

Employment Trends and Livelihood Pattern

4.1 Introduction

Human Development is a multifaceted concept embodying not just quantitative improvement measured through increase in per capita income but also improvement in qualitative aspects of life such as increasing life expectancy and educational attainment. Nevertheless, per capita income alone is not a bad indicator of human development because it has been found in many developing countries that there exists high correlation between per capita income and other variables that describe “human development”. Since per capita income is the manifestation of employment opportunities available, so while assessing human development it is important to examine the occupational trends and livelihood patterns of the population. The dynamics of employment trends and livelihood pattern is thus very closely related to the development of a society.

South 24 Parganas is, indeed, a complex district, stretching from the metropolitan Kolkata to the remote riverine villages in the south up to the mouth of Bay of Bengal. While the Alipore sub-division lies very close to the

Kolkata metropolis, Kakdwip, Canning and Diamond Harbour sub-divisions are in the southern part of the district. Baruipur sub-division is centrally located, being well connected with the urban centre of the district and also lying close to the blocks of Sundarbans. Sundarbans, the largest mangrove forests on earth, are spread over thirteen of the twenty-nine development blocks in the district. In 2001, about 86 per cent of the population in the district resided in the 29 blocks (out of which 84 per cent resided in the rural areas and 2 per cent in the urban areas) of the district, while 14 per cent resided in the municipal areas. Overall, it may be said that there exists wide topographic variation within the district. This variation often translates into differences in economic conditions across various regions of the district owing to the differences in the available employment opportunities based on the distribution of natural as well as man-made resources. Accordingly, inter-region as well as intra-region variation of employment trends and livelihood patterns within the district up to the block/municipality level need to be addressed.

Before an in-depth analysis of the employment situation of the district is made,

we take a quick glance at the overall performance. In 2001, one-third of the district population were employed. Over the nineties, there has been growing marginalization of labour with a decline in the share of main workers. In fact, in this period, annual compound growth rate of population had been higher than the annual compound growth rate of the number of main workers. Thus the rate of growth of productive employment generated in the district had not been able to keep pace with the rate of growth of population in the district. Though the blocks of the district are predominantly rural in nature but agriculture is no longer the main source of livelihood for the people residing here. In 2001 only 36 per cent of the workers could depend on agriculture as their main source of livelihood compared to 58 per cent in 1991. It is indeed a matter of concern that the decline has been perceived not just in the per centage of agricultural main workers but also in the absolute number of such workers by about 2.6 lakhs. This implies that rural population in the district is more and more unable to take up agriculture as their main source of living. Such a phenomenon tallies with the observation that the blocks that have high dependence on agriculture as the main source of living are generally those very blocks that have registered high incidence of poverty. Thus there is a high correlation

between the dependence on agriculture and incidence of poverty at the block level. It is therefore no wonder that the rural households are diversifying away from agriculture in the district. In fact, a large percentage of the households are pushed into relatively more vulnerable uncertain activities. The Rural Household Survey (2005) reveals that the main sources of sustenance for as many as 51 per cent of the rural households are daily/ agricultural/ other physical labour with no more than 12 per cent households being involved in high return regular jobs in the organized or in production and services sector. Of course, dependence on income from regular jobs is positively associated with the closeness to Kolkata metropolis.

A detailed analysis of the employment trends, occupational diversification and livelihood pattern of the district both at the block level as well as the municipality level is reviewed in the sections 4.2, 4.3 and 4.4 respectively. In section 4.5 we look at the potential alternatives for enhancement of employment opportunities in the district. Section 4.6 concludes. The secondary data used in this chapter have been collected from various sources such as the Census of India decennial reports 1991 and 2001, Rural Household Survey data of the Government of West Bengal - 2005 for this district and data furnished by different departments of the district administration.

