

## CHAPTER – V

### DETERMINANTS OF TOTAL INCOME OF AGRICULTURAL LABOURERS

The calculation of correct figure of income of the agricultural labourers is quite difficult. They are to some extent reluctant as well as unable to divulge their total earning throughout the year. So by taking indirect method we shall try to find the actual income of the agricultural labourers. Income from wages (cash and kind), income from sale of home produced goods, farm and non-farm produced goods, income from non-farm employment and income from other sources will be discussed in this chapter. Relative significance of each of sources of income will be analysed.

Our objective is to study the sources, composition and pattern of income of agricultural labourers across surveyed villages of Uttar Dinajpur district in West Bengal.

#### **5.1 Determinants of Income of Agricultural Labourers on the Basis of Total Households Income Per Annum (in Rupees) – Villagewise**

To analyse the income of the agricultural labourers, we have divided the agricultural labourers in two categories: a) Landless Agricultural labourers and b) Marginal Farmer-cum -Agricultural Labourers.

Table 5.1 shows the levels of income of landless agricultural labourers of the villages, Jagadishpur and Kamalpur, under highly developed block; Alianagar and Dolua, under moderately developed block; Lalbazar and Solpara, under least developed block, in the mean values of income earned by the landless agricultural labourers. An average landless agricultural labour household earns annually Rs. 21,927.28. However, there are considerable variations in the income level of landless agricultural labour households in the six villages. For example, 15 households of Jagadishpur village earns, on an average Rs. 22,926.67. In Kamalpur village households have recorded an average income of about Rs. 22352.00 from different sources of livelihood. The average household income of 15 households each of Alianagar, Dolua, Lalbazar and Solpara is only Rs.

19552.31, Rs. 26,193, Rs. 24130 and Rs. 20,552.00 respectively. From the Table 5.1, it is seen that the level of income in mean value is highest Rs. 26,193 in the village Alianagar, the village under moderately developed block. The major portion of income comes from hiring out agricultural labour of the landless agricultural labourers. We see that there is no such variation in income among the villages. But some variation arises due to out migration of agricultural labourers in some villages. These income of the households is somewhat higher compared to other households, in the village where the outmigration of laborers is higher than the other households. The relative share of individual components of income is given in Table 5.2. A perusal of the Table clearly depicts that the main source of income in the case of an average landless agricultural labour household in hiring out labour, on permanent as well as casual basis in agriculture.

**Table 5.1 Levels of Income of Landless Agricultural Labourers Village wise (Mean Value in Rs.)**

Sources of Income	Highly Dev. Block		Villages under Mod. Developed Block		Villages Under Least Developed Block		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
1. Income from hiring Agricultural Labourer								
Cash	9194.66	1157.66	7774.00	11048.00	9189.00	12532.00	61395.32	232.55
Kind	2962.00	3916.32	2777.33	3016.00	2398.00	3449.00	18518.00	3086.49
Sub Total	12156.66	15574.00	10551.33	14064.00	11587.00	15981.33	79914.32	13319.05
2. Non farm employment in Cash	1523.00	3452.00	5058.33	1682.00	1750.00	546.66	14011.99	2459.72
3. Sale of Agriculture Produce	3360.00	1380.00	533.33	3308.00	5187.00	990.00	14758.33	2459.72
4. Craft Item	167.00	480.00	149.33	728.00	497.00	-	2021.33	336.88
5. Sale of Fruits	-	68.00	47.33	-	76.00	-	191.33	31.88
6. Sale of Milk	780.00	546.66	132.00	1146.00	737.00	80.00	3421.66	570.27
7. Sale of Fish	67.00	33.30	60.00	-	407.00	420.00	987.30	164.55
8. Sale of Egg or Poultry	240.00	235.00	242.66	121.00	237.00	100.00	1175.74	195.96
9. Sale of other Liv stock	727.00	130.00	270.00	925.00	440.00	153.00	2645.99	1959.00
10 Remittance from Relatives	2173.00	-	1200.00	3400.00	2875.00	2106.00	11754.00	1959.00
11 From Pretty Trade	1573.00	360.00	1032.00	653.00	287.00	80.00	3984.96	664.16
12. Sericulture	-	-	-	-	-	-	-	-
13. Apiary	-	-	-	-	-	-	-	-
14. Weaving	-	-	-	-	50.00	-	50.00	8.33
15. Forestry	-	93.33	76.66	166.00	-	-	335.99	55.99
16. Salary/Pension	160.00	-	200.00	-	-	96.00	456.00	76.00
<b>TOTAL</b>	<b>22926.67</b>	<b>22352.00</b>	<b>19552.31</b>	<b>26193.00</b>	<b>24130.00</b>	<b>20552.99</b>	<b>135728.99</b>	<b>22628.10</b>

Source : Field Survey.

**Table 5.2 Levels of Income of Landless Agricultural Labourers  
Households Village wise (percentage of total income in Rs.)**

Sources of Income	Villages under highly developed Blocks		Villages under Mod. Developed Blocks		Villages Under Least Developed Blocks		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
<b>1. Income from hiring Agricultural Labourer</b>								
Cash	40.00	52.15	41.97	42.10	38.09	62.54	276.85	46.14
Kind	11.20	17.52	11.43	11.49	9.93	17.67	79.24	11.54
<b>Sub Total</b>	<b>51.20</b>	<b>69.67</b>	<b>53.40</b>	<b>53.60</b>	<b>48.02</b>	<b>80.21</b>	<b>344.20</b>	<b>59.26</b>
<b>2. Non farm wage income in Cash</b>	6.64	15.44	26.29	6.41	7.24	2.39	64.41	10.73
<b>3. Sale of Agriculture Produce</b>	14.65	6.17	2.77	14.51	21.48	4.93	64.51	10.75
<b>4. Sale of Crafts Item</b>	0.72	2.14	0.77	2.77	2.06	-	5.69	0.94
<b>5. Sale of Fruits</b>	-	0.30	0.24	-	0.31	-	0.85	0.14
<b>6. Sale of Fish</b>	0.29	0.14	0.31	-	1.68	2.09	4.51	0.75
<b>7. Sale of Milk</b>	3.40	2.44	0.68	4.36	3.05	0.39	13.95	2.32
<b>8. Sale of Egg or Poultry</b>	1.04	1.05	1.26	0.46	0.98	0.49	5.23	0.87
<b>9. Sale of other Livestocks</b>	3.16	0.58	1.40	3.52	1.82	0.76	11.24	1.87
<b>10 Remittance from Relatives</b>	9.47	-	6.23	12.95	11.90	10.50	51.65	8.50
<b>11 From Pretty Trade</b>	6.86	1.61	5.36	2.48	1.19	0.39	17.89	2.92
<b>12. Sericulture</b>	-	-	-	-	-	-	-	-
<b>13. Apiary</b>	-	-	-	-	-	-	-	-
<b>14. Weaving</b>	-	-	-	-	0.20	-	0.20	0.03
<b>15. Forestry</b>	-	93.33	76.66	166.00	-	-	335.99	76.00
<b>16. Salary/Pension</b>	160.00	-	200.00	-	-	96.00	456.00	76.00
<b>Total</b>	<b>308.63</b>	<b>262.54</b>	<b>428.77</b>	<b>320.65</b>	<b>147.95</b>	<b>278.36</b>	<b>1732.41</b>	<b>308.76</b>

Source: Field Survey.

