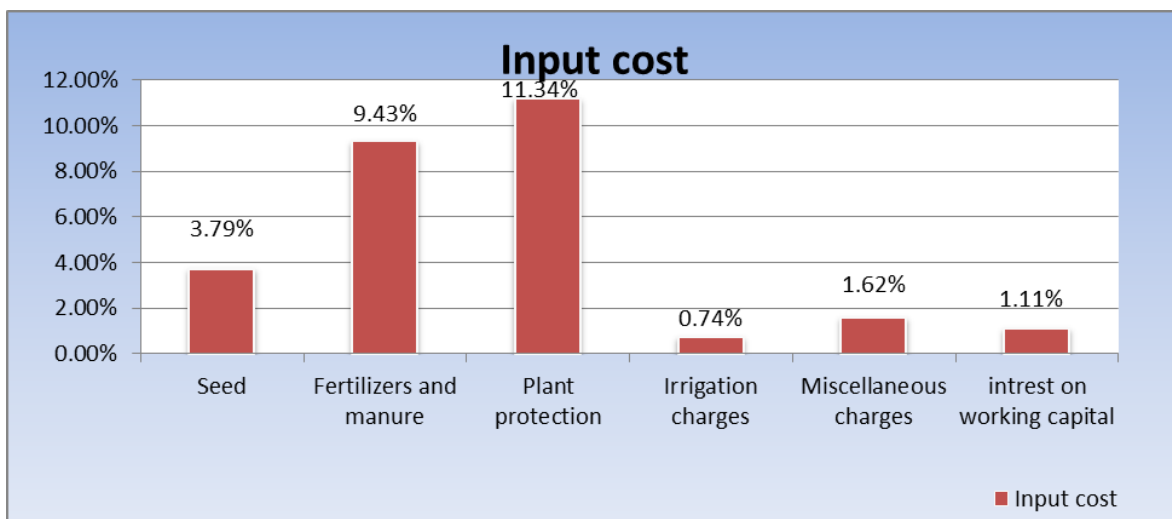


Fig 4: Input cost of paddy seed cultivation (In percent)

4). Profitability aspect of paddy cultivation: It was observed that the total cost of cultivation was Rs.56095.67 (Table 5) of sample unit. Table 5 shows that the average main product production was 50.51quintal per hectare and the

average by product production was 76 quintal per hectare. It yields a return of Rs.97810.05 and Rs.15200.00. The average gross income per Hectare was Rs.113010.05 and the net profit was Rs.56914.38per Hectare.

Table 5: Profitability aspect of paddy cultivation (Rs./qt.)

S. No.	Particular	Average Production (Qt/ha.)	Return/Amount (Rs./ha.)
i	Main product (paddy)	50.15	97810.05
ii	By product (paddy straw)	76	15200.00
1	Gross income	-	113010.05
2	Total cost (A+B)	-	56095.67
3	Net income	-	56914.38
4	Input output Ratio	-	1:1.98

5). Constraints in the production and marketing of paddy seed production

i) Production constrain

The table 6 relevant that were eleven major problems in paddy in confronted by paddy growers. Among several

problems was heavy infestation of insect pest was observed with 95.45 percent followed by problems of high labour cost and unavailability of agricultural labour respectively 93.18 and 81.81 percent. Less several problems observed among paddy growers were Electricity problem with 50 percent.

Table 6: Constraints in the production of paddy seed by the grower

S. No.	Particular	Growers	Percentage	Rank
1	High labour cost	41	93.18	II
2	Unavailability of agricultural labour	36	81.81	III
3	Heavy infestation of insect pest	42	95.45	I
4	Problem of high weed occurrence	30	68.18	IV
5	Electricity problem	22	50	V

ii) Marketing constraints

The major constraints faced by growers in marketing of paddy seed presented in the table 7 the major problems was poor quality of seed production with 88.63 percent. Storage of production was second major problem with 72.72 percent and

third major problem was insufficient of grading and any processing unit with 68.18 percent. Fewer problems observed among paddy growers was Transportation problems, lack of marketing information, long distance market with 52.27, 50, and 47.72 percent respectively.

Table 7: Constraints in the marketing of paddy seed by the growers

S. No.	Particular	Growers	Percentage	Rank
1	Insufficient ivy of Processing unit	30	68.18	III
2	Lack of Proper Storage	32	72.72	II
3	Lack of Transportation	23	52.27	IV
4	Lack of marketing Information	22	50	V

Conclusion

The growers are registered members under Maa Vidya Seed and total produced by the growers was directly sold to Maa Vidya Seeds which are processed and distributed to different agencies. On an average cost of cultivation per hectare of paddy seed was Rs. 56095.67 Average yield of paddy seed was 50.15 quintal per hectare and by product produced from paddy crop was 76 quintal per hectare. On an average Input-Output Ratio was 1:1.98. Average gross income of paddy seed was Rs. 113010.05 per hectare and Net income was Rs. 56914.38. Major constraints were found in production and marketing of paddy by the growers was order to their rank were-Heavy infestation of insect pest, high labour cost, problems of high weed occurrence, poor quality of seed, lack of proper storage and insufficient processing units.

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