CHAPTER - VII

IDENTIFICATION OF SUITABLE CROPS FOR REPLACEMENT OF TOBACCO IN THE STUDY AREA

7.0 Introduction

The main aim of this chapter is to identify suitable alternative crops to replace tobacco cultivation and the perceptions of tobacco and non-tobacco farmers' why they cultivate tobacco or substitute crops of tobacco in the study area and also fulfillment the research objective to identify significant constraints faced by tobacco farmers trying to shift out of tobacco production. Because it is believed that the decision to grow a particular crop is a highly individualized decision. It may depend upon the farmer's 'assessment' about the quality of the soil, climate conditions, availability of seeds, availability of the marketing facilities, cost of cultivation, availability of credit for meeting the cost, the size of holding, net return from cultivation of a particular crop etc. Farmer's perceptions about the following factors are likely to be more effective determinants of the decision. A better understanding of tobacco farmers' perceptions of the potential for substitute crop to replace tobacco could help Extension personnel information about these alternative crops to the farmers most interested in, and in need of, such information. This information could also help researchers' direct efforts towards the information needs of tobacco growers in the transition from tobacco to alternative crops. Additionally, this information may help policy makers to set priorities on how to guide tobacco farmers as they transition to substitute crops.

The information have been collected by interviewing both the tobacco and non-tobacco farmers on suitably framed questionnaire (Appendix-A). For the purpose four mouza were chosen from each block on the basis of simple random sampling without replacement. The name of the selected mouza are Bara Natabari (J.L. No- 2), Alokjhari (J.L. No-28), Bhalka (J.L. No- 46) and Dakshin Kharija Gitaldaha (J.L. No-139) at Dinhata-I block; Bhulki (J.L. No- 71), Karala (J.L. No-174) Bara Shakdal (J.L. No- 184) and Sahebganj (J.L. No-208), at Dinhata-II block; Bara Adabari (J.L. No- 11), Pirpal

Sitai (J.L. No-32), and Bharali (J.L. No-36) Chamta (J.L. No.-51) at Sitai block. After selection of mouzas tobacco grower and non-tobacco grower identified and considering the time and resource constraints, twenty samples in each mouzas are proportionately selected on the basis of simple random sampling without replacement. Following this method 240 farmers selected, out of which 120 famers are observed to cultivate tobacco crop.

7.1 Socio-economic characteristics of the sample farmers

The mean age of the sample tobacco farmers was approximately 48 years and standard deviation 14.65, whereas mean age of the sample non tobacco farmer was about 44 years with SD 14.27 in the study area. In some studies shows that, the age of the farmer influences choice of enterprise in that younger farmers are perceived to be a liberal in experimenting and venturing into the possible alternatives facing them while older farmers are conservative (Mbaye, et al. 2014). The average household size for both category were approximately 5 persons. The size land holing among tobacco farmer was slightly lower (1.56 hectare) than non-tobacco farmer (1.72 hectare). Ashenafi (2007), kibet et al. (2011) showed that large household and large farm sizes have been found to influence positively the uptake of more alternative agricultural practices through the provision of factors of production. The average year of experience of sample tobacco farmers was very high (16.56 year) than non-tobacco farmer (7.25 year). In terms of education, bulk of tobacco farmers did not go beyond primary level, more or less similar educational level found in non-tobacco farmers. Education levels are said to effect choice of modern method of production that need advanced skills unlike low levels of education which may leave the farmer with no choice than to practice traditional forms of production (Mbaye, et al. 2014).

Table: 7.1 Socio-economic characteristics of the sample farmer

Variable	Farmer	Mean	t value	SD
Age	Tobacco farmer	47.56	0.16	14.65
	Non tobacco farmer	43.98		14.27
Household size	Tobacco farmer	5.16	0.23	1.26
	Non tobacco farmer	4.98		1.28

Land size in hectare	Tobacco farmer	1.56	0.41	2.09
	Non tobacco farmer	1.72		2.68
Experience	Tobacco farmer	16.56	0.89	8.23
	Non tobacco farmer	7.25		3.14

Source: Field Survey, 2012

Table: 7.2 Educational status of the sample farmer

Education level	Tobacco farmers (%)	Non-tobacco farmers (%)	Mean (%)
None	17.50	11.66	14.58
Primary	24.16	18.33	21.25
Secondary	32.50	42.50	37.50
Higher secondary	4.17	11.66	5.42
Graduate	6.67	14.17	10.42
Post graduate	10.00	5.00	7.50
Others	5.00	1.67	3.34

Source: Field Survey, 2012

7.2 *Tobacco Farmers' Perception on Tobacco farming and Substitute crops*

According to the perceptions of sample respondents all the farmers answered that they are fully unknown about the WHO-FCTC treaty where Indian Government commited to reduced 50 percent area of the tobacco cultivation by 2020.

7.2.1 Response of farmers of Tobacco Cultivation in the next cropping season

The majority (68.33%) of the tobacco farmers will continue to cultivate Tobacco in the next cropping season. In Sitai block 80% of the farmers willing to continue cultivation of Tobacco crop, where as in Dinhata –II, 72.5% and in Dinhata-I only 52.5% of the respondent farmers will continue to do so. On the other hand 10% of the respondents will discontinue doing so and shifting to another crop, whereas in Dinhata –I and Dinhata –II and Sitai block 17.5%, 5%, and 7.5% respectively of the Tobacco farmers of will not cultivate Tobacco crop in the next cropping season (Figure 7.1).

Table: 7.3 Response of tobacco farmers on whether to continue Tobacco cultivation or not and their percentage distribution in the study area

Response	Dinhata –I	Dinhata – II	Sitai	Average
Yes	52.5	72.5	80.0	68.33
No	17.5	5.0	7.5	10.0
Undecided	22.5	17.5	7.5	15.83
No answer	7.5	5.0	5.0	5.83