4.2 Employment Trends

4.2.1 The District Level

As a first step towards understanding the employment scenario in the district, it is important to look at the share of workers in the total population of the district. As is well known, Census of India while enumerating the number of workers in the decennial enquiries uses concepts of main workers and marginal workers. Main workers are those who have worked for the major part of the year preceding the date of enumeration, i.e. those who were engaged in economically productive activity for 183 days or more. Marginal workers are those who worked anytime at all in the year preceding the date of enumeration but did not work for the major part of the year, i.e. those who worked for less than 183 days. From Table 4.1 it can be seen that in 2001, out of the total population in the district only about one-third (32.47 per cent) worked either as main or as marginal worker. If we consider only main workers, then productive population is only about one-fourth of the total population (24.30 per cent) of the district.

Considering the share of male and female workers in the population separately, the discrimination in terms of working status is obvious. Female work participation rate is very low in the

district as compared to the male. From Tables 4.2 and 4.3, one can find that in 2001, while the worker population ratio for the male workers (main + marginal) was 51.82 per cent, only 11.83 per cent of the female population was engaged in any economic activity either as main worker or as marginal worker. If we leave out workers in the marginal capacity and consider only main workers i.e., those who work for more than 183 days in a year then gender discrimination becomes even more striking. Only 5 per cent of the total female population in the district worked as main worker as compared to 42 per cent in case of male workers. Rural-urban break up of employment in the population shows lower share of employment in the rural areas compared to the urban areas both for the male as well as the female.

Although minimal participation of female population in economic activity is striking, this is not surprising in the context of West Bengal because this state has one of the lowest recorded rates of female work participation in the country. Percentage of female main workers in 2001 was 8.87 in the rural areas and 8.82 in the urban areas of West Bengal. As has been rightly pointed out in the West Bengal Human Development Report, 2004 that such low work participation rate for women is an evidence of gender discrimination not only because they reflect

Table 4.1: Total Workers as Percentage of Total Population in the District of South 24 Parganas in 1991 and 2001

Sector	2001			1991		
	Main Workers	Marginal Workers	Total Workers	Main Workers	Marginal Workers	Total Workers
Rural	23.66	8.91	32.57	26.01	2.46	28.47
Urban	27.71	4.23	31.93	26.65	0.50	27.15
Total	24.30	8.18	32.47	26.09	2.20	28.29

Source: Census of India : 1991, 2001

Table 4.2: Male Workers as Percentage of Male Population in the District of South 24 Parganas in 1991 and 2001

Sector	2001			1991		
	% of Main Workers	% of Marginal Workers	% of Total Workers	% of Main Workers	% of Marginal Workers	% of Total Workers
Rural	41.46	10.13	51.58	47.78	1.27	49.05
Urban	47.27	5.82	53.08	46.87	0.69	47.55
Total	42.38	9.44	51.82	47.65	1.19	48.84

Source: Census of India : 1991, 2001

Table 4.3: Female Workers as Percentage of Female Population in the District of South 24 Parganas in 1991 and 2001

Sector	2001			1991		
	% of Main Workers	% of Marginal Workers	% of Total Workers	% of Main Workers	% of Marginal Workers	% of Total Workers
Rural	4.77	7.62	12.39	2.79	3.73	6.52
Urban	6.29	2.49	8.77	3.59	0.30	3.89
Total	5.01	6.82	11.83	2.89	3.28	6.18

Source: Census of India : 1991, 2001

resistance to women working outside their home but also it may reflect under-reporting due to social invisibility and lack of recognition of women's unpaid work.

Even when we look at the proportion of

female workers in total workers of the district we once again find their dismal representation. Genderwise distribution of workers in the district (Table 4.4) reveals that in 2001 only 17.62 per cent of total

Table 4.4: Female Workers as Percentage of Total Workers in the District of South 24 Parganas in 1991 and 2001

Sector	2001			1991		
	% of female workers in main workers	% of female workers in marginal workers	% of female workers in total workers	% of female workers in main workers	% of female workers in marginal workers	% of female workers in total workers
Rural	9.78	41.47	18.45	5.19	73.34	11.08
Urban	10.83	28.07	13.12	6.29	27.61	6.68
Total	9.97	40.38	17.62	5.34	71.94	10.52

Source: Census of India 1991, 2001

Figure 4.1: Annual Growth Rates of Total Population and Total Workers between 1991 and 2001

