

In Search Major Problem of Paddy Farmer and their Socio-economic Condition: A case Study of SitalKuchi Block, Coochbehar District, West Bengal

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Abstracts:

In this paper, an attempt has been made to find out the Problem and Prospects of Paddy Cultivation of Sitalkuchi Block in Coochbehar District, West Bengal, India. Paddy is one of the most important agricultural products in India and it is cultivated in almost all countries in the world. *Oryza Sativa* is the scientific name of Paddy (Rice). Importance of rice in agricultural crops can't be ignored as it is the most common food for more than fifty per cent population of the world. It is a big source to cope with the food security issue of the world. During the year 2017-2018, rice production in the India was 112.91 million metric tons (F.A.O), where India came second rank of the world.

Sitalkuchi (community development block) is an administrative division in Mathabhanga subdivision of Cooch Behar district in the Indian state of West Bengal. This block dominated by paddy cultivation (mainly Aman & Boro), there are direct or indirectly over all 90% population depend on Paddy Cultivation. The block total Aman and Boro rice cultivated land were respectively 22,210 hectare and 5,285 hectare and total 14,435 agricultural labours engaged in paddy cultivation. The maximum paddy cultivation was found western, Eastern and Southern part in the block. The maximum rice concentrated villages like Bara Maricha, Amtala, Bara Godaikhora, Baromoshia, Chhat Lalbazar, khariza sitalkuchi, purbo Gosairhate, Nagar Lal bazar, Putiya Baromoshia, Paglimari etc.

This study shows that there are many problem in the study area, like that high rate of crop failure, irrigation problem, lack of proper marketing facilities, poor transportation system, lack of finance, labour migration, high rate of fertilizer, lack of Government policies etc. Concluding remarks are delineated that there is a huge prospects for paddy cultivation in the region, like suitable weather condition, fertile soil, road connectivity, and market facilities, development of agro-based industry etc. which will increase a better scenario of paddy cultivation near future.

Keywords:

Scientific, stable, prominent, average, growing.

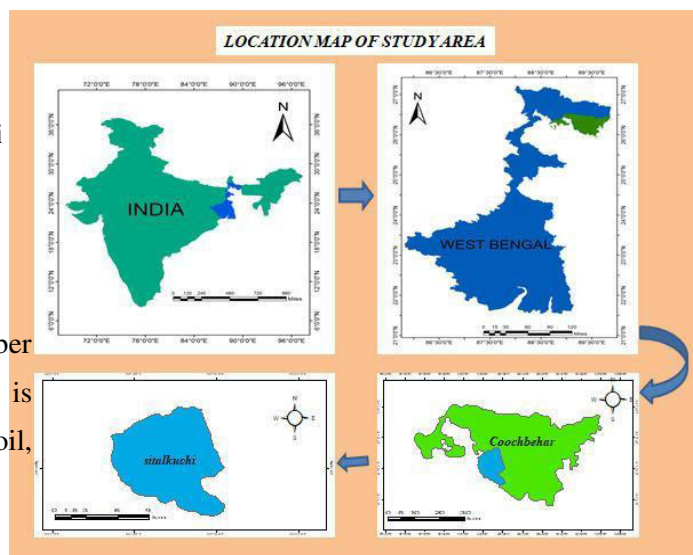
Introduction:

Total Geographical area of the Coochbehar district has 33, 8,700 hectare land. Agriculture is the Primary mode of living for most of the population in the Coochbehar district. The Principle agricultural produce of the district is Rice (Paddy). Mainly three types of paddy are found in the district like Aus, Aman, and Boro. In the district Maximum area concentrated under the Aman rice cultivation and followed by the Boro rice cultivation. Aman rice cultivated in the field From May to July (Monsoon Seasons) and Boro rice cultivated in the field from November to December (spring season). In the year 2011-2012 total 2,73,300 hectare land under the rice cultivation and total rice production 600700 ton (Directorate of agriculture, Government of West Bengal).

Paddy is the chief crop of monsoon regions and it is also grown in tropical and temperate regions. It requires 24 °C temperature and Annual average rainfall ideal 150-200cm. It is grown in different soils, like Alluvial, black & Red soils. River deltas, Floodplains & gentle slope are the most suitable lands for paddy cultivation. The Coochbehar district was situated the north-eastern part in India and Sitalkuchi block have situated southern part of the district, there are maximum fertile soil and huge amount labours available here, so developed the paddy cultivation.