It is observed that, on average landless agricultural labour households earn 59.26 percent of the total income from hiring out labour. However, there are some differences in the relative share of income across the villages. For example, on average landless agricultural labour households in Kamalpur, Solpara earns more than 60% of its total income from hiring out labour in agriculture. In the village Jagadishpur, Alianagar and Dolua on an average the agricultural labour household earns within 50 percent to 53.60 percent of total income from hiring out agricultural labour. In the village Lalbazar, the percentage share of total income from hiring out labour is lowest. The second important sources of income in the case of an average landless agricultural labour household, is non-farm employment and sale of agricultural production. On an average 10.73 percent of the total income is earned from non-farm wages. Village Alianagar has recorded

the highest income (26.29 percent) from this source under moderately developed block, followed by Kamalpur (15.44 percent) under highly developed block, Lalbazar (7.24 percent) under least developed block, Jagadishpur (6.64 percent) under highly developed block. Dolua (6.4 percent) under moderately developed block and Solpara ( 2.39 percent) under least developed block.

The other major source of income of the landless agricultural labourers is sale of agricultural products. Though they possess no land but sometime mainly in the *boro* season they lease in one or two *bighas* of land that only the major portion of income come from the sale of agricultural production. Village Lalbazar under least developed block recorded the highest (21.48 percentage) total income from this source, followed by Jagadishpur (14.65 percent) the village under highly developed block, Dolua (14.51 percent) the village under moderately developed block, Kamalpur (6.17 percent) under highly developed block, Solpara (4.93 percent) the village under least developed block and Alianagar (2.77 percent) under moderately developed block. Other major sources of income of the landless agricultural labour households are the remittance from relatives. On an average 8.50 percent of total income come from these sources. Village Dolua recorded the highest income (12.95 percent) under moderately developed block, followed by Lalbazar (11.90 percent) under least developed block, Solpara (10.50) under least developed block, Jagadishpur (9.47 percent) under highly developed block, and Alianagar (6.23 percent). On an average 2.32 percent come from sale of milk, 2.98 percent come from petty trade and other. Sources of income from, craft item, sale of fruits, sale of egg and poultry, sale of fish, weaving, forests and others, the percentage share of income to total income is less than one. In our survey area the cultivation of sericulture and apiary is nil.

It is observed from the foregoing analysis that irrespective of differences in the level of agricultural development, the pattern of income earned by the landless agricultural labourers is almost the same. The main source of income of the landless agricultural are wage employment. They supplement their income through sale of agricultural product. It is further supported by non-farm wage employment.

**Table 5.3**

**Levels of Income of Landless Agricultural Labourers Households Village wise (Per Capita in Rs.)**

Sources of Income	Village under highly developed Block		Village under Mod. Developed Block		Village Under Least Developed Block		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
1. Income from hiring Agricultural Labourer								
Cash	1724.00	2106.80	1422.07	1841.45	1731.00	2264.81	11090.13	1848.32
Kind	555.00	706.77	508.04	502.66	451.00	623.37	3347.84	557.99
Sub Total	2279.00	2814.57	2030.11	2344.11	2182.00	2888.18	14437.97	2406.31
2. Non farm wage income in Cash	286.00	623.84	925.30	230.44	329.00	98.79	2543.75	423.76
3. Sale of Agriculture Produce	630.00	249.39	97.56	634.66	976.00	178.91	2766.52	461.08
4. Sale of Crafts item	31.00	86.74	27.31	121.44	93.00	-	359.49	59.91
5. Sale of Fruits	-	12.28	8.65	-	14.00	-	34.93	5.82
6. Sale of Fish	13.00	6.02	10.97	-	76.00	75.90	181.89	30.31
7. Sale of Milk	146.00	98.79	24.40	191.00	138.00	14.45	612.64	102.10
8. Sale of Egg or Poultry	45.00	42.49	44.30	20.22	44.00	18.07	214.17	35.69
9. Sale of other Livestocks	136.00	23.49	49.51	154.22	82.00	27.71	472.93	78.82
10 Remittance from Relatives	408.00	-	219.57	566.66	541.00	380.72	2115.95	352.82
11 From Pretty Trade	295.00	65.06	188.78	108.88	54.00	14.45	726.17	121.02
12. Sericulture	-	-	-	-	-	-	-	-
13. Apiary	-	-	-	-	-	-	-	-
14. Weaving	-	-	-	-	9.41	-	9.41	1.56
15. Forestry	-	16.86	14.02	27.77	-	-	58.65	9.77
16. Salary/Pension	30.00	-	29.26	-	-	17.34	76.60	12.76
<b>TOTAL</b>	<b>4299.00</b>	<b>4039.55</b>	<b>3569.83</b>	<b>4449.40</b>	<b>4538.41</b>	<b>3714.53</b>	<b>24610.67</b>	<b>4101.77</b>

Source Field Survey.

## 5.2. Per Capita Income

Table 5.3 contains average per capita income earned by landless agricultural labourer households in the six villages of Uttar Dinajepur districts of West Bengal. The Table shows that an average landless agricultural labour household earns annually per capita income of Rs 4101.77. However, there are variations in the per capita income levels of landless agricultural labourer households in the different villages. For example, landless agricultural labour households in Lalbazar, the village under least developed block earned about Rs 4538.41 followed by Dolua (Rs 4449.40) the village under the moderately developed block. Jagadishpur (Rs 4299.00) and Kamalpur (Rs 4039.53), the village under highly developed block. Solpara (3714.53) the village under least developed block, Alianagar (3569.83) the village under moderately developed block.

The landless agricultural labour households in village Solpara are earning the highest (Rs 2888.18) per capita income from hiring out labour in agriculture, the village under least developed block and in Alianagar, the village under moderately developed block, earning the lowest (Rs. 2030.11) per capita income from hiring out labour in agriculture. In the case of non-farm employment the village Alianagar recorded the highest (Rs. 925.30) per capita income of the landless agricultural labour household and the village Solpara ranked the lowest (Rs. 98.79) level of per capita income of the agricultural labour households. In the case of income from the sale of Agricultural produce, village Lalbazar ranked the highest (Rs. 976.00) per capita income level, the village under least developed block, followed by Dolua (Rs. 634.66) under moderately developed block, Jagadishpur (630.00) under highly developed block, Kamalpur (Rs. 249.00) under highly developed block, Solpara (Rs. 178.91) under least developed block and Alianagar (Rs. 97.56) under moderately developed block. Per capita income from the sale of craft item village Kamalpur ranked the highest (Rs. 86.74) level, the village under highly developed block and Alianagar is the lowest (27.31) position the village under moderately developed block. Other major source of per capita income of the landless agricultural labour households is the remittances from relatives, village Dolua, the village under moderately developed block

recorded the highest (Rs. 566.66) position followed by Lalbazar (Rs. 541.00), Jagadishpur (408.00), Solpara (Rs. 380.72) and Alianagar (279.57). In the village Kamalpur, the income from remittances from relatives is nil. Other source of per capita income like, sale of fruit, sale of fish, sale of egg and poultry, sale of livestock, petty trade, weaving forestry, and others (salary/pension) range between Rs. 9.41 to Rs. 295.00. In the case of total per capita income we find that in our study area, apiary and weaving is nil.