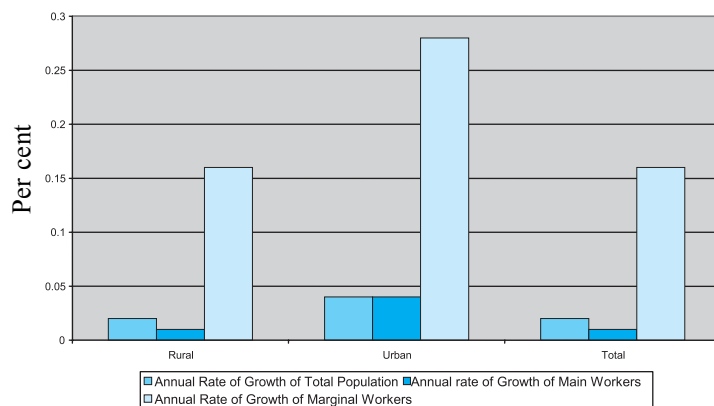


Figure 4.2: Annual Growth Rates of Male Population and Male Workers between 1991 and 2001

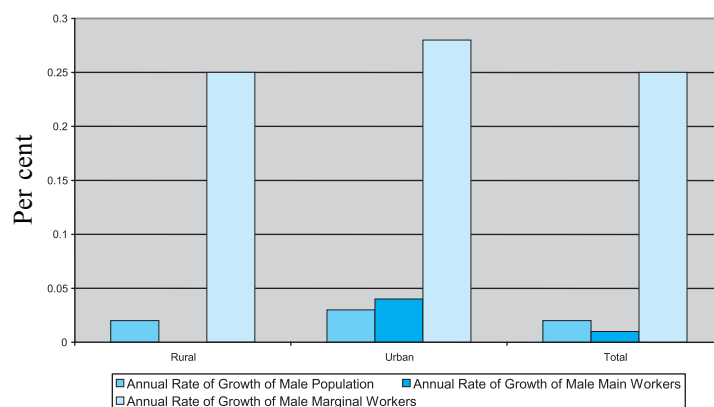
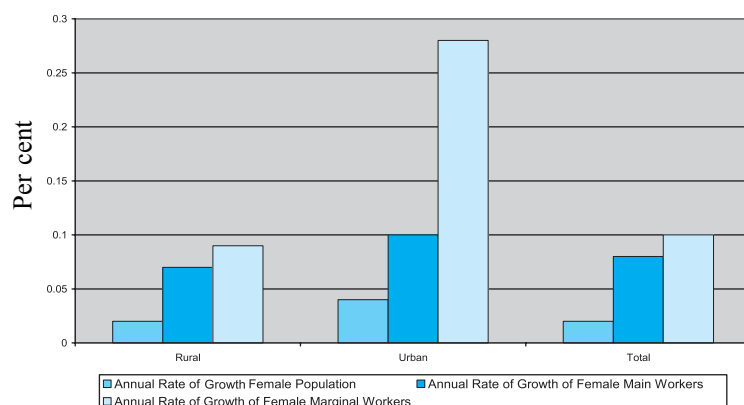


Figure 4.3: Annual Growth Rates of Female Population and Female Workers between 1991 and 2001.



(main + marginal) workers were female. However, female participation has somewhat improved in the decade of nineties. In 1991 female main workers formed only one-twentieth of the total main workers. The ratio has at least increased to about one-tenth of the workers in 2001.

Comparing the employment situation of 2001 over 1991, share of workers in the population of the district has increased by 4.18 percentage points in a period of ten years. Apparently the change signals an enhancement in the achievement level of the district in terms of employment creation. A closer examination, however, reveals that the increase in worker population ratio has been brought about by growing marginalization of labour, particularly in the rural areas. In fact, a notable point is that the percentage of main workers has actually dropped from 26.09 per cent in 1991 to 24.30 per cent in 2001. But the percentage of marginal workers increased from 2.20 per cent to 8.18 per cent in this period. So



the increase in share of workers is attributable to the increase in the share of marginal workers rather than main workers.