Source: Field Survey, 2012

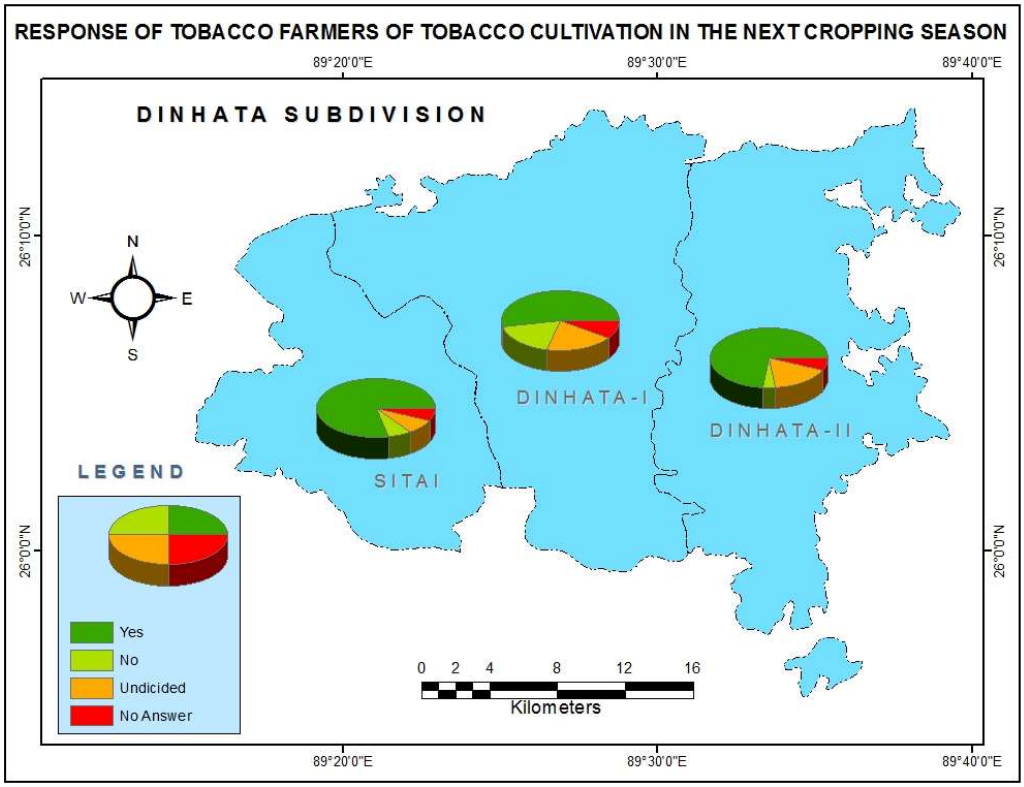

Figure: 7.1 Response of tobacco farmers on whether to continue tobacco cultivation or not in next cropping season

7.2.2 Reasons for continuing Tobacco cultivation in the next cropping season

Table 7.4 shows that the reasons given by tobacco farmers on why they will continue to cultivate tobacco in the next rabi season and their percentage distribution. The majority of farmers invoked (a) Farming experience (23.33 %) in tobacco cultivation as tobacco farming has been going on since the time of their forefathers, (b) Suitable soil and

climatic condition for tobacco growing (22.5%), (c) profitability of the crop (13.3%), (d) availability of inputs and cheap labourers (12.5%) for tobacco cultivation and (e) lack of knowledge to grow alternative crops (10%) as their major reasons for continuing tobacco cultivation. In case of Dinhata-I and Dinhata-II farming experience of tobacco cultivation (20% and 22.5% respectively) was the major consideration for continuing it. In regard to Sitai block, suitable soil and climatic condition (37.5%) for tobacco crop was the major factor for farmers in deciding to continue tobacco cultivation.

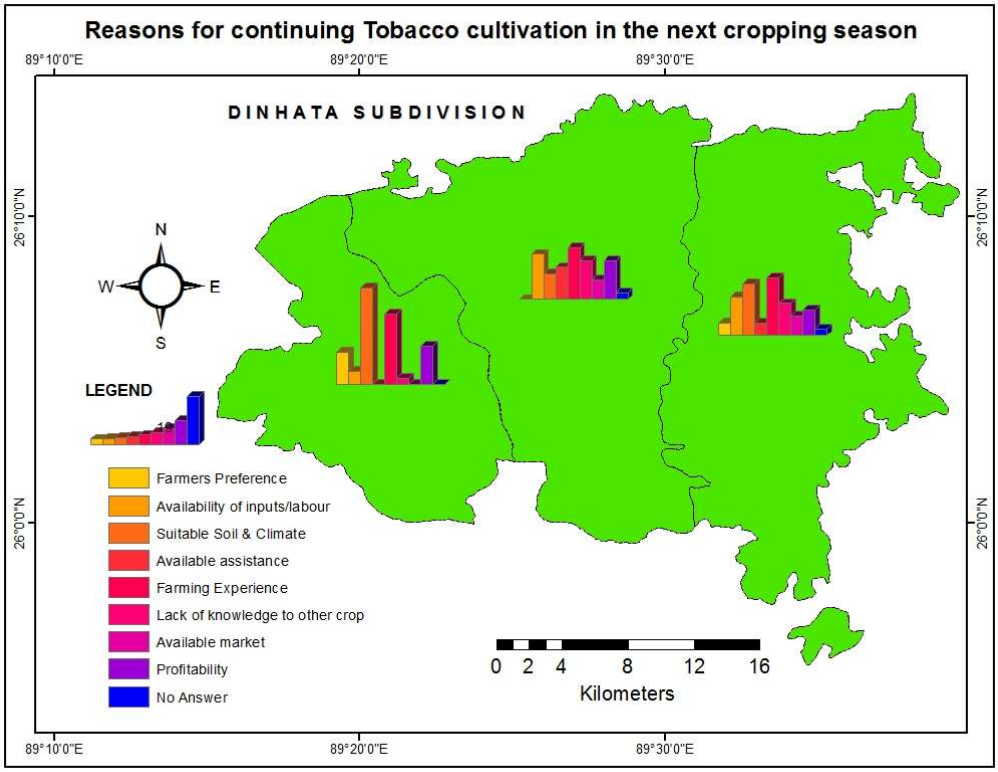

Figure: 7.2 Reasons provided by tobacco farmers to continue tobacco cultivation in next cropping season

Table: 7.4 Reasons provided by to Tobacco farmers in deciding to continue Tobacco cultivation in the next cropping season and their percentages distribution in the study area

Reason	Dinhata –I	Dinhata - II	Sitai	Average
Farmers Preference	0	5.0	12.5	5.83
Availability of inputs/labour	17.5	15.0	5.0	12.5

Suitable Soil & Climate	10.0	20.0	37.5	22.5
Available assistance	12.5	5.0	0	5.83
Farming Experience	20.0	22.5	27.5	23.33
Lack of knowledge to other crop	15.0	12.5	2.5	10.0
Available market	7.5	7.5	0	5.0
Profitability	15.0	10.0	15.0	13.3
No Answer	2.5	2.5	0	1.67

Source: Field Survey, 2012

7.2.3 Reasons for shifting from tobacco to another crop in the next cropping season

Table: 7.5 enumerates that unprofitability (15.0%), high input cost (13.33%), fluctuation of price (13.33%), farmer preference (12.5%), laborious (11.67%), and disease prevalence (10.83%) were the major reasons provided by farmers who intend to cultivate other crops in the next cropping season. Other reasons such as unavailability of assistance, health hazard, unsuitable soil and climatic condition, unavailability of market and buyer, farming experience and fluctuation of production were accounted for the remainder of the responses provided by the farmer respondents. In Dinhata- I, farmer's preference (20.0%), in Dinhata-II unprofitability (20.0%), and in Sitai laborious and fluctuation of price (17.5%) were the major consideration for respondent farmers in deciding to shift from tobacco to non-tobacco crops in the next cropping season (Figure 7.3).