Study Area:

My study area of paddy cultivation has been selected in Sitalkuchi block at Coochbehar district. Geographically location of Sitalkuchi block is 26 10'N-26 16'N and 89 11'E-89 19'E. Total area of the block is 101.53 sq.km. Agricultural cultivable land 22,210 hectare. Total no of villages 67. Number of agricultural labours 14435. This region is suitable for paddy cultivation in respect to soil, climate and others aspect. The maximum area under paddy cultivation.



Objectives:

The main objectives of my study are as follows: –

- ❖ To analysis the socio-economic condition of the Sample farmers of the Sitalkuchi Block.

- ❖ To find out the Major problems of the rice Farmers of the Sitalkuchi Block.
- ❖ To find out the different irrigation system, like well, tube well, pump pond, sallow etc.
- ❖ To find out the satisfaction level of the rice farmers about the initiatives taken by the government authorities.

Methodology and Data Source:

This research work depends on field survey and secondary data-

- ❖ The Sitalkuchi blocks, there are total 67 villages, selected 20 villages were randomly. From each village, 5 farmers were randomly selected. Hence a sample of total 100 rice farmers was selected.
- ❖ Sample survey at household level was done for collection of data related to trends of production of the regions.
- ❖ Different interview are taken from various level of people like wise very old aged man, different main workers or farmers.
- ❖ We used the different technique for data collection in the Study area.

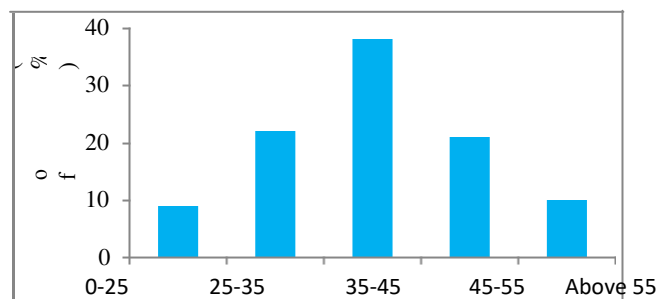
Result and Discussion

(Socio-economic condition of Paddy Farmer of Sitalkuchi Block)

The study area showing the socio-economic characteristics of the sample farmers are given below as well as shown in the tables-

Table-1. Age wise population Distribution of the Study Area.

Age Groups	Frequency	% of Sample Farmers
0-25	9	09
25-35	22	22
45-55	21	21
Above 55	10	10



Source: Field survey, 2020

Fig.1. (Age-wise Distribution)

In the sitalkuchi block there have different age group people engaged in Pappy cultivation. The study area that was showing the larger farmers fall in the age group 35-45 they were engaged in paddy cultivation(Table:1). Where 38 % farmer was engaged of farming activities. As compare to adults, the youth looks less involved in rice farming activities. In search the age group 25-35 and 45-55 which was respectively second and Third rank farmer engaged of paddy cultivation. The maximum head farmers spend much time at farm land (Fig.1)

Occupation-Wise Distribution of Sample Farmers:

The present Survey shows that about total 20.25 % (Table-2) of the persons are engaged in Farming , 15.04% of the persons are engaged in Agricultural labour, 8.14 % of persons are engaged in Casual labours, 15.75 % of the persons are engaged in Business/Trade man, 11.68% of the persons are engaged in Private service , 15.04 % of the persons are Students, At least 7.79 % persons are engaged in Self Employment (Table 2).