It is a matter of concern indeed that the percentage of male main workers in South 24 Parganas has dropped by about 6 percentage points between 1991 and 2001 particularly in the rural areas from 47.78 per cent to 41.46 per cent. This trend is similar to what has been happening in the state as a whole. As has been reported in West Bengal Human Development Report 2004, the ratio of male main workers to total male population in the rural areas fell quite significantly over the decade from 51.18 per cent in 1991 to 46.00 per cent in 2001.

If one looks at the annual compound growth rate of the total population vis-à-vis employment generation in the district then one can easily identify the shortfall of additional employment generated in keeping pace with the growing population (Figure 4.1). This is more so for the rural areas as compared to the urban. Gender wise break-up of this difference in growth rate of population and employment further reveals that the shortfall in the rate of employment generation has been more prominent for the male workers as compared to the females (Figures 4.2 and 4.3).

4.2.2 The Sub-district Level

As has been mentioned earlier there exists wide variation in the topography of the district. Accordingly, for a better insight of

the employment scenario in the district we further consider the disaggregated block/municipality wise distribution of workers. In 1991, the district had 30 administrative blocks and 5 municipalities. There had been administrative redistribution between 1991 and 2001 so that in 2001 there were 29 blocks and 7 municipalities. Areas of the Mahestala and Thakurpukur-Metiabruz blocks in 1991 were redistributed to form Thakurpukur-Mahestala block in 2001 and two other municipalities namely Mahestala and Pujali. So it is difficult to compare the performance of the blocks/municipalities with one to one correspondence over time. However, one can always study the variation over the cross section of blocks/municipalities at a particular point of time.

Using data published by Census of India 1991 and 2001 it can be seen from Tables 4.5 and 4.6 that there has been wide variation in the worker population ratio across blocks. The inter-block variation in worker population ratios has been more prominent among female workers compared to the male. Of course, female participation in all the blocks is much lower compared to the male. Out of the 29 blocks in the district, in 2001, male worker population ratio was a minimum at 48.44 per cent in Mathurapur I with a maximum of 55.96 per cent in Namkhana. In case of female workers Mathurapur I had lowest female work participation rate at 5.60 per cent, while blocks such as Patharpratima,

Table 4.5 : Block-wise Percentage of Total Workers in the Population by Gender in South 24 Parganas in 1991: (Rural + Urban)

Block	Male			Female		
	%of Main Workers	%of Marginal Workers	%of Total Workers	%of Main Workers	%of Marginal Workers	%of Total Workers
Thakurpukur-Maheshtala	46.96	0.40	47.36	2.68	0.11	2.79
Metiabruz	47.61	0.55	48.16	4.20	0.46	4.66
Budge Budge I	45.24	3.05	48.29	3.87	0.77	4.64
Budge Budge II	46.22	1.97	48.19	1.84	1.40	3.24
Bishnupur I	49.22	0.68	49.91	3.87	1.63	5.50
Bishnupur II	49.33	0.39	49.73	3.29	3.32	6.62
Sonarpur	47.39	0.27	47.66	4.69	0.50	5.20
Region I	47.55	0.84	48.39	3.56	1.13	4.69
Baruipur	47.63	0.71	48.34	3.00	1.33	4.33
Bhangar I	50.65	0.25	50.90	2.95	1.75	4.70
Bhangar II	47.54	0.31	47.85	1.24	0.57	1.81
Falta	51.12	1.56	52.67	3.94	3.42	7.36
Diamond Harbour I	46.44	0.77	47.22	2.85	0.87	3.72
Diamond Harbour II	47.04	2.12	49.17	2.58	1.78	4.36
Magrahat I	44.60	1.00	45.59	1.66	1.04	2.70
Magrahat II	47.01	0.45	47.46	2.71	2.83	5.55
Kulpi	45.57	2.62	48.19	1.40	1.93	3.32
Mandirbazar	44.29	1.34	45.63	1.84	0.87	2.71
Region II	47.22	1.11	48.33	2.43	1.71	4.14
Canning I	48.05	1.15	49.20	2.95	1.81	4.76
Canning II	49.06	0.25	49.31	2.81	1.00	3.81
Basanti	49.23	1.13	50.36	2.82	5.48	8.30
Gosaba	51.55	1.73	53.28	4.91	12.59	17.50
Joynagar I	45.70	1.20	46.91	2.00	1.65	3.65
Joynagar II	45.27	0.67	45.94	1.89	1.34	3.22
Mathurapur I	45.21	1.57	46.77	2.08	1.95	4.04
Mathurapur II	48.90	1.02	49.92	2.48	3.50	5.98
Kultali	46.75	0.80	47.55	1.31	2.45	3.76
Patharpratima	48.44	2.84	51.28	3.09	9.85	12.94
Kakdwip	48.36	1.37	49.73	2.55	5.57	8.12
Namkhana	49.70	5.38	55.08	5.36	28.11	33.47
Sagar	46.70	1.15	47.86	1.58	3.83	5.41
Region III	48.01	1.54	49.54	2.78	5.97	8.75