Table: 7. 5 Reasons given by tobacco farmers on why they will shift to another crop in the next cropping season and their percentage distribution in the study area

Reason	Dinhata-I	Dinhata-II	Sitai	Average
Farmer's preference	20.0	7.5	10.0	12.5
Unsuitable soil and climate	5.0	2.5	0	2.5
Labourious	10.0	7.5	17.5	11.67

Unavailability of market and buyer	0	0	7.5	2.5
Farming Experience	2.5	5.0	0	2.5
High Input cost	12.5	12.5	15.0	13.33
Unavailability of assistance	5.0	5.0	7.5	5.83
Disease prevalence	12.5	15.0	5.0	10.83
Health Hazard	7.5	0	5.0	4.17
Fluctuation of production	0	5.0	2.5	2.5
Fluctuation of price	7.5	15.0	17.5	13.33
Unprofitability	15.0	20.0	10.0	15.0
No answer	2.5	5.0	2.5	3.33

Source: Field Survey, 2012

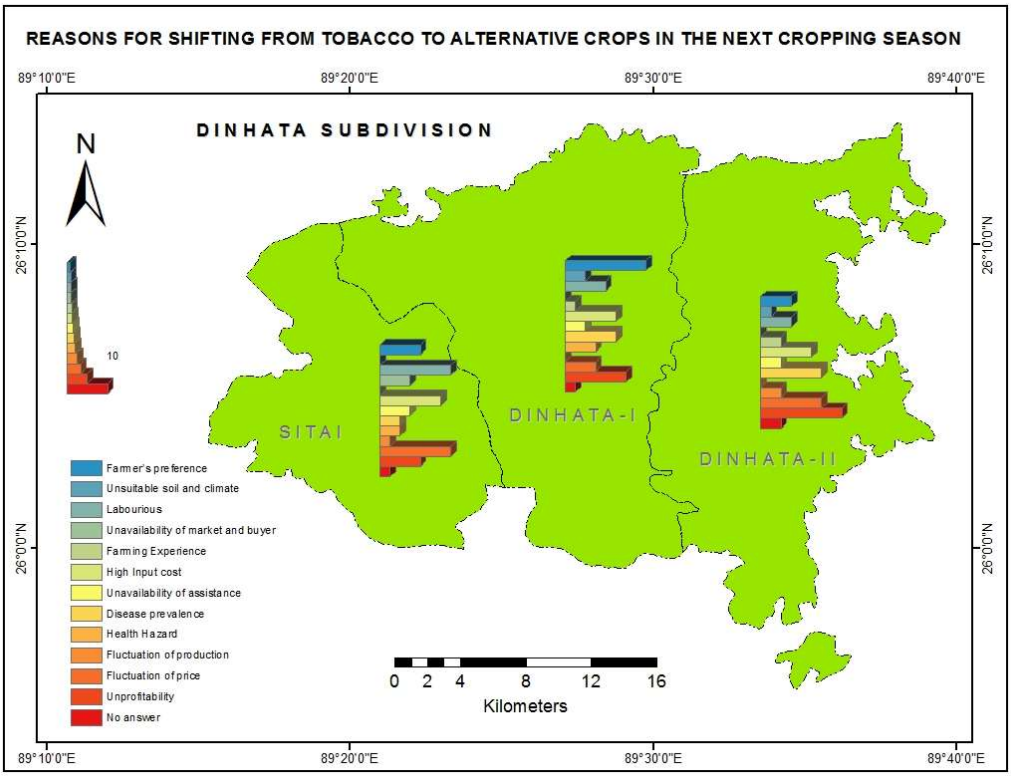

Figure: 7.3 Reasons for shifting from tobacco to alternative crops in the next cropping season

7.2.4 Crop selected as replacement for tobacco:

Maize (30.83%) was the dominant crop that was selected by respondent farmers of the study area who will be shifted from tobacco to other crops in the next cropping season. In addition boro paddy (22.5%), various vegetable crops (14.17%) and potato (12.5%) were also considered. A considerable percentage (8.33%) of the respondents have not decided on the crop that they will be cultivating in the next cropping season to replace tobacco. The majority (25%) of respondents' farmers of Dinhata-I preferred

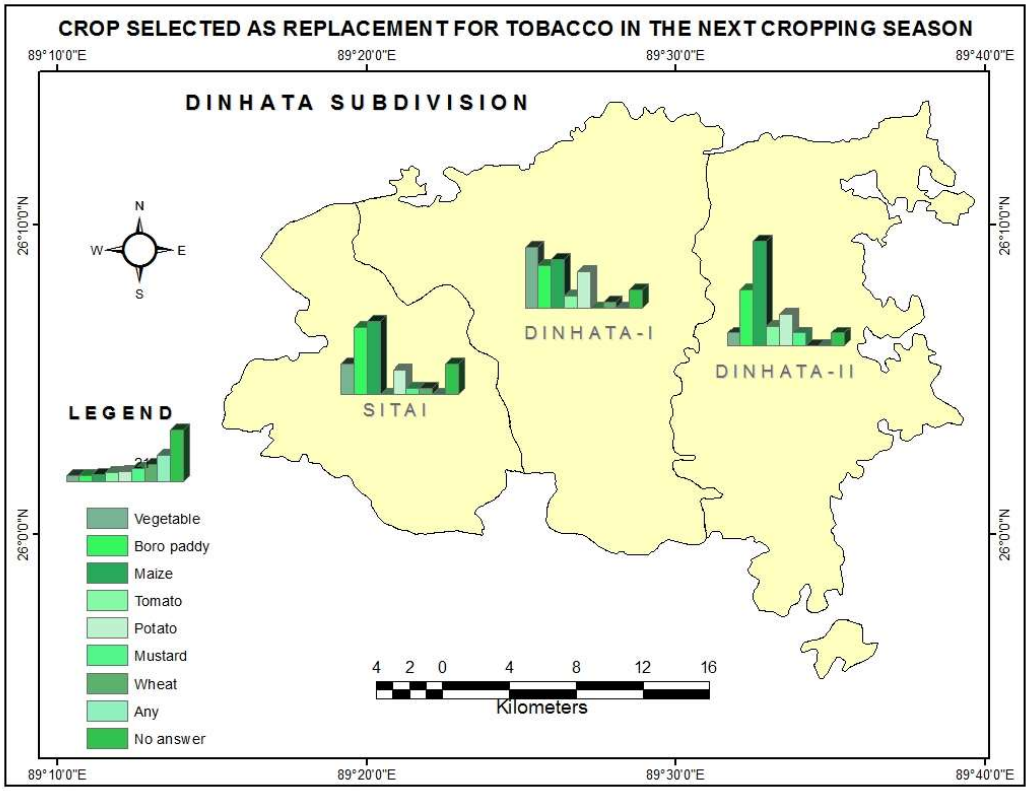

Figure: 7.4 Crop selected as replacement for tobacco in the next cropping season

vegetable, where as 20% farmers, preferred maize and 17.5% preferred boro paddy which they want to replace tobacco in the next cropping season. In addition maize 42.5% and 30% in Dinhata-II and Sitai block respectively were selected alternative crop by respondent farmers (Figure 7.4).

Table: 7.6 List of crops selected by farmers as substitute for tobacco in the next cropping season and their percentage contribution in the study area.

Crop	Dinhata-I	Dinhata-II	Sitai	Average
Vegetable	25.0	5.0	12.5	14.17

Boro paddy	17.5	22.5	27.5	22.5
Maize	20.0	42.5	30.0	30.83
Tomato	5.0	7.5	0	4.17
Potato	15.0	12.5	10.0	12.5
Mustard	0.0	5.0	2.5	2.5
Wheat	2.5	0	2.5	1.67
Garlic	5.0	0	0	1.67
Any	2.5	0	2.5	1.67
No answer	7.5	5.0	12.5	8.33

Source: Field Survey, 2012

7.2.5 Reasons for selecting a substitute crop for tobacco

Family consumption (22.5%) was the major reason provided by respondent farmers of the study area who were willing to shift from tobacco to other crops in the next cropping season. Due to population pressure they were decided to shift from commercial crop to food crop. The other reasons being that these crops are profitable and a good source of income (20%), farmer's preference (14.17%) and suitable soil and climate condition for cultivating alternative crops, whereas farmer's preference (27.5%), good source of income (30%) and Family consumption (27.5%) were the major reasons provided by respondents of Dinhata-I, Dinhata-II and Sitai block respectively (Table 7.7). It should be noted that 7.5% of the respondents of Dinhata-I did not give any reason for shifting from tobacco to another crop.