Table: 2. Occupation –wise Distribution of Sample farmers

Type Occupations	No of Persons		Total (%)
	Male (%)	Female (%)	
Farmers	18.23	2.12	20.25
Agricultural labour	10.80	4.25	15.04
Casual Labour	6.19	6.19	8.14
Business/Tradesman	13.27	2.48	15.75
Fishing inlands	6.19	0.00	6.19
Self-Employment	6.37	1.42	7.79
Private Service	9.56	2.12	11.68
Students	7.96	7.08	15.04
Total	66.77	21.42	100

Source: Field Survey, 2019 (Occupation-wise Distribution of the Farmers)

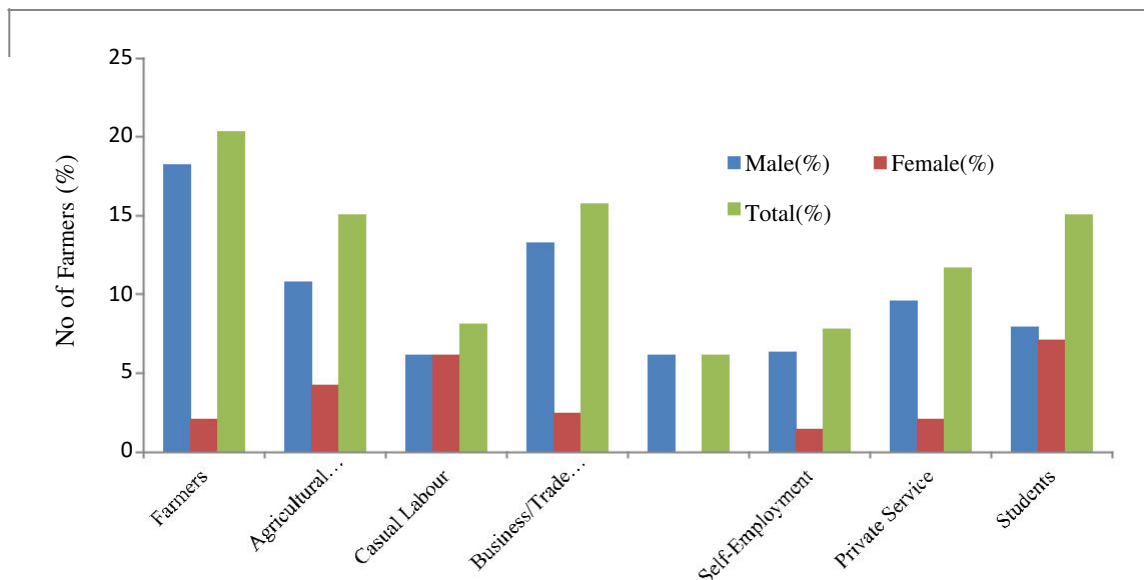


Fig : 2 (Occupation-Wise Distribution of Sample Farmers)

Demographic Condition:

According to census -2011 reports there were total 42,587 residential households in Sitalkuchi blocks with total population of 185,353. Total male persons 94,277 out numbers of female persons 91,076 and sex ratio 895. The population density in blocks 707 /sqkm. Total SC population 101,009 and ST Population 259. Literacy rate in the block 70.34 %.

Age Groups	Male (%)	Female(%)	Total (%)
1-15	8.85	7.96	16.810
15-30	10.27	8.85	19.12
30-45	18.05	15.52	33.63
45-60	10.09	9.73	19.82
>60	6.37	4.25	10.62
Total	53.63	46.37	100

Table: .3. Demographic Condition of the Study Area.

Source: Field Survey, 2019

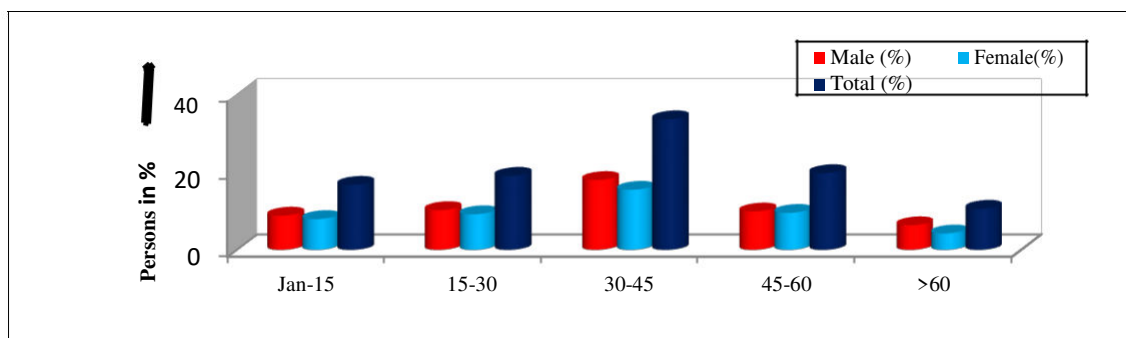


Fig: 3. (Demographic Condition of the Study area)

According to Sample Survey , Total 33.63 %(Table-3) of the Sample farmers are having in the age groups 30-is 45, Which is maximum in study area, among them male (18.05%) and Female (15.52%).Total 19.82% and 45-60 19.12% persons fall in respectively in the age group of and 15-30(Table-3). Only 10.62% persons of them are above 60 years old (Table-3).

