

CHAPTER – V

DATA ANALYSIS AND INTERPRETATION

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This chapter deals with the analysis and interpretation of data collected from the sample of 84 Ghansal Rice farmers. In Ajara Taluka there are about 837 farmers taking Ghansal Rice. Out of this population the sample of 10 percent is selected on random basis and the data was collected from conducting field work, interviews and administering of questionnaire. The results are shown in the following tables and interpreted.

Table 5.1

Education Wise Distribution of Farmers Growing Ajara Ghansal

Level of Education	Number of Farmers	Percentage
Illiterate	13	15.48
Read and Write	28	33.33
Primary	10	11.90
Secondary	22	26.20
Graduate	11	13.09
Total	84	100

Source: Field Work

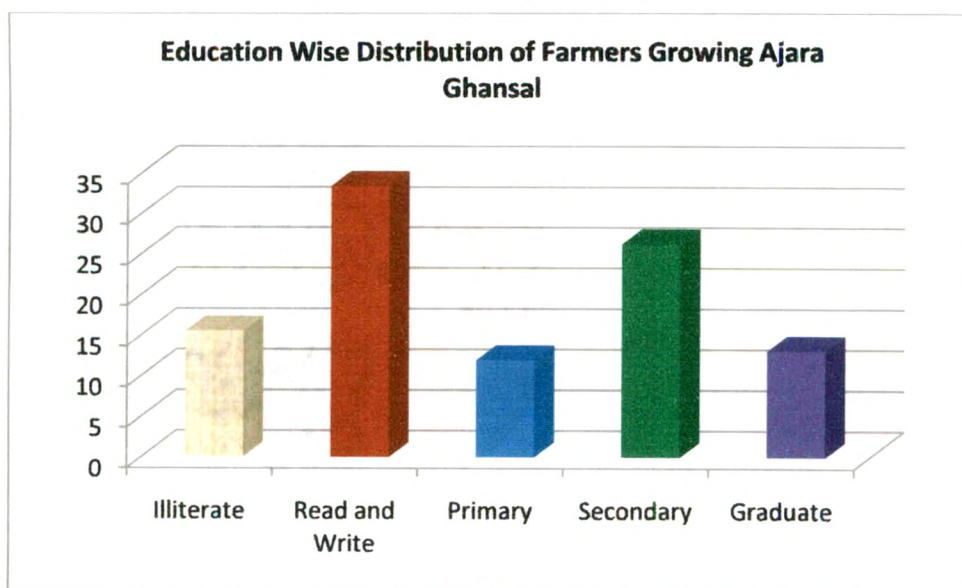


Table 5.1 shows the education wise distribution of respondent farmers. Nearly 16 percent farmers were illiterate, 33 percent farmers could read and write only 12 percent farmers had taken education up to primary level, were as 26 percent farmers had taken education secondary level and 13.09 percent farmers graduates. Thus it is observed that nearly 49 percent farmers are either illiterate not taken even primary education. The low level of education affects the attitude, knowledge and skills of farmers in general and confines them to traditional farming method and techniques in particular

Table 5.2

Land Holding of Respondent Farmers

Land Holding (in Acres)	Number of Respondents	Percentage
0-2	9	10.7
2-4	37	44.07
4-6	18	21.42
6-8	12	14.29
8-10	08	9.52
Total	84	100