Table: 7.7 Reasons provided by farmers in selecting a particular crop as replacement for tobacco in the next cropping season and their percentage distribution in the study area

Reason	**Dinhata-I**	**Dinhata-II**	**Sitai**	**Average**
Farmer's preference	27.5	10	15	17.5
Less input and labour cost	10	7.5	0	5.83
Suitable soil and climate	15	7.5	20	14.17
Available market	5	5	2.5	4..17

Family consumption	17.5	22.5	27.5	22.5
availability of assistance	0	2.5	0	0.83
Pest resistance	2.5	0	7.5	3.33
Available technology/ information/ inputs	2.5	15	7.5	8.33
Good source of income/ profitable	12.5	30	17.5	20
No reason given/ answer	7.5	0	2.5	3.33

Source: Field Survey, 2012

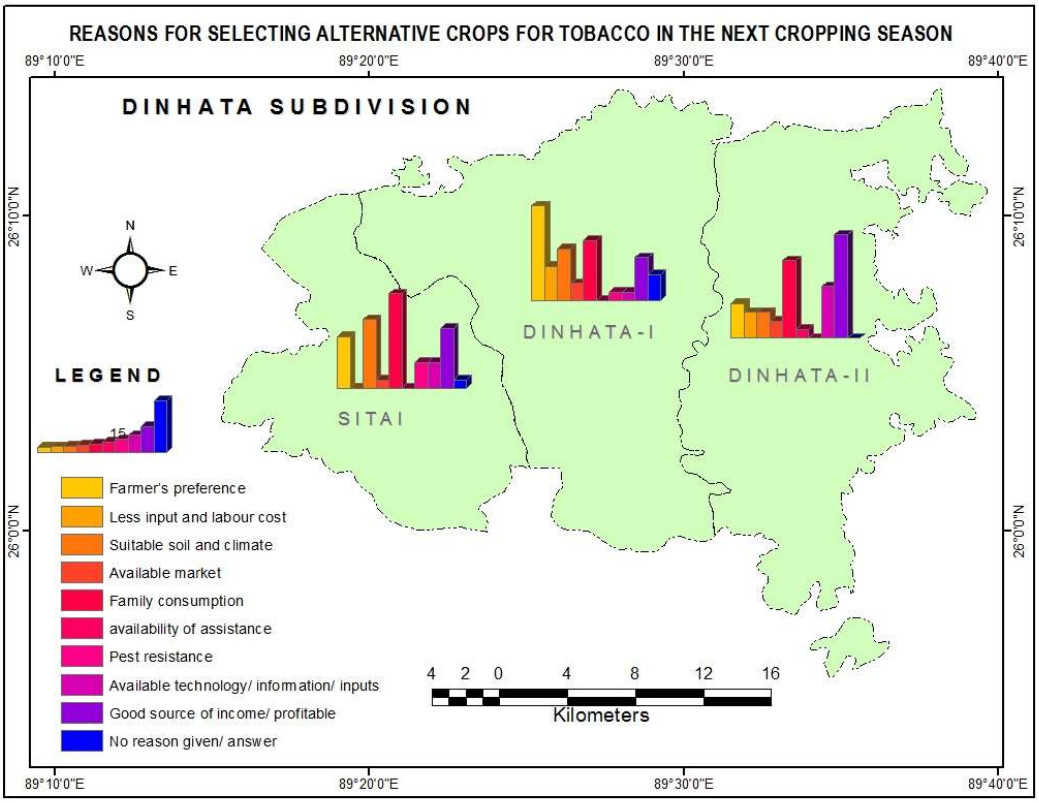

Figure: 7.5 Reasons for selecting alternative crops for tobacco in the next cropping season

7.2.6 Crop selected if irrigation facility be extendent:

Table 7.8 shows that list of crops selected by tobacco farmer if irrigation facility is to be extending in the next cropping season covered by the survey. On the average, 64.17 % tobacco farmers willing to shift from tobacco to other crops subject to availability of irrigation facility provided by the Government. Boro paddy was the predominant crop

that was chosen by farmers who will be shifting from tobacco to other crops which accounted for 33.33% of the total respondent. In addition, Maize (9.17%), Potato (8.33%) Vegetable (5.83%) and mustard (5.83%) were also considered. The majority (40.0) of the tobacco farmers of Dinhata-I preferred Boro paddy and 10.0% farmers preferred various vegetable crops which they want to replace tobacco if irrigation facility is to be extending in the next cropping season. In case of Dinhata-II Boro paddy (27.5% and Maize (20.0%) were selected by respondents if irrigation provided by Government. Boro paddy (32.5%), and Potato (12.5%) in Sitai block were selected by respondents (Figure 7.6). It should be noted that 32.5%, 22.5% and 45.0 % of the tobacco farmers of Dinhata-I, Dinhata-II and Sitai block respectively were again grown tobacco if irrigation facility is to extending. No response was obtained in 5% and 2.5% of the respondent in Dinhata-I and Sitai block respectively.

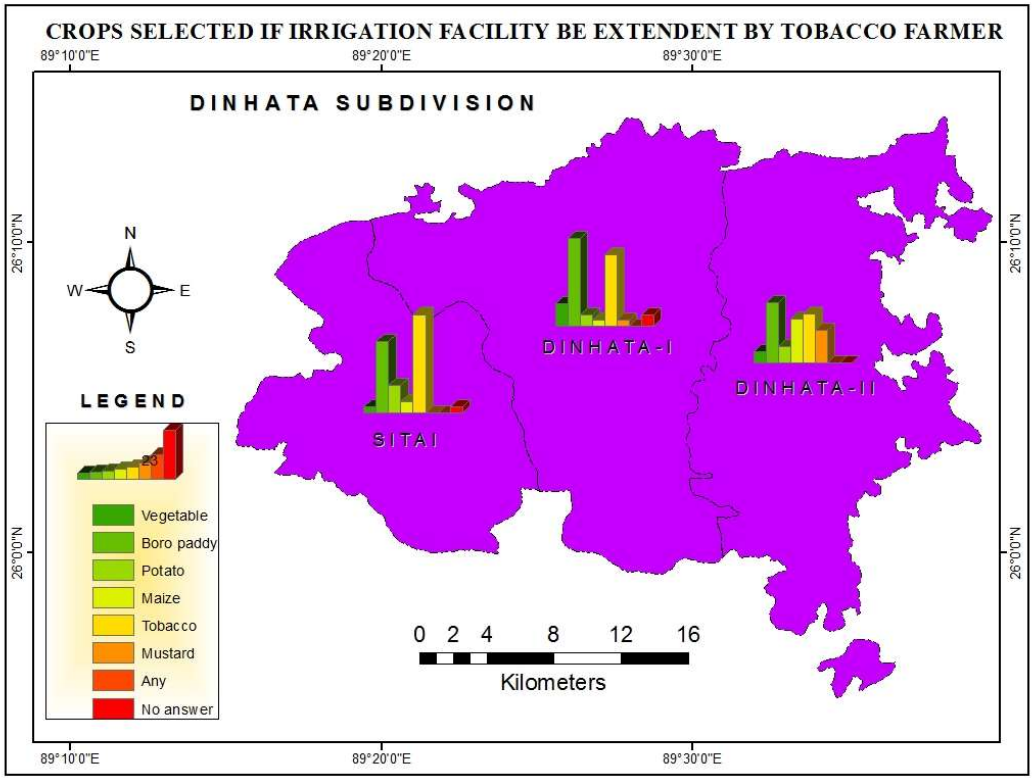

Figure: 7.6 Crops selected if irrigation facility be extendent by tobacco farmer

Table7.8 List of crops selected by tobacco farmers if irrigation facility be extendent in the next cropping season and their percentage contribution in the study area