Gender and Marital Status:

Table-4

Gender	frequency	% of genders
Male	91	91
Female	9	09
Marital Status	frequency	% of sample
Bachelor	8	08
Married	92	92

Source: Field Survey Data, 2020

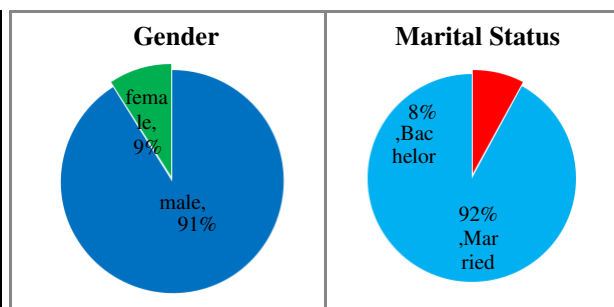


Fig: 4. Gender & Marital Status)

The study area 91(Table-4) parent the respondents farmers are male, only 9 per cent farmers are female (Table-4). The maximum females are engaged in household activities and housewife. They are always helping the men at nursery growing stages and harvesting stage of rice crop(Fig:4).

The study area, different farmer's interview taken, showing that only 8 percent sample farmers are Bachelor or unmarried and total rest of sample farmers are married (Table-4). Major causes of early married that sitalkuchi block were totally rural area, where maximum people are illiterate. So they quickly get at the married.

Literacy and education status:

Table-5. Literacy and Education Status of the Study Area

Education Status	No of persons		Total
	Male (%)	Female (%)	
Illiterates	105 (18.58)	84 (14.86)	189 (33.46)
Primary	78 (13.81)	67 (11.85)	145 (25.66)
MP	61 (10.80)	55 (9.73)	116 (20.53)
HS	46 (8.14)	39 (6.90)	85 (15.04)
Bachelor & above	17 (3.01)	13 (2.30)	30 (5.31)
Total	306 (53.98)	259 (46.02)	565(100)

Source: Field Survey data, 2019,

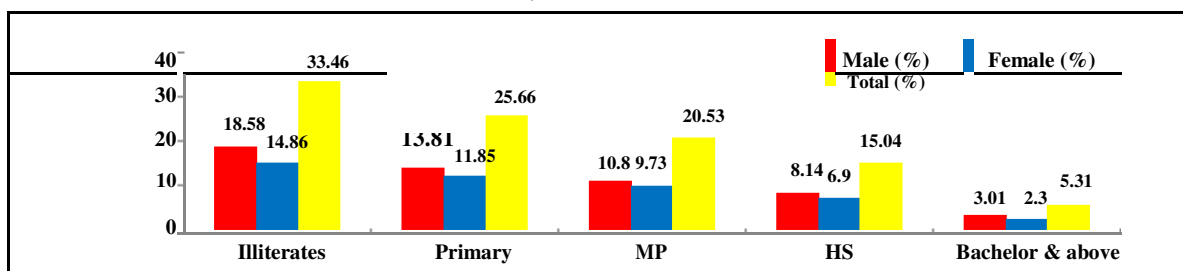


Fig:5 (Literacy and Education Status of the Study Area)

Pilot survey in sitalkuchi blocks out of total 565 persons from the 100 sample farmers households. The results show that a significant total number of households i.e.33.46% (Table-5) were having illiterate, which percentage were maximum in study area and 25.66%(Table-5) were having primary level **education**. 20.53%

& 15.04% persons respectively were having Madhyamik & Higher Secondary education level(Table-5). At least 5.31% persons were having Bachelor and above level of educations.