### **5.2.1 Level of Per-Household and Per Capita Income of Marginal Farmer Cum Agrical Labourers**

It has been observed by some researchers that the level of development of an area is highly correlated with the level of living. The income level of farmers has been observed to be higher in the areas which made an advance in technology. From the initial years of HYV programme than those which made efforts in this direction somewhat late. In such a situation it becomes relevant to examine the difference in the level and the pattern of income in the differentially developed villages. Our limited objectives is to highlight the level and the composition of household income earned by the marginal farmer-cum agricultural labourers in six villages in Uttar Dinajpur District of West Bengal.

Table 5.4

## Levels of Income of Marginal Farmer-cum-Agricultural Labourers Households Village wise ( Mean Value in Rs.)

Sources of Income	Villages under highly Developed Blocks		Villages under Mod. Developed Blocks		Villages under Least Developed Blocks		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
1. Income from hiring Agricultural Labourer								
Cash	10228.00	9677.33	10646.66	12247.66	10322.00	16934.00	70055.56	11675.94
Kind	2951.33	4453.33	3165.33	2694.00	2504.00	3824.00	19591.99	3265.33
Sub Total	13179.33	14130.66	13812.00	14941.66	12826.00	20758.00	89647.65	14941.27
2. Non farm wage income in Cash	2413.33	3750.00	4000.00	1803.33	1266.00	686.00	13918.66	2319.77
3. Sale of Agriculture Produce	10553.33	12445.33	11861.33	9410.66	11240.66	9703.00	65213.65	10868.94
4. Sale of Crafts item	50.00	901.33	138.66	256.00	772.00	274	2391.99	398.66
5. Sale of Fruits	13.33	40.00	370.00	1900.00	440.00	680.00	3443.33	573.88
6. Sale of Fish	146.66	-	197.33	80.00	622.00	880.00	1925.99	320.99
7. Sale of Milk	1533.33	949.33	549.33	1136.66	1369.00	146.60	5684.31	947.38
8. Sale of Egg or Poultry	488.66	210.00	353.33	327.33	342.00	720.00	2439.32	406.55
9. Sale of other Livestocks	1133.33	766.00	293.33	709.33	1269.00	4383.33	8554.98	1425.33
10 Remittance from Relatives	6080.00	2000.00	4343.33	3600.00	4480.00	-	20503.32	3417.22
11 From Pretty Trade	2486.66	666.66	653.33	610.00	1383.33	200.00	5999.65	999.94
12. Sericulture	-	-	200.00	-	-	-	200.00	33.33
13. Apiary	-	-	-	6.66	-	-	6.66	1.11
14. Weaving	-	-	-	-	-	-	-	-
15. Forestry	-	100.00	982.66	586.66	226.00	-	1895.32	315.88
16. Salary/Pension	-	240.00	-	-	-	226.00	466.00	77.66
<b>TOTAL</b>	<b>38076.00</b>	<b>36200.00</b>	<b>37754.60</b>	<b>35368.29</b>	<b>36235.00</b>	<b>38656.98</b>	<b>222290.93</b>	<b>22106.64</b>

Source : Field Survey.

Table 5.4 gives the meanvalues of income earned by marginal farmer-cum agricultural labourer households in six vilages, under highly developed block (Jagadishpur and Kamalpur), under moderately developed block (Alianagar and Dolua), under least-developed block (Lalbazar and Solpara). An average marginal farmer-cum-agricultural labourer household earned Rs. 22106.64 annually in the rural areas of Uttar Dinajpur District of West Bengal. However, there are distinct differences in the income levels of the households in the six different villages. For example 15 ouseholds in the village Jagadishpur earns Rs. 38076.00 on average. In the Kamalpur villages 15 households have recorded an average income of Rs. 36200.00 from different sources of income. The average household income of each village i.e, Alianagar is Rs. 37754.60, Dolua is Rs. 35368.29, Lalabazar is Rs. 36235.00 and in Solpara is Rs. 38656.98. As the average income levels of the six villages are different, the income pattern may better be studied by comparing the relative shares of individual components of income in the total income of each village.

The relative shares of individual components of income are given in Table 5.5. The Table clearly shows that the main sources of income in the case of an average marginal farmer-cum-agricultural labour household is hiring out agricultural labour and sale of agricultural produce by Dolua (41.99 percent), the village under moderately developed block, Kamalpur (39.09 percent) the village under highly developed block, Alianagar (36.39 percent) the village under moderately developed block, Lalbazar (35.17 percent), the village under least developed block, Jagadishpur (34.61 percent) the village under highlk developed block. As we observed in the previous section, the second important source of income in the case of an average household is non-farm wage income, on an average marginal farmer-cum-agricultural labour household earns about 5.91 percent of the total income from non-farm wage employment. Village Solpara has recorded 11.74 percent of total income from non-farm employment followed by Alianagar (10.53 percent), the village under moderately developed block, Kamalpur (10.35 percent) the village under highly developed block, Jagadishpur (6.33 percent) the village under highly developed block, Dolua (5.06 percent) the village under moderately developed block and Lalbazar (3.47 percent), the village under least developed block.

Table 5.5

## Levels of Income of Marginal Farmer-cum-Agricultural Labourers Households Village wise (Percentage in Rs.)

Sources of Income	Villages under highly Developed Blocks		Villages under Mod. Developed Blocks		Villages under Least Developed Blocks		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
1. Income from hiring Agricultural Labourer								
Cash	26.86	26.73	28.05	34.42	28.31	43.71	188.68	31.34
Kind	7.75	12.30	8.33	7.57	6.86	9.87	52.68	8.78
Sub Total	34.61	39.03	36.39	41.99	35.17	53.58	24.74	40.12
2. Non farm wage income in Cash	6.33	10.35	10.53	5.06	3.47	11.74	47.48	5.91
3. Sale of Agriculture Produce	27.71	34.37	31.25	26.45	30.82	25.09	175.69	29.28
4. Sale of Crafts item	0.13	2.49	0.08	0.71	2.11	1.75	7.26	1.21
5. Sale of Fruits	0.03	0.11	0.97	5.34	1.20	-	7.65	1.29
6. Sale of Fish	0.38	-	0.51	0.22	1.70	1.75	4.56	0.76
7. Sale of Milk	4.02	2.62	1.44	3.19	3.75	2.27	17.29	2.88
8. Sale of Egg or Poultry	1.27	0.58	0.93	0.92	0.95	0.37	5.02	0.83
9. Sale of other Livestocks	2.97	0.27	0.77	2.74	3.48	1.86	12.09	2.01
10 Remittance from Relatives	15.96	5.52	11.44	10.11	12.28	11.20	66.51	11.08
11 From Pretty Trade	6.53	1.84	1.72	1.71	3.75	-	15.55	2.59
12. Sericulture	-	-	0.52	-	-	0.51	1.03	0.17
13. Apiary	-	-	-	-	-	-	-	-
14. Weaving	-	-	-	-	-	-	-	-
15. Forestry	-	0.29	2.58	1.64	0.62	0.32	5.45	0.90
16. Salary/Pension	-	0.66	-	-	-	0.71	1.37	0.22
<b>TOTAL</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>-</b>	<b>100.00</b>

Source : Field Survey.