Source: Field Work

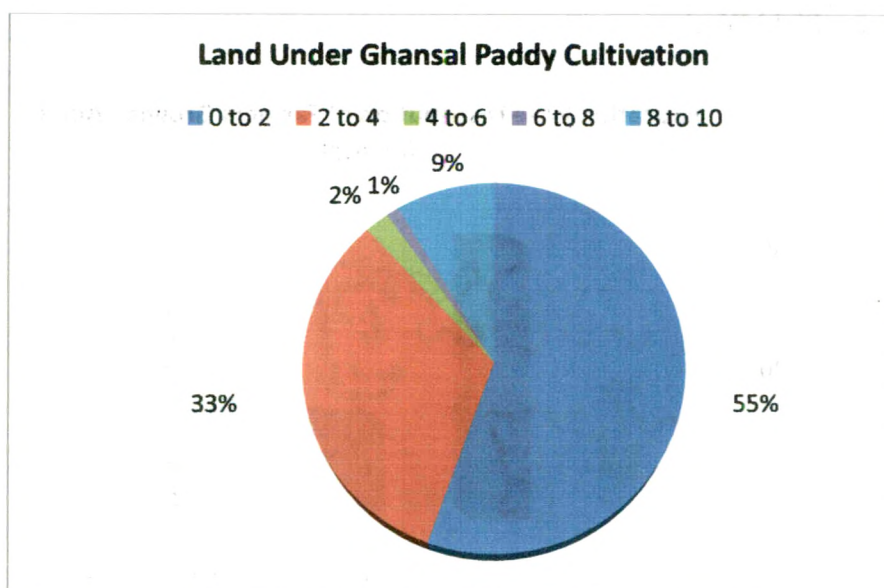


Table 5.2 shows the land holding pattern of respondent farmers. Nearly 55 percent farmers had agricultural land up to 4 acres. 21 percent farmers held agricultural land from 4 to 6 acres.14 percent farmers held agriculture land from 6 to 8 acres and only 10 percent farmers held agriculture land above 8 acres. Thus the average land holding is small, affecting the productivity and profitability of agricultural activity.

Table 5.3

Pattern of Land Holding (Own or Lease)

Land Holding (in Acres)	Number of Respondents	Percentage
Own	71	84.52
Leased	13	15.47
Total	84	100

Source: Field Work

Table 5.3 shows that 85 percent of respondent farmers were owners of the land and only 15 percent farmers had taken land on lease basis.

Table 5.4

Land Under Ghansal Paddy Cultivation

Size of Land (in acres)	Number of Respondents	Percentage
Up to -2	51	60.71
2-4	30	35.72
4-6	02	2.38
6-8	01	1.19
Total	84	100

Source: Field Work

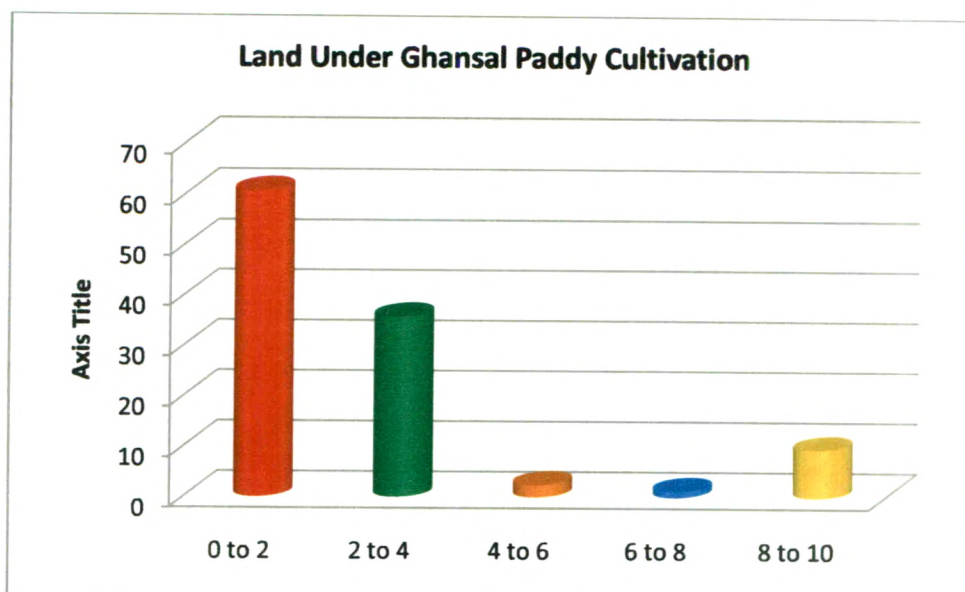


Table 5.4 shows the distribution of land under Ghansal paddy cultivation. 51 farmers (60.71 percent) were taking Ghansal paddy on land up to 2 acres. 30 farmers (35.72 percent) had land from 2 to 4 acres and only 3 farmers had land taking 4 to 8 acres under Ghansal paddy cultivation. Thus more than 96 percent farmers were taking Ghansal paddy on less than 4 acres of land.