Size of cultivated land (Acre)	No of Sample Farmers (%)
< 1	17 (17)
1- 2.5	38 (38)
2.5- 5	32 (32)
>5	13 (13)
Total	100 (100)

Table-6. (Size of Cultivated land)

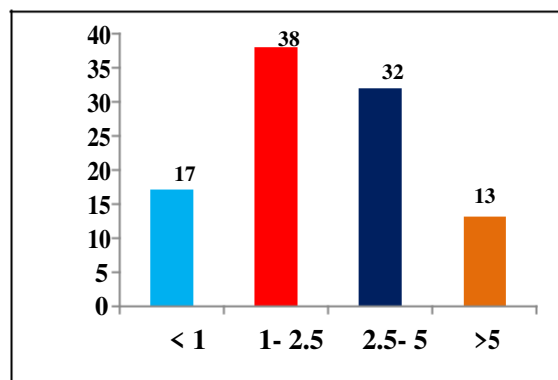


Fig- 6. (Size of Cultivated land)

The Sitalkuchi block was a totally rural area, there were maximum people lived in the villages area. 95 % peoples have engaged in Agricultural activities. In Field study indicated that Maximum of the sample farmers having Small land holdings. Where 38 % respondent's farmers were cultivating 1 - 2.5 acres land, 32% farmers were cultivating 2.5 - 5 acres land, 13 % farmers were cultivating more than 5 acres lands and At least 17% farmers were cultivating below 1 acres lands (Table-6).

Table: 7. Uses Irrigation System in Study area

zz	Well	Tube-Well	Shallow Tube-Well	Pond/Tank	River Lift Irrigation	Open Dug Well	Others	Total
No of Sample Farmers (%)	04	09	47	17	11	5	7	100

Source: Field Survey, 2020.

The Study area there has different types of irrigation system. The Paddy farmer uses the different type of irrigation system for their agricultural purpose. The Sitalkuchi block, from household's survey result showing that, There 47% (Table-7) sample Paddy farmer used the Shallow Tube-well irrigation for Paddy cultivation. Which irrigation system used maximum in study area. 11% Sample farmers used the River lift Irrigation system, which was second rank irrigation system in study area. Respectively name of the Irrigation System was Tube-well (09%), Open Dug well (5%). At least the lowest uses the Well irrigation system (4%) in the study area (Fig-7)

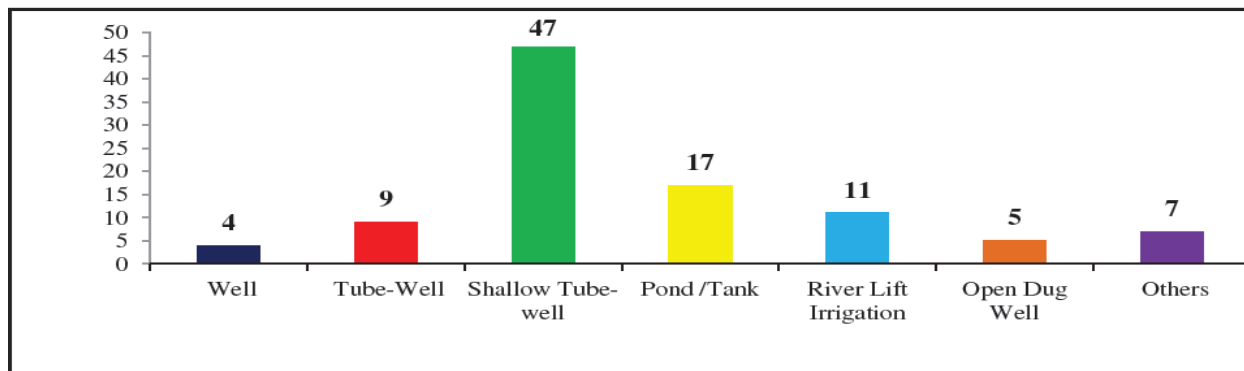


Fig-7 (Uses Irrigation System in Study area)

Major Problems of Paddy Cultivation in SitalKuchi Block

The farmers of SitalKuchi Block have been facing a number of problems involved in Paddy Cultivation. Some of Major Problems in Paddy farming as revealed by the Present investigation are the following:

Table: 8. High Rate of Crop Failure

Major Causes of Crop Failures	Plant Diseases	Suddenly Heavy Rainfall	Incidence of Pests	Adverse Climatic Condition	Poor Farming Practices	Low Fertility of Soil	Others
No of Farmers (%)	25(25%)	06 (06 %)	34(34 %)	12(12 %)	07(07 %)	06(06 %)	08(08 %)

Source: Field Survey data, 2019

One of the crucial Major problems of paddy cultivation in the Sitalkuchi block have high rate of crop failure. For In these problems, many crop destroyed each of the year during the paddy cultivating time. In study area, 34% (Table-8) sample farmers indicate that Major causes of Crop Failure were Incidence of Pests. 25% and 12

% selected farmers respectively said that Plant Diseases and Adverse Climatic condition was another causes of crop Failure and 7 % and 6 % Sample farmers respectively said that Poor Farming Practice & low fertility of soil was others causes of crop failure.

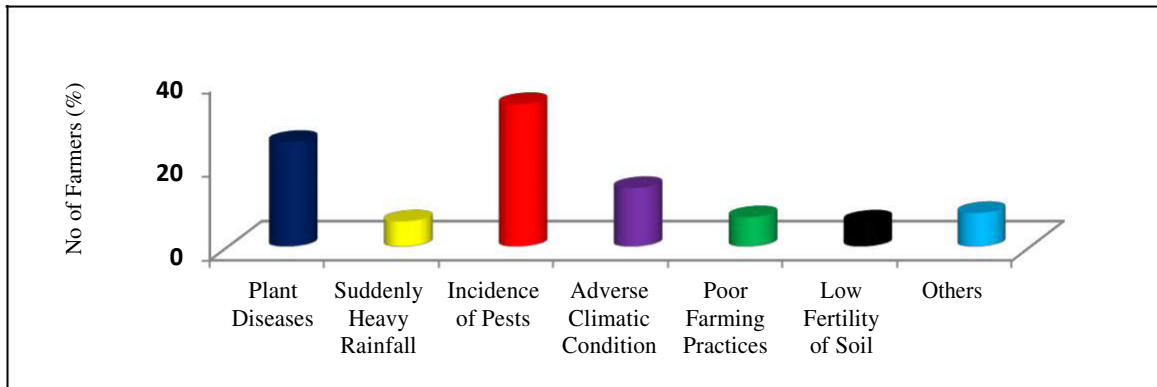


Fig: 8 High rate of crop failure

In the Sitalkuchi block, there are 67 villages. All most 90% respondent farmers said that Maximum high price of fertilizer as a very big challenge faced by them during the production process of the rice. The farmers were view that high prices of fertilizer has increased their total cost of production and reduced their profit margins. We also found that the high price of fertilizer as a big problem faced by farmer in my study area.

Table-9. Irrigation Problems

Problems of Irrigation	% of Sample Farmers
Low voltage of Electricity	22
High Electric Bill	17
Old Diesel Pump set	10
Mechanical Problems of Pump set	08
Problems of Tank Irrigation	11
Minimum Coverage of RLI	09
Water crisis in Wetland	07
Problems of Tube-Well Irrigation	06
Others Problems	10