In the case of sale of agricultural produce, the share of income of the marginal farmer-cum-agricultural labour household comes about 29.18 percent of the total income. Kamalpur the village under highly developed block recorded the highest income (34.37 percent) from this source followed by, Alianagar (31.25 percent) the village under moderately developed block, Lalbazar (30.82 percent) the village under least developed block, Jagadishpur (27.7 percent) the village under highly developed block, Dolua (26.45 percent), the village under moderately developed block, and Solpara (25.09 percent), the village under least developed block. The major source of income of the marginal farmer-cum-agricultural labour household is remittances from relatives. As about 11.08 percent of total income of the agricultural labour households, comes from this source. Village Jagadishpur has recorded the highest (15.96 percent), the village under highly developed block, followed by Lalbazar (12.28 percent), the village under least developed block, Alianagar (11.44 percent), the village under moderately developed block, Solpara (11.20 percent), the village under least developed block, Dolua (10.11 percent), the village under moderately developed block and Kamalpur (5.52 percent), the villages under highly developed block. It is clear from the Table 5.5 that the rest sources of income from sale of milk and petty trade ranked the highest-position. The components of income such as, sale of craft item, sale of fruit, sale of fish, sericulture, apiary, egg and poultry, forestry, weaving and others account for very low proportion of the total income in all the villages. The only exception is the village Dolua, under moderately developed block, where we find the practice of apiary but only by one or two households.

### **5.2.2 Per Capita Income of Marginal Farmer-cum-Agricultural Labourers**

There are considerable variations in the family size across the villages. The average family size of the sampled marginal farmer-cum-agricultural labourer is about six. The average family size of village Jagadishpur and Kamalpur, under highly developed block is five and six.

Table 5.6

## Levels of Income of Marginal Farmer-cum-Agricultural Labourers Households Village wise (Per capita in Rs.)

Sources of Income	Villages under highly Developed Blocks		Villages under Mod. Developed Blocks		Villages under Least Developed Blocks		Total	Average
	Jadishpur	Kamalpur	Alianagar	Dolua	Lalbazar	Solpara		
1. Income from hiring Agricultural Labourer								
Cash	1848.43	1544.25	1947.00	1655.09	1821.00	2466.00	11281.77	1880.29
Kind	533.37	710.63	579.00	364.05	431.00	556.00	31740.05	529.00
Sub Total	2381.80	2254.88	2526.00	2019.14	2252.00	3022.00	14455.82	2409.30
2. Non farm wage income in Cash	2413.33	598.40	731.00	243.69	218.00	100.00	4304.42	717.40
3. Sale of Agriculture Produce	1907.00	1985.95	2169.00	1271.71	129.00	1413.00	8875.42	1479.27
4. Sale of Crafts item	9.00	143.82	61.00	34.59	133.00	40	421.41	70.23
5. Sale of Fruits	2.00	6.38	67.00	256.76	75.00	-	407.14	67.85
6. Sale of Fish	27.00	-	36.00	10.81	107.00	99.00	279.81	46.63
7. Sale of Milk	27.00	151.48	100.00	153.60	236.00	128.00	1046.08	174.34
8. Sale of Egg or Poultry	88.00	33.51	64.00	44.23	59.00	21.00	309.14	51.62
9. Sale of other Livestocks	305.00	122.34	53.00	95.86	218.00	104.00	798.20	133.03
10 Remittance from Relatives	1099.00	319.14	794.00	486.49	772.00	631.00	4101.63	683.60
11 From Pretty Trade	449.00	106.38	169.00	8.24	238.00	-	970.62	161.77
12. Sericulture	-	-	36.00	-	-	29.00	65.00	10.83
13. Apiary	-	-	-	0.90	-	-	0.90	0.15
14. Weaving	-	-	-	-	-	-	-	-
15. Forestry	-	15.95	179.00	79.28	39.00	18.44	331.67	55.27
16. Salary/Pension	-	38.29	-	-	-	33.00	71.29	11.88
<b>TOTAL</b>	<b>6881.00</b>	<b>6542.16</b>	<b>6942.00</b>	<b>4807.70</b>	<b>6287.00</b>	<b>5631.55</b>	<b>36439.39</b>	<b>6066.56</b>

Source : Field Survey.

Table 5.6 gives an account of the per capita income of marginal farmer-cum-agricultural Labour households in the six villages of Uttar Dinajpur district of West Bengal. An average household earns about Rs. 6066.56 per capita from various sources of income in the rural areas of the villages of Uttar Dinajpur district of West Bengal. However, there are variations in the per capita income levels of marginal farmer-cum-agricultural labour households across the villages. For example village Alianagar under the moderately developed block recorded the highest per capita income (Rs. 6942.00), followed by Jagadishpur (Rs. 6881), the village under highly developed block, Kamalpur (Rs. 6542.16), the village under highly developed block, Lalbazar (Rs. 6287), the village under least developed block and Dolua (4807.70), the village under moderately developed block.

It is clear from the Table 5.6 that the per capita income of the marginal farmer-cum-agricultural labourer households increases as we move up from the low productivity villages to the high productivity villages. A different pattern is seen in the case of per capita income from sale of agricultural produce. The second important source of income in the case of the marginal farmer-cum-agricultural labour is also income from sale of agricultural produce. On an average marginal farmer-cum-agricultural labour household in the rural areas of our study of Uttar Dinajpur district of West Bengal earns about Rs. 1480.00 per capita from this source. Income from this source is highest in Alianagar followed by Kamalpur, Jagadishpur, Dolua, Solpara and Lalbazar.

On an average, a marginal farmer-cum-agricultural labour household in Uttar Dinajpur district of West Bengal earns an income of Rs. 717.40 per capita from non-farm employment. From the Table we see that the availability of non-farm employment is higher in the village under highly developed block than the village under moderately or least developed block except Kamalpur. The village Jagadishpur recorded the highest (Rs. 2413.33) per capita income from this source, followed by Kamalpur (Rs.598.40), Alianagar (Rs. 731.00), Dolua (Rs. 243.69), Lalbazar (Rs. 218.00) and Solpara (Rs. 100), the village under highly, moderate and least developed block respectively. In our study area, out of six villages only in two villages we find the practice of sericulture. But besides

there are government sericulture farm at Raiganj and at Chopra block. Among the others sources of income, remittances from relatives is important. On an average, the marginal farmer-cum-agricultural labour household earns Rs. 683.60 as per capita income from this source. The per capita income from others sources as we see from the Table is very low.

It appears that there is much similarity in the per capita income pattern across the villages. The per capita income levels are closely related to the agricultural development in the villages of Uttar Dinajpur district. It is also observed that the average household and the average per capita income levels of the marginal farmer-cum-agricultural labourers are marginally higher than those of the landless agricultural labourers in the study area.