Crop	Dinhata-I	Dinhata-II	Sitai	Average
Vegetable	10.0	5.0	2.5	5.83
Boro paddy	40.0	27.5	32.5	33.33
Potato	5.0	7.5	12.5	8.33
Maize	2.5	20.0	5.0	9.17
Tobacco	32.5	22.5	45.0	33.33
Mustard	2.5	15.0	0	5.83
Any	2.5	2.5	0	1.67
No answer	5.0	0	2.5	2.5

Source: Field Survey, 2012

7.2.7 Crop selected if credits are given from bank

Table: 7.9 shows the list of crops selected by the tobacco farmers and its percentage distribution if credit are given from bank. Majority (64.15%) of the selected tobacco farmers have expressed their willingness to divert area from tobacco to others crops subject to availability of credit. Potato was the predominant crop chosen by farmers which accounted for 22.5% of the total respondent if crop loan are available from bank. A significant proportion of respondents also reported in favour of expansion of area under various types of Vegetables (17.92%) and maize (10.0%) at the cost of tobacco if credit support is to be provided. No response was obtained in 20.0%, 16.25% and 28.75% of the respondents in Dinhata-I, Dinhata-II and Sitai blocks respectively, which signifies that these farmers were not aware about banking credit or loan system. About 26.25% of respondent farmers in Dinhata-I selected various types of vegetables such as cabbage, cauliflower, onion, tomato, chilies etc. whereas 16.25% chosen potato which they want to replace tobacco if credits are available. In addition, potato 22.5% and 28.75% in Dinhata-II and Sitai blocks respectively, were selected alternative crop by respondent tobacco farmers if loans are available for cultivation

Table: 7.9 List of crops selected by tobacco farmers if credits are given from bank in the next cropping season and their percentage contribution in the study area

Crop	Dinhata-I	Dinhata-II	Sitai	Average
Vegetable	26.25	21.25	6.25	17.92

Boro paddy	0	3.75	8.75	4.17
Potato	16.25	22.5	28.75	22.5
Maize	7.5	11.25	11.25	10.0
Tobacco	17.25	15.0	10.0	14.17
Mustard	0	6.25	0	2.08
Any	8.75	3.75	6.25	6.25
No answer	20.0	16.25	28.75	21.68

Source: Field Survey, 2012

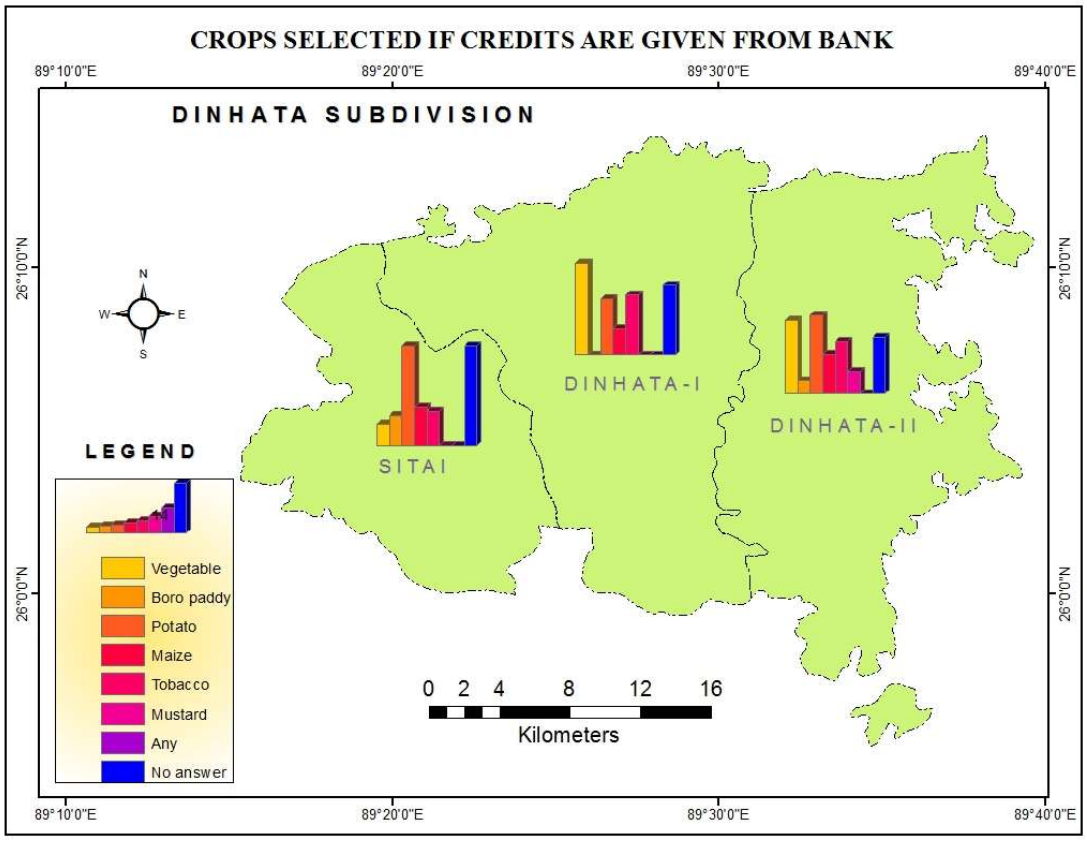

Figure: 7.7 Crops selected if credit are given from bank by farmers

7.3 Non-tobacco Farmers' Perception on Tobacco farming and substitute crop

7.3.1. Response of non-tobacco farmers on the cultivation of tobacco in the next cropping season

Responses obtained from non-tobacco farmers showed that 25.83% intend to cultivate tobacco in the next cropping season in Dinhata subdivision. The majority of the respondent farmers (63.33%) will continue to cultivate non-tobacco crops. Around

10.83% of the farmers were undecided/provided no answer as to their intention for the next cropping season in the study area (Table 7.10).