Table 5.5

Age Wise Distribution of Farmers

Age Group (in year)	Number of Respondents	Percentage
21-30	7	8.33
31-40	18	21.42
41-50	18	21.42
51-60	41	48.83
Total	84	100

Source: Field Work

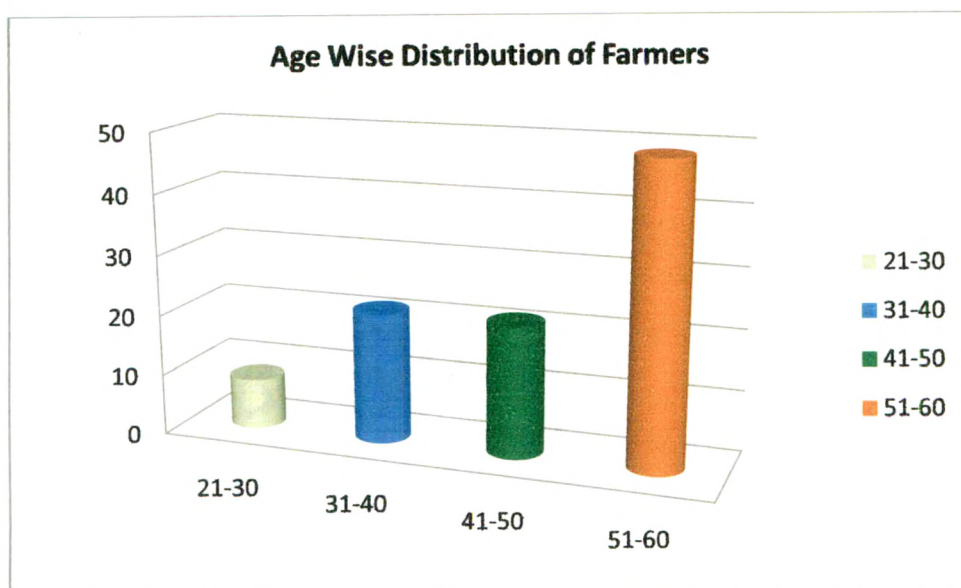


Table 5.5 shows age wise distribution of respondent farmers. It has seen from the table only 7 farmers were in the age group of 21 to 30 years (8 percent). Nearly half of the farmers were above the age of 50 years. 18 farmers (21 percent) were in the age group of 41 to 50 years. Thus the number of young farmers is very less.

Table 5.6

Number of Years Ghansal Paddy is Being Taken

Years	Number of Respondents	Percentage
1-3	14	16.67
4-5	20	23.80
More than five year	50	59.53
Total	84	100

Source: Field Work

From, table 5.6 it is observed that nearly 60 percent farmers were taking Ghansal paddy for a period of more than 5 years. 16 percent farmers were taking this crop for a period of 1 to 3 years and remaining 24 percent farmers were cultivating this crop from the last 4 to 5 years.

Table 5.7

Reason behind Cultivating Ghansal Paddy

Reason	Number of Respondents	Percentage
More Production	12	14.29
More Price	70	83.33
Less Work	02	2.38
Total	84	100

Source: Field Work

Table 5.7 shows the reason behind Ghansal paddy cultivation. It is the more prices which has cultivated 83 percent farmers. According to 14 percent farmers more production per acre was the main reason of Ghansal paddy cultivation. Only 2 percent farmers had taken the crop due to less work.

Table 5.8

Implements Used for Ploughing Land and Other Operations.

Equipments	Number of Respondents	Percentage
Bullock	73	86.90
Tractor	11	13.10
Other	-	-
Total	84	100

Source: Field Work

From, table 5.8 it is seen that 73 farmers (87 percent) were using bullocks for ploughing land and other operations only 11 farmers (13 percent) were using tractor for this purpose. Thus the extent of mechanical equipment was minimal.