### **5.3 Household Income Category wise**

There is variation from village to village in respect of household per capita income. It is also important to observe the number of households in respect of household income category wise. Table 5.7 shows the distribution of landless agricultural labourer household in respect of household income category wise in rupees. From the table 5.7 we can say that the number of household belongs to 1st income category (From Rs. 20,000 to Rs. 30000) is highest (39) followed by 2<sup>nd</sup> income category (Rs. 30001 to Rs.45000) and 3rd income category (Rs. 45001 and above). The number of households of 1<sup>st</sup> income category is highest in village Alianagar (28.20 percent) the village under moderately developed block and Solpara (28.20 percent), the village under least developed block followed by Kamalpur (12.89 percent), the village under highly developed block and Lalbazar (12.82 percent), the village under least developed block, Dolua (10.25 percent), the village under moderately developed block and Jagadishpur (7.69 percent) the village under highly developed block. The percentage of households of second income category of the marginal farmer-cum-agricultural labour out of 15 household is highest in Jagadishpur (33.33 percent), the village under highly developed block followed by Lalbazar (20.00), the village under moderately developed block, Kamalpur (16.66 percent) the village under highly developed block, Alianagar (13.33 percent) and Dolua (13.33 percent), the village under moderately developed block and Solpara (3.33 percent), the village

under least developed block. In respect of third income category (above Rs.45000.00), village Dolua recorded the highest (31.82 percent) among landless labourers household, the village under moderately developed block followed by Kamalpur (22.72 percent), the village under highly developed block, Lalbazar (18.18 percent), the village under least developed block, Jagadishpur (9.09 percent) the village under highly developed block and Alianagar (4.54 percent) the village under moderately developed block.

**Table 5.7**

**Distribution of Landless Agricultural Labour Household in Respect of Household Income Categorywise Annually (in Rupees)**

Status of Blocks	Villages	1 <sup>st</sup> income category 15000-30000	2 <sup>nd</sup> income category 30001-45000	3 <sup>rd</sup> income category above 45000
Villages under highly Dev. Block	Jagadishpur	3(7.69)	10(33.33)	2(9.09)
	Kamalpur	5(12.89)	5(16.66)	5(22.72)
Villages under Mod. Dev. Block	Alianagar	11(28.20)	4(13.33)	1(4.54)
	Dolua	4(10.25)	4(13.33)	7(31.82)
Villages under Least Dev. Block	Lalbazar	5(12.82)	6(20.00)	4(18.18)
	Solpara	11(28.20)	1(3.33)	3(13.63)
	Total	39(100)	30(100)	22(100)

Source : Field Survey.

apportioning into single-ion components for alkali metal halide salts by employing Fajan's competition principle<sup>[II.238]</sup> and 'volcano plots' of Morris.<sup>[II.239]</sup> The principle was extended to derive absolute single ion  $B$  coefficients for alkali metals and halides in water. They also observed that  $B_{Cs^+} = B_{I^-}$  suggested by Krumgalz<sup>[III.234]</sup> to be more reliable than  $B_{K^+} = B_{Cl^-}$  in aqueous solutions. However, we require more data to test the validity of this method.

It is apparent that almost all these methods are based on certain approximations and anomalous results may arise unless proper mathematical theory is developed to calculate  $B$ -values.

### II.8.11. Temperature Dependence of Ionic Viscosity $B$ -Values

Regularity in the behaviour of  $B_{\pm}$  and  $dB_{\pm}/dT$  has been observed both in aqueous and non-aqueous solvents and useful generalizations have been made by Kaminsky. He observed that (i) within a group of the periodic table the  $B$ -ion values decrease as the crystal ionic radii increase, (ii) within a group of periodic system, the temperature co-efficient of  $B_{ion}$  values increase as the ionic radius. The results can be summarized as follows:

$$(i) \quad A \text{ and } dA/dT > 0 \quad (II. 46)$$

$$(ii) \quad B_{ion} < 0 \text{ and } dB_{ion}/dT > 0 \quad (II. 47)$$

characteristic of the structure breaking ions.

$$(iii) \quad B_{ion} > 0 \text{ and } dB_{ion}/dT < 0 \quad (II. 48)$$

characteristic of the structure making ions.

An ion when surrounded by a solvent sheath, the properties of the solvent in the solvational layer may be different from those present in the bulk structure. This is well reflected in the 'Co-sphere' model of Gurney,<sup>[II.240]</sup> A, B, C Zones of Frank and Wen<sup>[II.241]</sup> and hydrated radius of Nightingale.<sup>[II.226]</sup>

Stokes and Mills gave an analysis of the viscosity data incorporating the basic ideas presented before. The viscosity of a dilute electrolyte solution has been equated to the viscosity of the solvent ( $\eta_0$ ) plus the viscosity changes resulting from

block followed by Jagadishpur (19.61 percent) and Kamalpur (19.61 percent) the village under highly developed blocks, Alianagar (15.68 percent) and Solpara (15.68 percent) the village under moderately and least-developed blocks and Dolua (7.84 percent) the village under moderately developed block.

It is clear from the Table 5.8, that the number of marginal farmer-cum-agricultural labourers households increases from 1<sup>st</sup> income category to 2<sup>nd</sup> income category and from 2<sup>nd</sup> income category to 3<sup>rd</sup> income category. That is the condition of marginal farmer-cum-agricultural labourers households is better than the landless agricultural labour households. The number of marginal farmer-cum-agricultural labourers households in respect of 3<sup>rd</sup> income category (51) is highest than the 2<sup>nd</sup> income category (30) and 1<sup>st</sup> income category (9).

**Table 5.9**

**Distribution of Marginal Farmer-cum-Agricultural Labourers Households on the Basis of Household Income Categorywise Annually (in rupees)**

Status of Block	Name of villages	1 <sup>st</sup> Income Category 15000 to 30000	2 <sup>nd</sup> Income Category Rs.30001 to 45000	3 <sup>rd</sup> Income Category Rs.45000 & above	Total no of households
Villages under Highly Dev. Block	Jagadishpur	2(12.50)	9(15.25)	4(25.00)	15
	Kamalpur	2(12.50)	11(18.64)	2(12.50)	15
Villages under Mod. Dev. Block	Alianagar	5(31.25)	9(15.25)	01(6.25)	15
	Dolua	4(25.00)	8(13.55)	03(18.75)	15
Villages under Least Dev. Block	Lalbazar	-	15(25.42)	01(6.25)	16
	Solpara	3(18.75)	7(11.86)	5(31.25)	15
	Total	16(100)	59(100)	16(100)	91

Source : Field Suirvey.