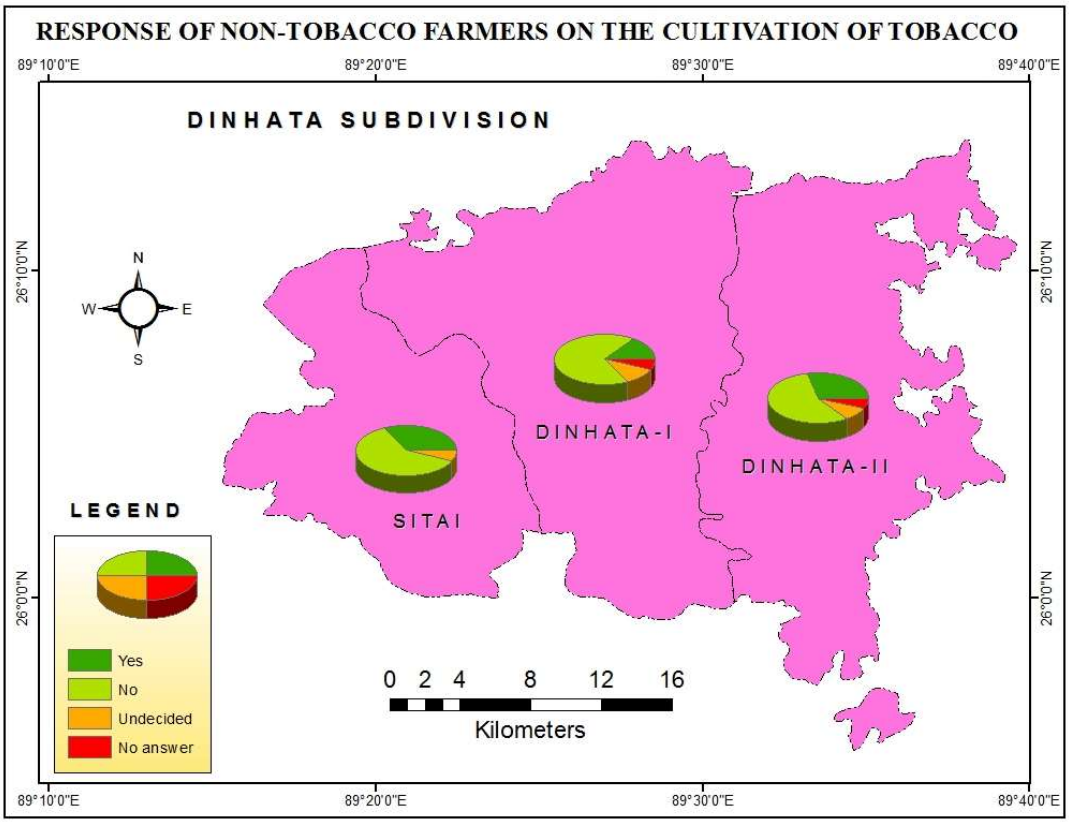

Figure: 7.8 Response of non-tobacco farmers on the cultivation of tobacco

Table: 7.10 Response obtained from non-tobacco farmers on their intention to cultivate tobacco or not in the next cropping season and their percentage distribution in the study area

Response	Dinhata –I	Dinhata – II	Sitai	Average
Yes	12.5	30.0	35.0	25.83
No	72.5	57.5	60.0	63.33
Undecided	10.0	7.5	5.0	7.5
No answer	5.0	5.0	0	3.33

Source: Field Survey, 2012

7.3.2. Reasons for shifting from non-tobacco to tobacco cultivation

Table 7.11 shows that suitable soil and climate (24.09%) and good price (19.76%) of tobacco cultivation were the main reasons provided by the respondent farmers who intend to cultivate tobacco in the next cropping season. In addition, it also serves as a good source of income or profitable (16.23%) to farmers. Farming experience and farmer's preference accounted for 12.06% and 11.63% respectively of the responses provided by the farmers. In Dinhata-II good or high price of tobacco (25.00%) was the provided by the farmers. In Dinhata-II good or high price of tobacco (25.00%) was the major reason whereas suitable soil and climate was major reason in Dinhata-I and Sitai block for shifting from non-tobacco to tobacco cultivation in next cropping season. A significance percentage (10.0%) of respondents farmers in Dinhata-I were not given any reason for shifting to non-tobacco to tobacco cultivation in next cropping season.

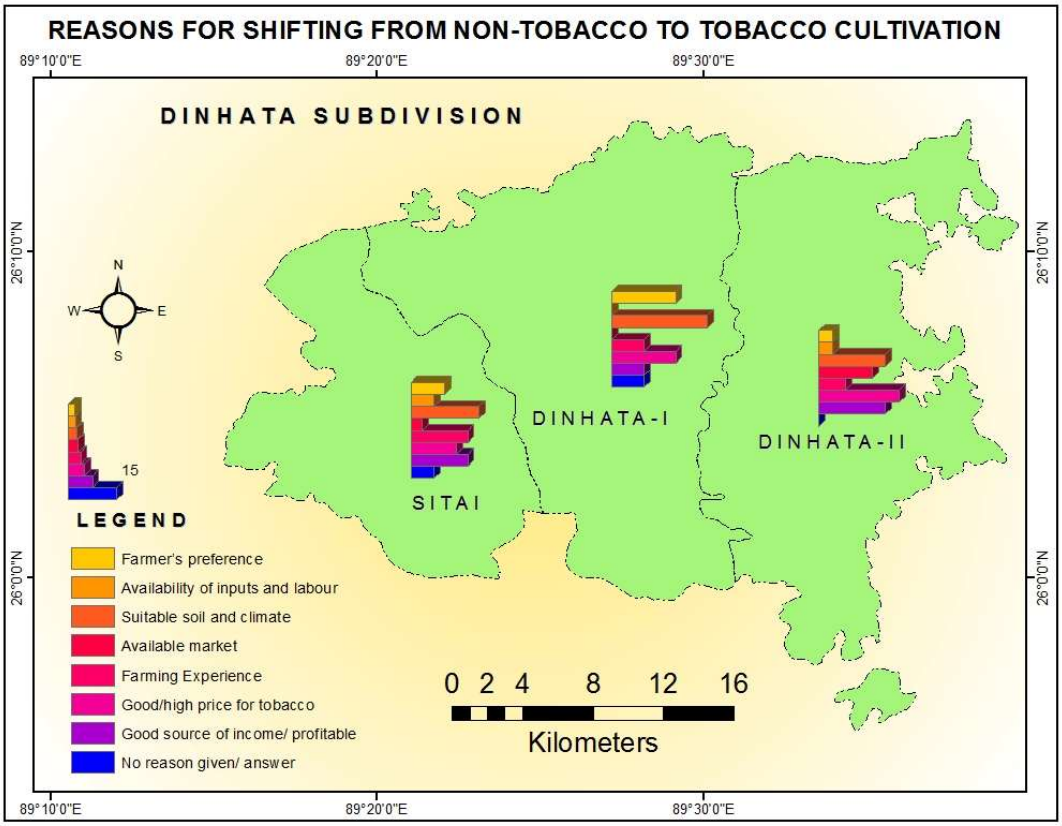

Figure: 7.9 Reasons for shifting from non-tobacco to tobacco cultivation

Table: 7.11 Reasons provided by non-tobacco farmers for shifting to tobacco cultivation in the next cropping season and their percentage distribution in the study area

Reason	Dinhata-I	Dinhata-II	Sitai	Average
Farmer's preference	20.0	4.17	10.71	11.63
Availability of inputs and labour	0	4.17	7.14	3.77
Suitable soil and climate	30.0	20.83	21.43	24.09
Available market	0	16.67	3.57	6.75
Farming Experience	10.0	8.33	17.85	12.06
Good/high price for tobacco	20.0	25.00	14.28	19.76
Good source of income/ profitable	10.0	20.83	17.85	16.23
No reason/answer given b	10.0	0	7.14	5.71

Source: Field Survey, 2012

7.3.3. Reasons provided by non-tobacco farmers for continuing cultivation non-tobacco crops

Fluctuation of market price of tobacco (23.57%), less labour (13.9%) requirement in alternative crops of tobacco, suitable soil and climate for other crops (10.85%), unsuitability of tobacco to soil and climate (10.64%), High input cost for tobacco (9.48) and cultivation for food crops (7.37%) were the predominant reasons provided by non-tobacco farmers who will continue to plant non-tobacco crops in next cropping season. In case of Dinhata-I and Dinhata-II block, unsuitability of tobacco to soil and climate was the major factor accounted for 18.97% and 10.86% respectively, preferred by the respondent farmers who deciding to continue non-tobacco cultivation in next cropping season.