Table 5.9

Availability of Agricultural Labour on Time

Availability of Labour	Number of Respondents	Percentage
Yes	72	85.71
No	12	14.29
Total	84	100

Source: Field Work

Table 5.9 shows the information of the availability of workers in farming season. According to 85.71 percent farmers the availability of workers was on proper time and 14.29 percent farmers complained about lack of workers at the time of farming season.

Table 5.10

Level of Wages and Agricultural Labour

Labour (Rs)	Wage Range
Male	100-150
Female	40-60

Source: Field Work

From, table 5.10 it is understood that male labour got wages from Rs. 100 to 150 per day, were the female labour got wages from Rs.40 to 60 per day.

Table 5.11

Number of Family Member in the Respondent's Farmers.

Number of Family Members	Number of Respondents	Percentage
Up to 4	6	8
5 to 6	54	63
7 and Above	24	29
Total	84	100

Source: Field Work

From ,table 5.11 it is seen that only 6 farmers (8 percent) had up to 4 members in their families.54 farmers (63 percent) had 5 to 6 members in their families and remaining 24 farmers (29 percent) had more than 6 family members.

Table 5.12
Production of Ghansal Paddy (Per acre)

Production (Quintals)	No of Respondents	Percentage
15-20	16	20
21-30	53	62
Above-30	15	18
Total	84	100

Source: Field Work

Table 5.12 shows the production of Ghansal Paddy per acre 16 farmers reported the production from 15 to 20 quintals, Nearly 62 percent farmers reported the production from 21 to 30 quintals per acre. And remaining 15 farmers reported higher production above 30 quintals per acre.

Tables 5.13
Market Rate for Ghansal Rice (Per acre)

Year	Rate (Per k.g in Rs.)	Rate (Per Quintal in Rs.)
2008	18-22	1400
2009	15-35	1700
2010	45-50	2500

Source: Field Work

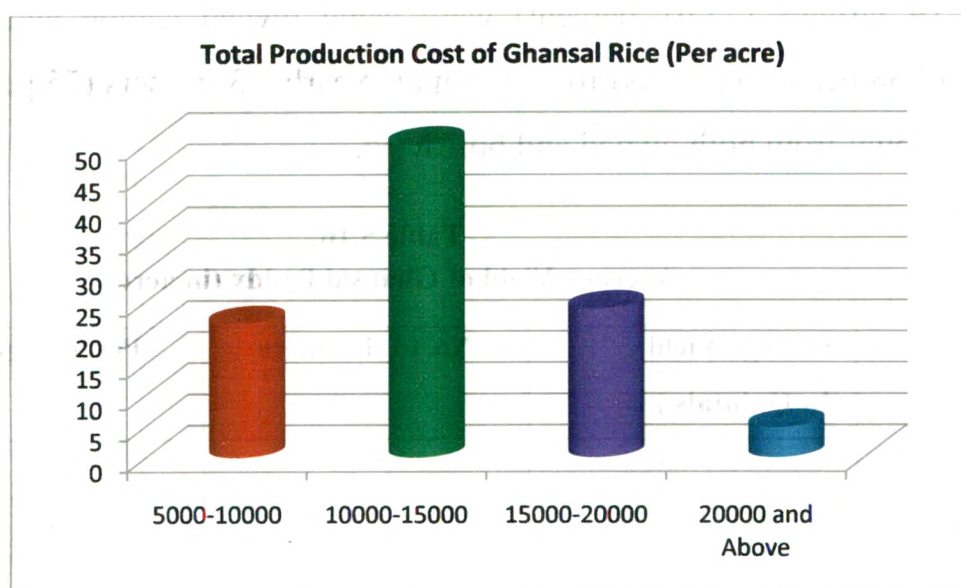
Table 5.13 shows the market rate of Ghansal rice per quintal from the year 2008 to 2010. It is seen from the table that the rate per quintal has increased the rate from Rs.18 to 22 to Rs.45 to 50 in 2010. Thus the rate has been more than doubled. This increasing rate has been attracting more farmers to Ghansal Rice cultivation. Implementations of proper measures for promotion and marketing have increased to total wages rate.