Household incomes of marginal farmer-cum-agricultural labourers are shown in the Table 5.9 category wise and block wise. For the 1<sup>st</sup> Income category (Rs. 15000 to Rs. 3000), village Alianagar (31.25 percent) recorded the highest position, the village under moderately developed block followed by Dolua (25.00

percent), the village under moderately developed block, Solpara (18.75 percent), the village under least developed block, Jagadishpur (12.50 ) and Kamalpur (12.50), the village under highly developed blocks. In the case of 2<sup>nd</sup> income category (Rs. 30,001 to 45,000), the village Lalbazar, recorded the highest (25.42 percent) position, the village under least developed block followed by Kamalpur (18.64 percent), the village under highly developed block, Jagadishpur (15.25 percent) the village under highly block, Alianagar (15.25 percent), the village under moderately developed block, Dolua (13.55 percent) and Solpara (11.86 percent), the village under moderately and least developed blocks. In the case of 3<sup>rd</sup> income category (above 45,000) the village Solpara (31.25 percent) recorded the highest position, the village under least developed block followed by Jagadishpur (25.00 percent), the village under highly developed block; Dolua (18.57 percent), the village under moderately developed block, Kamalpur (12.50 percent), the village under highly developed block, Alianagar (6.25 percent) and Lalbazar (6.25 percent) the village under moderately and least developed blocks. From the Table we see that income of 2<sup>nd</sup> income category (Rs. 30,001 to Rs. 45000) the village Lalbazar ranked the highest position though it belongs to the least developed block the reason is that the number of outmigration is highest in this village. For the 3<sup>rd</sup> income category the village Solpara recorded the highest position though it belongs to the least developed block, reason is that in the study area of this village, the cropping intensity is highest than the other village of this block. The number of households of the marginal farmer-cum-agricultural labour is highest is 2<sup>nd</sup> income category than the 1<sup>st</sup> and 3<sup>rd</sup> income category.

**Table 5.10**

**Distribution of Landless Agricultural Labourers Household on the Basis of Per Capita Income Categorywise Annually (in Rupees)**

Status of Block	Name of villages	1 <sup>st</sup> Income Category 2000 to 3999	2 <sup>nd</sup> Income Category Rs.4000 to 5999	3 <sup>rd</sup> Income Category Rs.6000 & above	Total no of households
Villages under Highly Dev. Block	Jagadishpur	11(17.44)	2(9.09)	2(40.00)	15
	Kamalpur	4(17.44)	4(18.18)	00	15
Villages under Mod. Dev. Block	Alianagar	14(22.55)	1(4.54)	00	15
	Dolua	9(14.51)	4(18.18)	2(40.00)	15
Villages under Least Dev. Block	Lalbazar	6(9.67)	9(40.90)	1(20.00)	16
	Solpara	11(17.74)	2(9.09)	2(40.00)	15
	<b>Total</b>	<b>62(100)</b>	<b>22(100)</b>	<b>7(100)</b>	<b>91</b>

Source : Field Survey.

Table 5.10 shows the distribution of landless agricultural labourers household on the basis of per capita income category wise annually in rupees. From the Table 5.10, it can be said that in the case of 1<sup>st</sup> income category village Alianagar (22.55 percent) recorded the highest position, the village under moderately developed block. Jagadishpur (17.44 percent), Kamalpur (17.44 percent) and Solpara shows the same ranked in 1<sup>st</sup> income category, the village under highly and moderately developed blocks, followed by Dolua (14.51) and Lalbazar (9.67) village under moderately and least developed blocks respectively. For the 2<sup>nd</sup> income category village Lalbazar (40.90 percent) showed the highest level of the landless agricultural labourers household, the village under least developed block, followed by Kamalpur (18.18 percent) and Dolua (18.18 percent), the villages under highly and moderately developed blocks, Jagadishpur and Solpara (9.09), the village under highly and least developed block and Alianagar (4.54 percent), the village under moderately developed block. In the

case of 3<sup>rd</sup> income category (Rs. Above 6000.00), the village Jagadishpur (40.00 percent), Dolua (40.00 percent) and Solpara (40.00 percent) showed the same level for the per capita income, category wise of the landless agricultural labourers household followed by Lalbazar (20.00 percent) the village under least developed block. In the village Kamalpur and Alianagar, the villages under highly and moderately developed blocks, the number of households belongs to the 3<sup>rd</sup> income category is nil. That is the household per capita income in these two villages is below Rs. 6000.00. It is clear from the Table (5.10) that number of households in respect of per capita income of the landless agricultural labourers is highest in the 1<sup>st</sup> income category followed by 2<sup>nd</sup> and 3<sup>rd</sup> income category. So it is clear from the Table that the economic condition of the landless agricultural labourer is not so good.

#### **5.4 Distribution of Agricultural Labourers According to the Sources of Non-Agricultural Activities**

The agricultural labourers accept non-agricultural activities as a subsidiary activity. Table 5.11 below shows the number and percentage of households without and with subsidiary sources of income across the villages of Uttar Dinajpur district. The percentage of agricultural labour households reporting subsidiary source of income was higher in all the villages of Uttar Dinajpur district. Only 27.39 percent agricultural labour households have no subsidiary source of income in this district. The percentage of agricultural labour households with subsidiary source of income range from 63.26 percent at Lalbazar – a village under least developed block to 78.94 percent at Jagadishpur – a village under highly developed block. So with the development of block the agricultural labourers have diversified their economic activities. This implies the fact that the size of pure agricultural labourers declined over the periods because of uncertainty of employment in agriculture, better opportunity in non-agricultural sector and growing consciousness among the agricultural labourers.

**Table 5.11**

**Proportion of Agricultural Labourer Without and With Subsidiary Source of Income Across Surveyed Villages of Uttar Dinajpur District**

Names of Villages	No. and percentage of Ag.Labourer without sub-sidiary source of Income			No. and Percentage of Ag. Labourer with sub-sidiary source of Income			Total
	Male	Female	Sub-total	Male	Female	Subtotal	
<b>Villages under Highly Dev. Block</b>							
Jagadishpur	5(8.77)	7(12.28)	12(21.05)	32(56.14)	13(22.89)	45(78.94)	57
Kamalpur	6(11.76)	5(9.60)	11(21.56)	25(49.01)	15(29.41)	40(78.43)	51
<b>Mod. Dev. Block</b>							
Alianagar	8(15.38)	7(13.46)	15(28.84)	22(42.30)	15(28.84)	37(71.15)	52
Dolua	9(17.64)	8(15.68)	17(33.33)	20(39.31)	14(27.45)	34(66.66)	51
<b>Least Dev. Block</b>							
Lalbazar	9(18.36)	8(16.32)	17(34.62)	10(38.78)	13(26.53)	31(63.26)	49
Solpara	8(15.09)	7(13.20)	15(28.36)	22(41.50)	16(30.18)	39(73.58)	53
<b>District</b>	<b>45(14.37)</b>	<b>42(13.41)</b>	<b>87(27.79)</b>	<b>140(44.72)</b>	<b>86(27.47)</b>	<b>226(72.20)</b>	<b>313</b>

Source : Field Survey.

Non-agricultural activities can include all those activities, which are undertaken outside agriculture. In this sense, rural non-agricultural activity is essentially residual category (Basant and Kumar,1980) Rural non-agricultural activities consist of manufacturing – mainly agro-processing and the production, repair and supply of farm inputs, construction, rural crafts, trade, transport and services that cater largely to rural consumer demand. Rural non-agricultural activities have to emerge partly through the growth process and partly through conscious policy interventions. Vaidyanathan (1986) shows that it is either due to ‘distress diversification’ or due to the emergence of a dynamic and viable

non-agriculture sector. The data presented in the Table 5.12 and Table 5.13 show the various non-agricultural activities in which the agricultural labour households were engaged and accepted these activities as a subsidiary source of income. The proportion of agricultural labourers engaged in non-agricultural activities as a subsidiary source of occupation or main occupation, was observed to be highest at Dolua (47.95 percent), the village under moderately developed block, followed by Lalbazar (40.80 percent), the village under least developed block. The participation of female agricultural labourers in non-agricultural activities is lower as compared to male agricultural labourers in all villages of this district. In this district, the proportion of agricultural labourers engaged in non-agricultural activities was 33.55 percent and the share of female agricultural labourers in the non-agricultural activities (25.02 percent) was lower than the male agricultural labourers in the non-agricultural activities. Thatching activities, mud wall construction, rural crafts like basket (bambo) making, *dhokra* weaving, transport and trade, manufacturing industries within the state are the main non-farm activities of the agricultural labourers of this district. Among the different non-agricultural activities, thatching activity was the principle non-agricultural activity of agricultural labourers of this district followed by manufacturing industries outside the state.