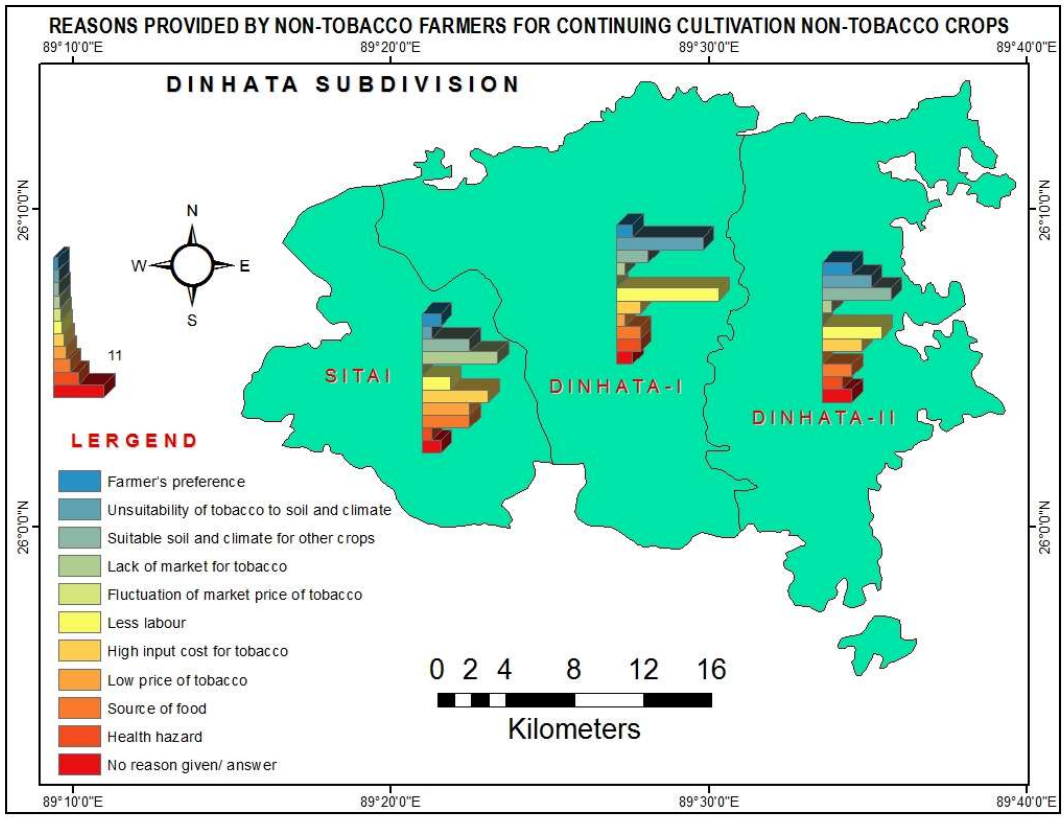

Figure: 7.10 Reasons provided by non-tobacco farmers for continuing cultivation non-tobacco crops

Table: 7.12 Reasons provided by non-tobacco farmers to continue cultivation non-tobacco crops in the next cropping season and their percentage distribution in the study area

Reason	Dinhata-I	Dinhata-II	Sitai	Average
Farmer's preference	3.45	6.52	4.17	4.71
Unsuitability of tobacco to soil and climate	18.97	10.86	2.08	10.64
Suitable soil and climate for other crops	6.9	15.22	10.42	10.85
Lack of market for tobacco	1.72	2.17	16.67	6.85
Fluctuation of market price of tobacco	25.86	26.09	18.75	23.57
Less labour	22.41	13.04	6.25	13.9
High input cost for tobacco	5.17	8.7	14.58	9.48

Low price of tobacco	1.72	0	10.42	4.05
Source of food	5.17	6.52	10.42	7.37
Health hazard	5.17	4.35	2.08	3.87
No reason given/ answer	3.44	6.52	4.17	4.71

Source: Field Survey, 2012

7.3.4. Preferred crops to be cultivated in next cropping season

Table 7.13 shows the list of crops wanted to cultivate by the non-tobacco farmers and its percentage distribution in next cropping season. This include vegetable, boro paddy, maize, tomato, potato, mustard, wheat, garlic and others. Maize (29.27%), and potato (27.49%) were the top preference of the farmers to cultivate in the next cropping season. Table 7.11 also revealed that 11.65% of respondent farmers were decided to grow boro paddy as a food crop for family consumption. Farmers' preference for other crops ranged from less than 2 % to 6.34%. Potato was the major crop preferred by respondent farmers of Dinhata-I and Dinhata-II which accounted for 31.03% and 34.75% respectively,

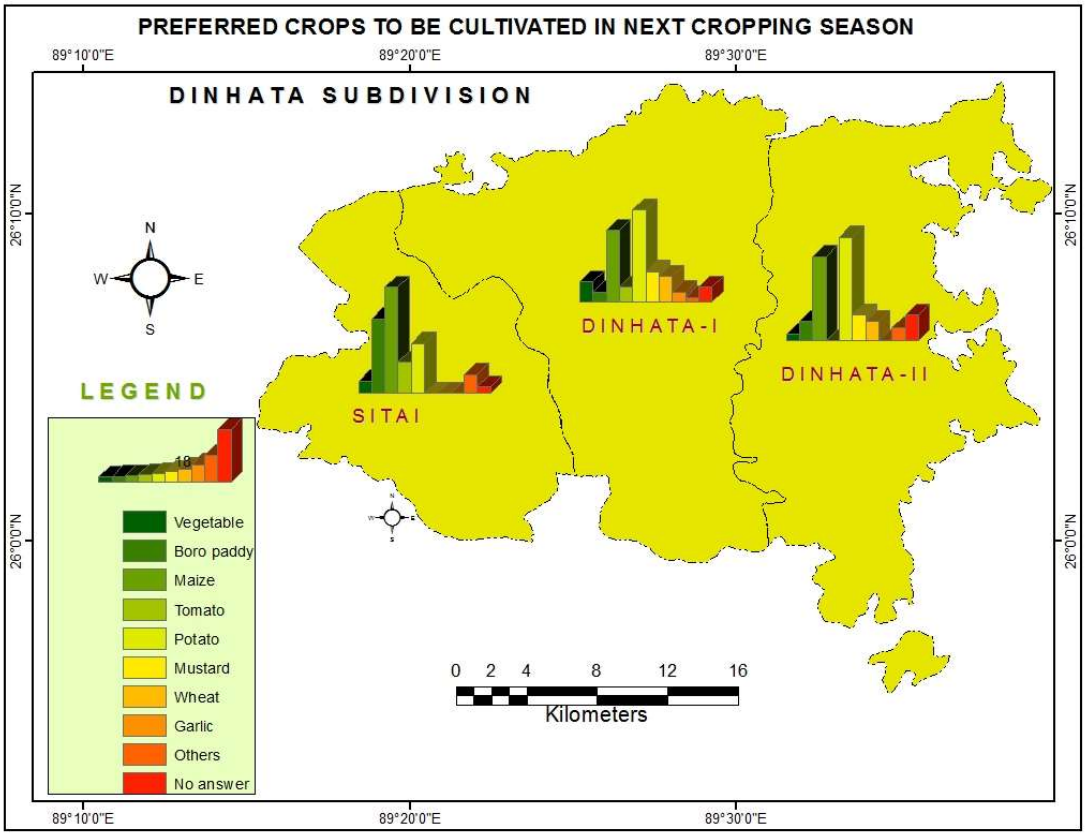

Figure: 7.11 Preferred crops to be cultivated in next cropping season

whereas in Sitai 35.42% respondent non-tobacco farmers were preferred maize cultivation in next cropping season.