Table 5.14

Total Production Cost of Ghansal Rice (Per acre)

Production Cost(in Rs)	No of Respondent	Percentage
5000-10000	18	21.42
10000-15000	42	50.00
15000-20000	20	23.80
20000 and Above	04	4.78
Total	84	100

Source: Field Work



Tables 5.14 shows the total production cost of Ghansal paddy of respondent farmers. Nearly 50 percent farmers incurred production cost from Rs.10000 to 15000, 21.42 percent farmers incurred production cost from Rs.5000 to 10000, where as 23.80 percent farmers incurred production cost from Rs.15000 to 20000 and remaining 4.78 percent farmers incurred production cost from Rs. 20000 and above.

Table 5.15
Sources of Capital

Source	No of Farmers	Percentage
Owned	19	22.62
Borrowed	02	2.38
Both	63	75.00
Total	84	100

Source: Field Work

Table 5.15 shows the source of capital in respondent farmers. Only 19 farmers (22.61 percent) were using owned capital and 2 farmers (2.38 percent) used borrowed capital. Nearly 63 farmers (75 percent) used capital from both owned and borrowed.

Table 5.16
Average Yield of Ghansal Paddy (in acre)

Average Yield (In Quintals)	No. of Farmers	Percentage
5 to 10	11	13.09
10 to 15	17	20.23
15 to 20	25	29.78
20 and Above	31	33.90
Total	84	100

Source: Field Work

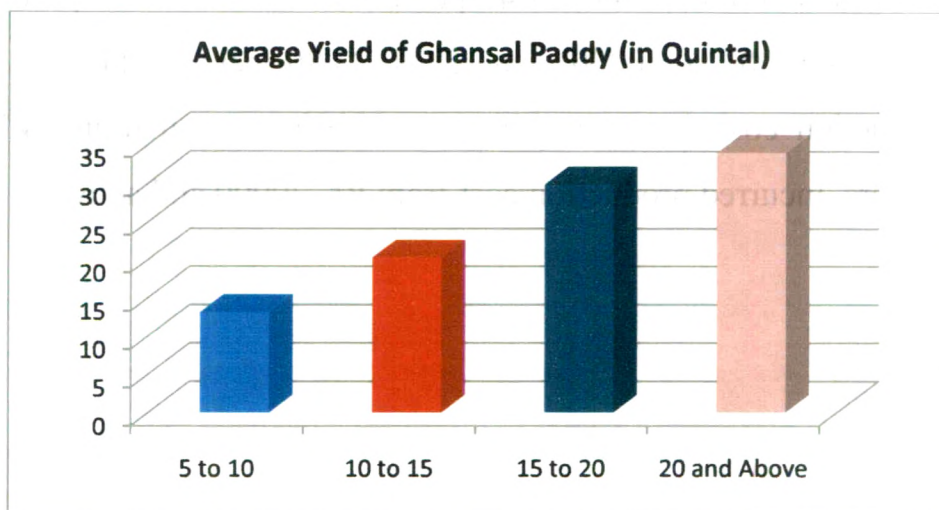


Table 5.16 shows the average yield of Ghansal paddy. The respondent received by farmers. Nearly 13.09 percent farmers received an average yield of 5 to 10 quintals, 20.23 percent farmers received an average yield was 10 to 15 quintals and 29.76 percent farmers had taken average yield of Ghansal paddy 15 to 20 and remaining 36.90 percent farmers had highest yield to 20 and above.