Source: Field Survey data, 2019

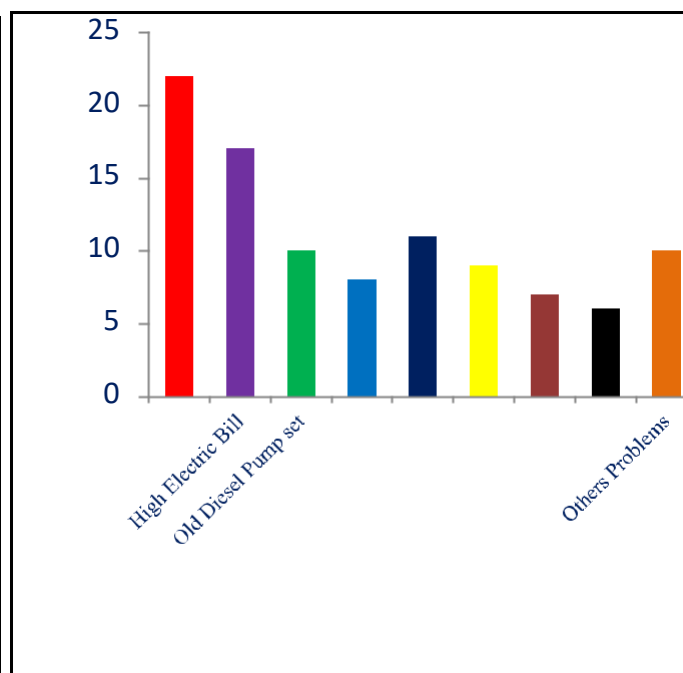


Fig: 9. (Irrigation Problems in the Study Area)

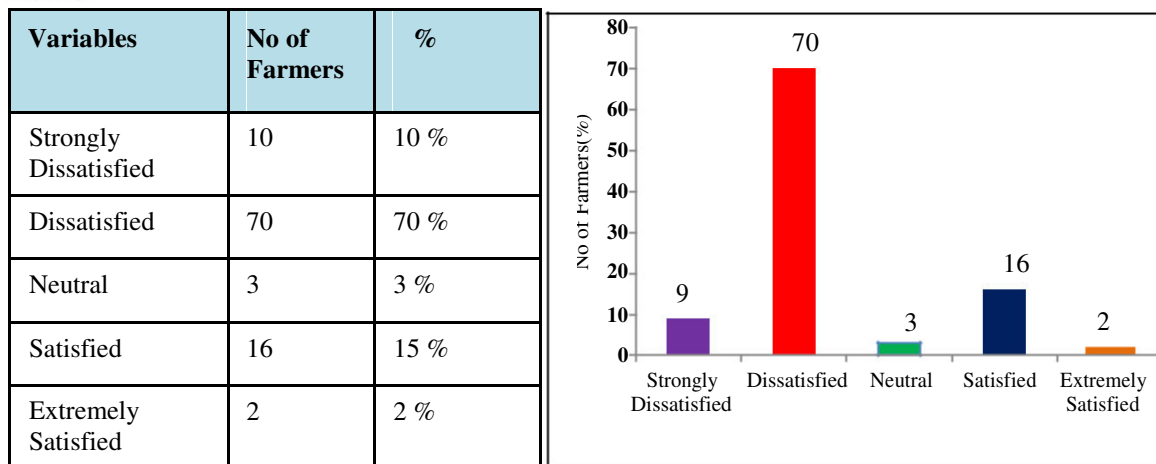
Boro, Aman paddy cultivation are totally depend on irrigation systems. Out of 100 selected farmers for field Survey, 72% (Table-9) Sample farmers declared that many farmers facing irrigation problem during the time of Boro and Amman cultivation. 22% Sample Farmers Facing low voltage problems, 17% High Electric Bill, 10% old Diesel Pump set, 11% Tank Irrigation, 7% water crises in Wetland, 6% Tube-Well Irrigation and 10% sample farmer (Table-9) facing other problems. As a result increased their production cost and decrease the profit margins.

One of crucial problem in the sitalkuchi block farmers have lack of proper transportation system. The block have no connected with national highway also state highway. Some Villages touched the district road like, sitalkuchi, Gosairhate, Raterdangha, Bara Maricha, Lalbazar. These block maximum villages have Kutcha road, which condition is very bad. Some of villages which are not well connected with main roads or market centres. Many road in rural areas are Kutcha (bullock-cart roads) and become useless in Rainy season.

Based on the interviews and Field observations it become clear that in the study area Sample Farmers have been Facing many lack of proper mechanization Problems-

- ✓ Little use of machines is made in ploughing, sowing, irrigating, weeding harvesting threshing and transporting the crops. This is specially the case with small and marginal farmers.
- ✓ Most of the remotely located agricultural field farmers have traditionally used diesel pump in the study area as electric connections are not available.
- ✓ The peak Rabi season, especially during boro cultivation. 75 % farmers responded that the pump sets some time to have some mechanical defects due to which they do not work properly.