Table: 7.13 List of crops preferred by non-tobacco farmers for cultivation in the next cropping season and their percentage distribution in the study area

Crop	Dinhata-I	Dinhata-II	Sitai	Average
Vegetable	6.90	2.17	4.17	4.41
Boro paddy	3.44	6.52	25.0	11.65
Maize	24.14	28.26	35.42	29.27
Tomato	5.17	0	10.42	5.20
Potato	31.03	34.78	16.67	27.49
Mustard	10.34	8.69	0	6.34
Wheat	8.62	6.52	0	5.05
Garlic	3.45	0	0	1.15
Others	1.72	4.35	6.25	4.11
No answer	5.17	8.69	2.08	5.31

Source: Field Survey, 2012

7.3.5. Reasons for selecting the preferred crops

Table 7.14 shows the various reason given by non-tobacco farmers in continuing to cultivate other crops rather than tobacco in the next cropping season. The major reasons provided were suitable soil and climate (18.43%), less input and labour cost (17.98%), family consumption (15.04%), good source of income/profitable (14.83%), and good/high price (14.81%). These were similar reasons provided by the non-tobacco farmers for their decision to cultivate tobacco. About 5.29% of the total respondents did not provided any answer on why they chose to cultivate non-tobacco crops in the next cropping season. In addition less input and labour cost in alternative crops of tobacco and good or high price (18.97%) were the prime reason in continuing to cultivate other crops provided by the non-tobacco farmers of Dinhata-I block. In case of Dinhata-II, good source of income or profitable (28.26%) and less input and labour cost (23.91%) were the major reason, whereas family consumption (31.25%) and suitable soil and climate

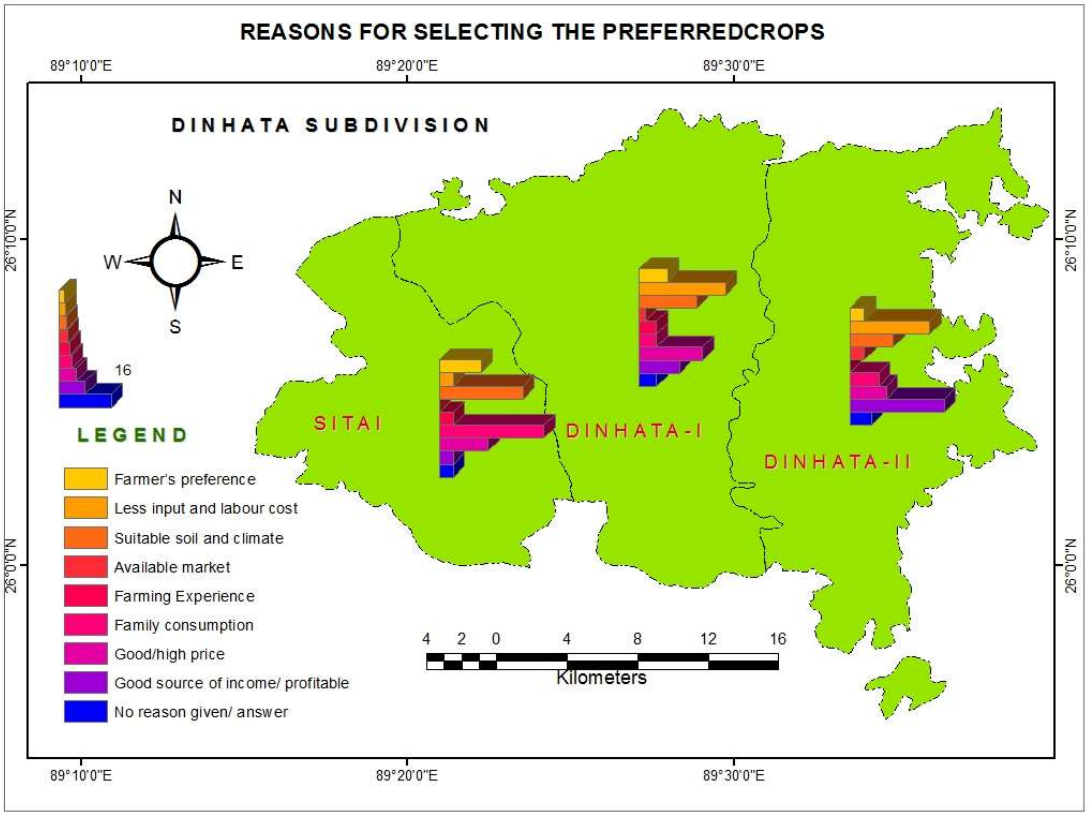

Figure: 7.12 Reasons for selecting the preferred crops

(25.0%) were the major factor for selecting preferred crops in next cropping season (Figure 7.12).

Table: 7.14 Reasons provided by farmers in deciding which crop to cultivate in the next cropping season and their percentage distribution in the study area.

Reason	Dinhata-I	Dinhata-II	Sitai	Average
Farmer's preference	8.62	4.35	12.5	8.49
Less input and labour cost	25.86	23.91	4.17	17.98
Suitable soil and climate	17.24	13.04	25.0	18.43
Available market	1.72	4.35	0	2.02
Farming Experience	5.17	0	4.17	3.11

Family consumption	5.17	8.69	31.25	15.04
Good/high price	18.97	10.87	14.58	14.81
Good source of income/ profitable	12.07	28.26	4.17	14.83
No reason given/ answer	5.17	6.52	4.17	5.29

Source: Field Survey, 2012

Conclusion

1. The study shows that there is no significant difference in socioeconomic characteristics between tobacco and non-tobacco farmers. At 0.05 significance level all the factors have been compared between tobacco and non tobacco farmers. Farmer in the study area are generally aged (mean age 47.56 year for tobacco farmers and 43.98 years for non-tobacco farmers), medium to large household size (mean size about 5 persons), small farm size, less than 2 hectare, had average16 year experiences for tobacco cultivation and average 7 year experiences for non-tobacco cultivation.
2. The tobacco farmers in the study area not only cultivate tobacco but also cultivate others crops such as vegetables, boro paddy, maize, tomato, potato, mustard, wheat, garlic etc. under the specific crop rotation arrangement, where tobacco is generally cultivated.

   Farmers who maintain tobacco cultivation are justified by suitable soil and climate conditions, farming experience and high profit of the crop.

   There are farmers who exits from tobacco cultivation and shift to others crops. This is because fluctuation of market price, high input cost and high labour requirements for tobacco.
3. It is also showed that majority of the tobacco farmers have expressed their willingness to divert area from tobacco to others crops subject to availability of irrigation and credit. If irrigation and credit facilities are provided most of the farmers will divert their landholdings away from tobacco to boro paddy and potato respectively.

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