Table 5.17

Loan Taken for Farming Presently

Amount of Loan (Rs)	No of Farmers	Percentage
10000 -15000	37	44.04
15000-20000	28	33.34
20000-25000	04	4.76
Not taken	15	17.86
Total	84	100

Source: Field Work

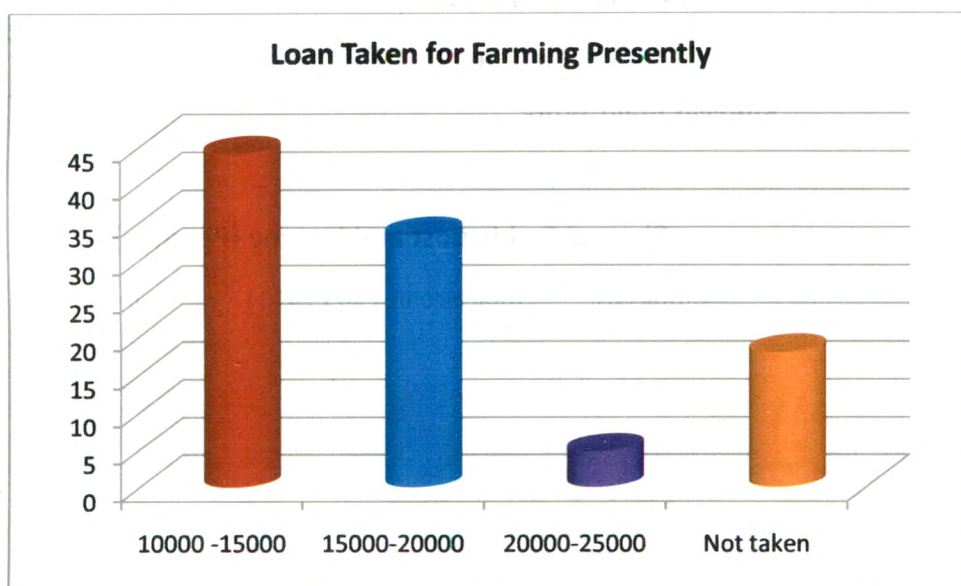


Table 5.17 shows the amount of loan taken by the respondent farmers. 44.04 percent farmers have taken loan in the rate of Rs. 10000 to 15000, 33.34 percent farmers have taken loan from of Rs. 15000 to 20000

and 4.76 percent have taken loan in the range of Rs.20000 to 25000 and remaining 17.85 percent farmers have not taken loan for rice farming.

Table 5.18
Ghansal Paddy Cost and Income (Per acre)

Production Process	Production Cost (in Rs.)
Land Cultivation (300 x 11)	3300
Purchases of paddy(16 x 30)	480
Sowing Planting	900
Fertilizers	1900
Spraying of Chemicals	400
Labour Expenses	600
Harvesting Management	1975
Transportation	500
Storage Facilities	225
Other Expenditure	1100
Interest paid	350
Total Cost	11730
Total Income (20 x 2450)	49000
Net Income	37270

Source: Field Work

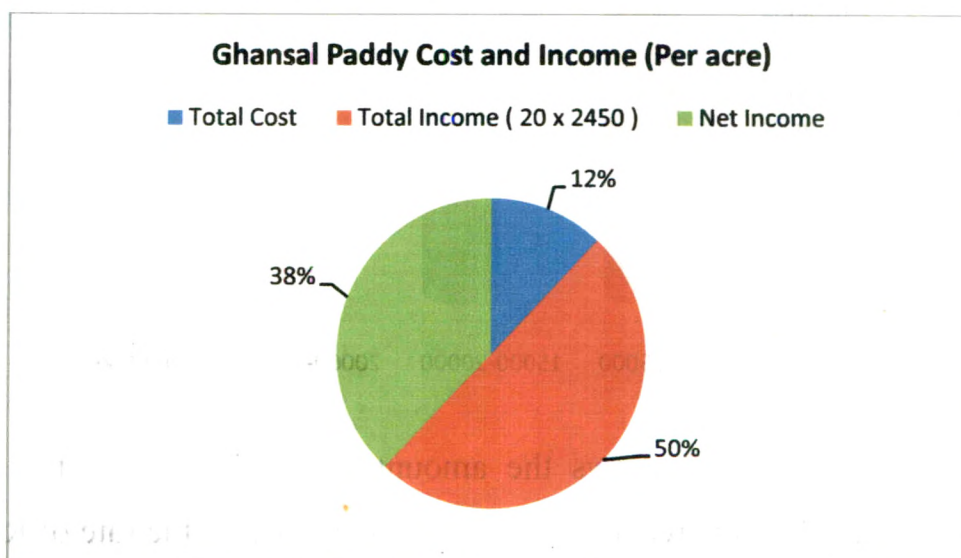


Table 5.18 shows the cost of production of Ghansal paddy and income from it per acre. The average cost was Rs.11730 per acre and the income raised from the sale was Rs.49000. Thus there was net income of Rs. 37270 per acre.