**Table 5.12**

**Proportion of Agricultural Labourers Engaged in Different Non-Agricultural Activities Across Surveyed Villages under Highly Developed Blocks and Moderately Developed Blocks of Uttar Dinajpur**

Types of Non Ag. Activities	Villages under Highly Dev. Blocks						Villages under Moderately Developed Blocks					
	Jagadishpur			Kamalpur			Alianagar			Dolua		
	M	F	T	M	F	T	M	F	T	M	F	T
1. Manufacturing Industry outside the State	2(5.40)	-	2(3.10)	2(6.45)	-	2(3.92)	6(6.66)	-	2(3.84)	2(17.240)		5(17.24)
2. Manufacturing Industry within the State	-	-	-	-	-	-	-	-	-	3(10.34)	-	3(5.88)
3. Rural Craft	-	-	-	2(6.45)	-	2(3.92)	-	-	-	-	5(22.72)	5(9.80)
4. Biri Binding	-	-	-	2(6.45)	-	-	2(9.09)	2(3.84)	-	-	-	-
5. Muson	-	-	-	-	-	-	2(6.66)	2(9.09)	4(7.69)	2(6.89)	1(4.54)	3(5.88)
6. Road Construction	-	-	-	-	-	-	-	-	-	-	2(6.89)	3(5.88)
7. Mud House Construction	2(5.40)	-	2(3.50)	4(12.90)	-	4(7.84)	3(10.00)	-	3(5.76)	-	-	-
8. Thatching	4(10.81)	1(5.-00)	5(8.77)	3(9.67)	1(4.54)	4(7.84)	2(9.09)	5(9.61)	-	-	-	-
9. Trade	2(5.40)	-	2(3.50)	-	-	-	1(4.54)	3(5.76)	-	-	2(9.09)	2(3.92)
10. Transport	1(2.70)	-	1.75)	-	-	-	-	-	1(1.92)	2(6.89)	-	2(3.92)
11. Hotel	-	-	-	-	-	-	-	-	-	1(9.44)	-	1(1.96)
12. Service	1(2.70)	-	1(1.75)	-	-	-	-	-	-	-	-	-
<b>Total</b>	<b>12(32.43)</b>	<b>1(5.00)</b>	<b>1(1.75)</b>	<b>13(22.80)</b>	<b>11(35.48)</b>	<b>1(4.54)</b>	<b>13(43.33)</b>	<b>7(31.81)</b>	<b>20(38.46)</b>	<b>15(51.72)</b>	<b>9(40.90)</b>	<b>24(47.95)</b>

Source: Field Survey.

**Table 5.13**

**Proportion of Agricultural Labourers Engaged in Different Non-Agricultural Activities Across the Surveyed Villages of Least Developed Blocks and Uttar Dinajpur District**

Types of Non-Agricultural Activities	Village under Developed			Village under Least Developed Blocks			District		
	Lalbazer			Solpara					
	M	F	T	M	F	T	M	F	T
1. Manufacturing Industry Outside the State	7(25.00)		7(14.28)				18(9.73)		18(5.75)
2. Manufacturing Industry within the State							3(1.12)	1(0.78)	4(1.28)
3. Rural Crafts		3(14.28)	3(6.12)				12(1.08)	10(7.81)	12(3.83)
4. Biri Binding					3(13.04)	3(5.66)		5(3.91)	5(1.60)
5. Mason							4(2.16)	3(2.34)	7(2.24)
6. Road Construction	2(7.14)	2(9.52)	4(8.16)				4(2.16)	3(2.34)	7(2.24)
7. Mud House Construction				2(6.66)		2(3.77)	11(5.95)		11(3.51)
8. Thatching	3(10.72)	2(9.52)	5(10.20)	2(6.66)		2(3.77)	15(8.11)	6(4.69)	21(6.71)
9. Trade				2(6.66)	1(4.34)	3(5.66)	6(3.24)	4(3.13)	10(3.19)
10. Transport				1(3.33)		1(1.88)	5(2.70)		5(1.60)
11. Hotel				1(3.33)		1(1.88)	3(1.62)		3(1.96)
12. Service	1(3.57)		1(2.04)	1(3.33)		1(1.88)	3(1.62)		3(0.96)
<b>TOTAL :</b>	<b>13(46.42)</b>	<b>7(33.33)</b>	<b>20(40.81)</b>	<b>9(30.00)</b>	<b>4(17.39)</b>	<b>13(24.52)</b>	<b>73(39.46)</b>	<b>32(25.02)</b>	<b>105(33.55)</b>

Source: Field Survey.

Table 5. 14

**Proportion of Agricultural Labourers Work within the Village, Outside the Village and Outside the State Across Surveyed Villages of Uttar Dinajpur District**

Names of village	Within the village			Outside the village			Outside the State		
	M	F	T	M	F	T	F	M	T
<b>Villages under highly Dev. Block</b>									
Jagadishpur	9 (24.32)	4 (20.00)	13 (22.88)	3 (8.10)	1 (5.00)	4 (7.01)	2 (5.40)	-	2 (3.50)
Kamalpur	5 (16.12)	4 (20.0)	9(17.64)	2(6.45)	1(5.00)	3(5.80)	-	-	-
<b>Villages under mod. Dev. Block</b>									
Alianagar	4(13.77)	5(22.77)	9(17.30)	3(10.00)	2(9.09)	5(9.61)	4(13.33)	-	4(7.69)
Dolua	3(10.34)	3(13.63)	6(11.76)	4(13.79)	2(9.09)	6(11.76)	3(10.34)	-	3(5.88)
<b>Village under least Dev. Block</b>									
Lalbazar	6(21.42)	3(14.28)	19 (18..36)	2(7.14)	-	2(4.08)	2(9.52)	-	2(4.08)
Solpara	8(26.66)	8(34.78)	16 (30.18)	3(10.00)	1(4.34)	4(7.54)	5(16.66)	-	3(5.66)
<b>All villages/ District</b>	<b>35 (18.91)</b>	<b>30 (23.43)</b>	<b>65 (20.76)</b>	<b>17 (9.18)</b>	<b>7 (5.46)</b>	<b>24 (7.66)</b>	<b>16 (8.64)</b>	<b>-</b>	<b>16 (5.11)</b>

Source : Field Survey.