Table-10



Source: Field Survey, 2019

Fig: 11 (Farmer satisfaction level about government policies)

In the Field study, we find out that Farmers were given their feedback about the effectiveness of the steps taken by the government policies in the study area. The responses of farmers were recorded on five category scale i.e. Strongly Dissatisfied, Dissatisfied, Neutral, Satisfied and Extremely Satisfied. Results showed that 70% Farmers were Dissatisfied & 9% (Table-10) Strongly Dissatisfied respectively with the initiatives taken by concerned government authorities to solve their problems. Only 3% farmer's views neutral, 2% extremely satisfied and 16% Farmers were satisfied opinion toward the initiatives of government policies (Table-10).

Lack of Proper Marketing still Continues to be a bad shape in Rural in India, not except my study area in Sitalkuchi blocks. In the fields investigation time 62% respondents and outer in the blocks 50 farmers say that there have many marketing problems under following-

>There have no daily regular market in many villages, in this block there have one weekly blocks market. >Many Farmer have to depend upon local traders, businessman and middlemen for the disposal of their farm paddy rice.

>In many villages, like Baramaricha, patantuli, Atiyabari, Golenaohati, Mirapara, Gitaldhamaricha, putiya, baromasia, salbari, mahismuri etc, in the study area farmers are Forced, under socio-economic conditions, to carry on distress sale of their Rice.

>Maximum Farmer carries to long distance (10-15 km) for sale their paddy Rice.

Sitalkuchi blocks have not Economically Developed, Where main source of economy is agriculture.90% persons were depended on cultivation. Finance problems was a biggest problems during the paddy cultivation.60% respondent farmer reported this problems faced by them during production time.

>The 55% sample farmer facing finance problem because of increase the production cost, fertilize/pesticide and others material, as results they were depending upon the input dealers.

>The 45 % farmers were depending upon the agents who extend the credit to farmer and in return purchase the rice crop at the lower price than the price offered by market.

Due to lack of education, farmers may not be able to learn modern agricultural techniques and methods, so they dependent upon traditional farming practices. Pilot survey in sitalkuchi blocks out of total 565 people from the 100 sample farmer households. The results show that a significant number of household .i.e. 33.46% were having illiterate and 25.66% were having primary level of education(Fig:12).

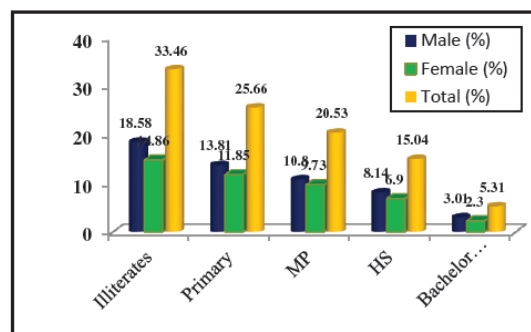


Fig: 12 (Lack of education)

Recommendation:

- ❖ The water management has to be improved to consent a more skillful management of the resource at the farm level.
- ❖ In the study area farmer should be trained to carefully select and manage their own seed production field.
- ❖ The farmer should use more organic fertilizer in the fields. (The Sitalkuchi block is needed higher amount of chemical fertilizer and Organic fertilizer.)

- ❖ Improve the education system in the block, because due to lack of education, the farmers were could not adopt new methods of cultivation of rice crop.
- ❖ Pesticide, fungicide and herbicides uses should be decreased in the block.
- ❖ The government should take measures to reduce the different cost of farmer which they have to bear during rice production time.

Conclusion:

The above Field observation, It can be conclude that there are many factor which most important problem involved in Paddy cultivation in the Sitalkuchi block, Like High Price of Fertilizer, High rate of crop failure, Lack of Finance, Lake of Proper Marketing System, Poor transportation system, Lack of Mechanization, Lack of Government policy , Lack of Education , Irrigation Problem and Plant diseases etc. In specially, the very low amounts of fertilizer that are at presently used to rice are likely the major causes for the low production of rice in the Sitalkuchi block. In agriculture field, the use of chemical fertilizer, likely of N, P, K and organic fertilizer, manure etc are essential for the increasing rice production in sitalkuchi block. If the Government take attention on above problem and factor they will be able to find the solution. It is most important to save the paddy cultivation because it is the most importance Economic field in the Sitalkuchi block as well as all over the India.

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