Table 5.19
General Paddy Cost and Income (Per acre)

Production Process	Production Cost (in Rs.)
Land Cultivation (300 x 10)	3000
Purchases of paddy(16 x 45)	720
Sowing Planting	900
Fertilizers	1800
Spraying of Chemicals	250
Labour Expenses	600
Harvesting Management	1975
Transportation	500
Storage Facilities	325
Other Expenditure	1000
Interest paid	250
Total Cost	11320
Total Income (35 x 950)	33250
Net Income	21930

Source: Field Work

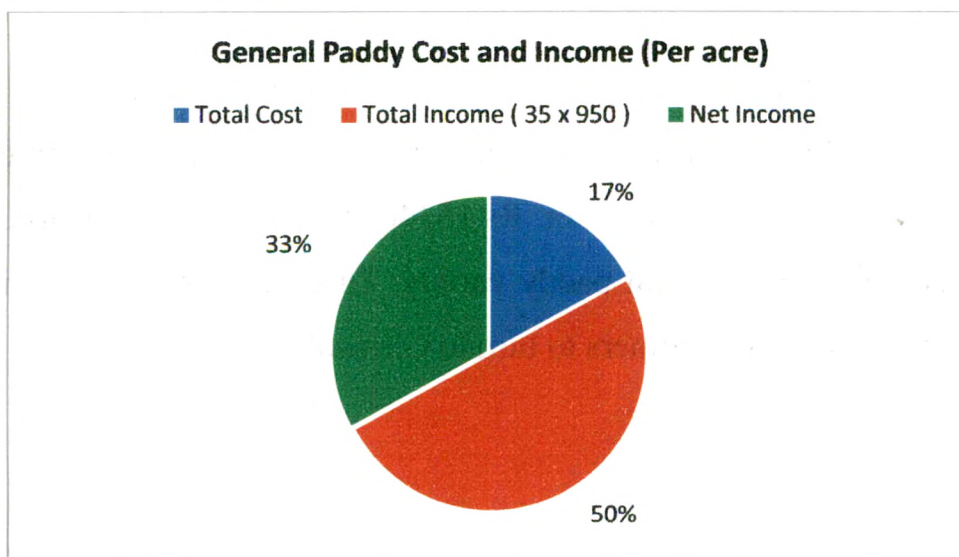


Table 5.19 shows the cost of production of General paddy and income from it per acre. The average cost was Rs.11320 per acre and the income raised from the sale was Rs.33250. Thus there was net income of Rs. 21930 per acre.