Accordingly, highest proportion of agricultural labourers are engaged in thatching activities (6.71%) followed by manufacturing industry (5.75%) outside the state. In all villages except Lalbazar and Solpara, the largest proportion of agricultural labourers accepted thatching activities as a main non-agricultural activities. The next highest rate of growth of employment is seen in rural crafts activities. Other sectors with relatively high rate of growth of employment have been, trade, masonry, mud house construction, transport, communications, mining and quarrying. At Lalbazar, maximum proportion of agricultural labourers engaged in manufacturing industries located outside the state. In the case of rural crafts the village Dolua recorded the highest (9.80 percent) followed by Lalbazar (6.12%). The people engaged in *bidi* binding is highest in the village Solpara (5.66 %) followed by Alianagar (3.84%). Biri binding work is mainly done by the female workers of the agricultural labour household.

It is very important to note that all non-agricultural activities of agricultural labourers are not carried on in the rural areas. All data on agricultural and non-agricultural activities of agricultural labourers are collected on the basis of residence of respondent, and not according to the place of work or location of economic activity. The 43<sup>rd</sup> Round of the NSS, conducted during 1987-88, estimated that almost 2.5 million male workers and 151,000 female workers residing in rural areas of our country had a reported place of work in a neighbouring town or city. The larger the nearby towns, shorter the commuting distance and cheaper the cost. In our study area, non-agricultural activities pursued by the agricultural labour households are on seasonal basis within the village or outside the village or outside the state. Out of the 313 agricultural labourers, only 105 (33.55 percent) agricultural labourers reportedly work in various non-agricultural activities as subsidiary source of income. Non-agricultural activities generated within the villages are mostly seasonal. They got non-agricultural employment during March-July in non-agricultural activities like, thatching, road construction, mud well construction in rural areas. Some of them also engaged themselves in building construction work, agro-processing industries and as rickshaw pullers in urban areas.

Out of 33.55% of agricultural labourers, 20.76% are reported engaged themselves in non-agricultural activities within the village, 7.66% outside the village i.e. in nearby towns and 5.11 percent outside the state, in Delhi, Punjab, Kerala, Uttar Pradesh and Haryana. In our study area, non-agricultural activities pursued by the agricultural labour households are on seasonal basis within the village or outside the village or outside the state. Out of the 313 agricultural labourers only 105 (33.55%) agricultural labourers reportedly work in various non-agricultural activities as a subsidiary source of income. Non-agricultural activities generated within the village are mostly seasonal. Such seasonal migration in the urban areas are even in the outside the state is largely the result of distress factors like underemployment and compulsion to supplement the meagre farm income to meet both food and non-food needs. However, the easily available unskilled jobs on a large scale in the towns and cities and also the developed transport facilities have motivated large number of agricultural labour to migrate from villages to town or even outside the state. Another reason is that

agricultural labourers now prefer to engage themselves in non-agricultural activities as compared to agricultural activities. They feel that non-agricultural activities are more comfortable than agricultural activities and also ensures higher income if they migrated in towns or outside the state. They are also able to maintain cleanliness and standard of living through participation in the non-agricultural activities.

## **5.5 Summary:**

In this chapter we have analysed the income levels and sources of income of the landless agricultural labourers and marginal farmer-cum-agricultural labourers in the rural areas of Uttar Dinajpur district of West Bengal. The analysis has been made in two sections. In the first section, we have included the analysis of levels of per household income and per capita income villagewise of landless agricultural labourers. Secondly, we have examined the levels of per-households income and per capita income of marginal farmer-cum-agricultural labourers in six villages of Uttar Dinajpur district of West Bengal.

There is much similarity in the income pattern of the near landless agricultural labourers across the income level villagewise. From our study, we can say that the main source of income in the case of an average landless agricultural labour household is hiring out labour, on permanent as well as casual basis in agriculture. After all, the main source of their income is agricultural wages. We can mention that the lowest income category earns more money by hiring out labour in the agricultural sector than the middle and highest income category levels. Another major source of income for lower and middle income category of the landless agricultural labourers household is remittances from relatives. As a result, there is little difference across the income levels of the landless agricultural labourers.

The above findings have an important implication. The household income of wage earner is essentially a function of the level of wages, the duration of employment and the number of earners. It appears that the income of lowest income category of landless agricultural labourers in Uttar Dinajpur district is relatively high, because they are engaged whole year as permanent as well as

casual agricultural labour. There are some nominal differences in the wage rates, of lower income category with middle and highest income categories which are not in any case unfavourable to the middle and highest income categories.

In the villagewise analysis of our study the main source of income of landless agricultural labourers are hiring out labour in agriculture and second source of income is the sale of agricultural produce followed by remittances from relatives. According to the villagewise analysis the income from remittances from relatives is highest, but it is not the main source of income. Remittances from relatives depends on various factor, i.e, the available extra workman among the family labours, availability of work outside the villages and other various sectors. Among the six villages, Labazar the village under least developed block earns highest per capita income and lowest per capita income earned by Alianagar, the village under moderately developed block.

From the analysis of per household income of the marginal farmer-cum-agricultural labourers it transpired that the major source of income is hiring out agricultural labour and in own farm income. The marginal farmer-cum-agricultural labourers supplement their income by adopting non-farm-employment as subsidiary occupation.

The analysis of per capita income of the marginal farmer-cum-agricultural labourers suggests the increase in household income is accompanied by the increase in family size, the per capita income also shows an increasing trend.

In the villagewise analysis, marginal farmer-cum-agricultural labour households in Alianagar has recorded the highest per capita income, the village under moderately developed block than the other villages. Village Jagadishpur, the village under highly developed block, recorded the highest per capita income of marginal farmer-cum-agricultural labourers households from non-farm employment. Among the six villages only one village, Dolua reported the practice of apiary, though the practice is limited within one or two households and in one village i.e., Alianagar the practice of sericulture is found. We have also analysed the number of households in respect of households income and per capita income categorywise in rupees of the landless agricultural labourer

households and marginal farmer-cum-agricultural labourer households. We can see that in case of households income of landless agricultural labourers the number of household belonging to first income category is highest followed by second and third income category. In the case of per capita income of the landless agricultural labourers categorywise, here also the numbers of households belonging to first income category is highest followed by second and third income category.

In the case of marginal farmer-cum-agricultural labourers households the number of households belonging to the second income category is highest than the first and third income category.

The data presented in the Tables 5.12 and 5.13 shows the various non-agricultural activities in which the agricultural labour households were engaged and accepted those activities as a subsidiary source of income. In our study area, non-agricultural activities pursued by the agricultural labour households are seasonal basis within the village or outside the state. The seasonal migration in the urban areas or even in the outside the state is largely the result of distress factors like under employment and compulsion to supplement the meager farm income to meet both food and non-food needs. However, the easily available unskilled job on a large scale is the towns and cities and also the developed transport facilities have motivated large numbers of agricultural labourers to migrate from villages to town or even outside the state.

To conclude, there is much similarity in the per capita income pattern across the villages. The per capita income levels are closely related to the agricultural development in the villages under study. It has also been observed that the average households and average per capita income levels of the marginal farmer-cum-agricultural labourers are marginally higher than those of the landless agricultural labourers in the villages under study.

There are some exogeneous factors, which affect the extent of occupational diversification at both the household level and individual level.

These are literacy rate, density of population, land ownership and distance of village from town. Other factors like percentage of unemployment man-days and poverty among agricultural labourers are also important.