Table 5.20

Comparisons of Ghansal Paddy and General Paddy

Kind of Paddy	Cost (Rs.)	Income (Rs.)
Ghansal	11730	37270
General	11320	21930

Source: Field Work

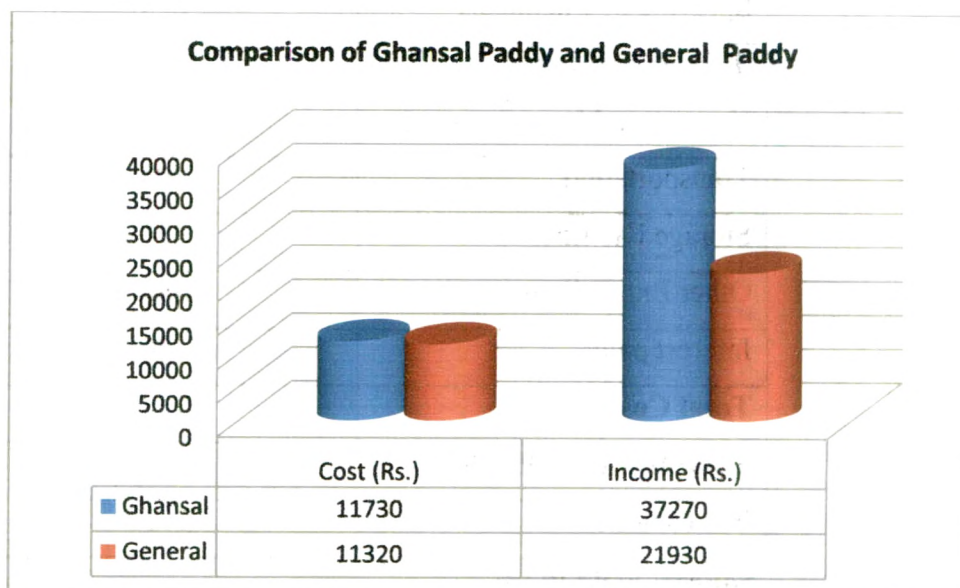


Table 5.20 Shows the comparison between cost and income of Ghansal paddy variety and General paddy. As seen from the taking there was additional income or Rs.15340 per acre from Ghansal paddy as compared to General paddy variety. This additional income is the main motivator to the farmers to turn to Ghansal Rice farming.

Table 5.21

Maintenance of Accounts

Maintenance of accounts	No. of Farmers	Percentage
Yes	-	-
No	84	100
Total	84	100

Source: Field Work

The field work reveals that no respondent farmers maintained books of accounts. In proper format due to the lack of maintenance of accounts farmers were unable to calculate cost and income accurately. This affected the financial discipline.

Table 5.22

Exploitation by Commission Agents and Merchants

Kind of Exploitation	No of Respondents	Percentage
Less Rate	16	19.04
Fraud in weighing	23	27.38
Both	45	53.58
Total	84	100

Source: Field Work

Since the marketing of Ghansal Rice is in the hands of private dealers and merchants the farmers are exploited in a number of ways. 19 Percent farmers complained about less rate being paid to their produce. Another 27 percent farmers in complained about faulty weighing were as remaining 54 percent farmers were complained about both the kinds of exploitation.

Table 5.23

Distribution of Income

Purpose	No of Respondent	Percentage
Land Development	29	34.53
Family Expenses	55	65.47
Total	84	100

Source: Field Work

Table 5.23 shows the purpose of which income from Ghansal Rice farming is utilized. More than 65 percent farmers used their agriculture income for household purpose. Only 35 percent farmers reinvested their income for land development. The small size of farm and lack of modern technology compels the farmers to subsistence farming.

Processing of Paddy

It was found that respondent farmers had no processing facilities and sold the paddy to the processing mills in the area. This resulted in to their exploitation and lower rate.

Marketing of Rice

The marketing of rice was found in the lands of processing mills and private traders. Since there was no control on marketing activity the farmers could not get better price for their crop.

Incentive Given by the Governments

From, 2008-2009 the government of Maharashtra stated during incentives for undertaking Ghansal Rice farming. Under the schemes a subsidies of 50 percent per acre is given to the farmers. The subsidiaries given on Ghansal seeds,Zink salphet,Feres salphet,Bayola, Azetobactor, Cilicon etc.

1. Agricultural Department of State Government

Area expansion, training to farmers about goods cultivation practices.

2. Agricultural Research Station Radhanagari

Major work about seeds purification for 3 years as it traditional variety the use of seeds for sowing again and again from the same seeds. The purity of seeds low down up to 50 to 60 percent, targets for purity of 80 to 85 percent.

3. Eco Friendly Organic Co-operative Societies, Gadhinglaj

About Organic Farming.

4. Agricultural Department Zilla Parishad Kolhapur.

Area expansion and higher yield subsidiaries provided in the Ghansal Producers. It worked for developing market, field visits, farmers training , assured price for Ghansal paddy.