Source: Census of India 1991



Table 4.6 : Block-wise Percentage of Total Workers in the Population by Gender in South 24 Parganas in 2001: (Rural + Urban)

Block	Male			Female		
	% of Main Workers	% of Marginal Workers	% of Total Workers	% of Main Workers	% of Marginal Workers	% of Total Workers
Thakurpukur - Maheshtala	47.04	7.15	54.18	8.05	4.40	12.45
Budge Budge I	36.79	14.64	51.43	2.97	3.71	6.68
Budge Budge II	39.97	13.72	53.69	3.17	5.18	8.35
Bishnupur I	45.33	8.07	53.40	5.99	4.91	10.90
Bishnupur II	45.15	8.52	53.67	5.51	5.03	10.53
Sonarpur	45.23	7.32	52.55	6.67	2.53	9.20
REGION I	43.67	9.59	53.26	5.50	4.38	9.88
Baruipur	43.04	6.80	49.85	5.25	3.10	8.34
Bhangar I	44.82	6.05	50.87	4.93	5.38	10.31
Bhangar II	43.25	6.39	49.64	2.95	2.48	5.42
Falta	42.24	12.44	54.68	3.87	5.98	9.85
Diamond Harbour I	42.40	7.62	50.02	3.22	2.95	6.17
Diamond Harbour II	39.74	11.92	51.65	3.61	3.65	7.26
Magrahat I	39.78	9.60	49.37	3.81	3.88	7.69
Magrahat II	41.41	7.03	48.44	4.10	3.63	7.73
Kulpi	36.08	14.77	50.85	2.87	3.92	6.79
Mandirbazar	39.00	10.11	49.11	4.74	5.85	10.60
REGION II	41.22	9.16	50.39	4.03	4.04	8.07
Canning I	40.58	10.56	51.14	6.68	5.96	12.64
Canning II	40.40	8.08	48.48	4.11	7.05	11.16
Basanti	39.19	11.53	50.73	3.97	8.38	12.35
Gosaba	41.03	15.01	56.04	3.99	16.41	20.40
Joynagar I	41.00	8.34	49.33	6.12	4.74	10.85
Joynagar II	40.06	9.19	49.25	5.10	9.30	14.40
Mathurapur I	34.26	14.18	48.44	2.96	2.64	5.60
Mathurapur II	42.36	10.48	52.84	4.20	6.72	10.92
Kultali	40.35	11.01	51.36	2.92	6.84	9.75
Patharpratima	43.73	11.26	54.99	8.73	20.87	29.60
Kakdwip	41.39	11.22	52.61	4.52	11.72	16.24
Namkhana	44.74	11.21	55.96	6.14	22.89	29.03
Sagar	40.86	11.86	52.72	4.51	23.16	27.66
Region III	40.85	11.05	51.90	5.06	11.34	16.40

Source: Census of India 2001

Namkhana and Sagar had nearly one-third of the female population engaged in some form of economic activity. It is no mere coincidence that the blocks with high female work participation rates are the blocks which have very high percentage of female marginal workers. This implies that in these blocks more and more women are getting involved in income earning activities over and above their household responsibilities even for a smaller part of time in a day. Patharpratima, Sagar and Namkhana which are indicating high work participation rate for the female are also the three blocks in South 24 Parganas which rank first, fourth and fifth in terms of number of persons engaged in pisciculture (see Table 4.20 in section 4.5.2 of this chapter). The most likely activity that these women are getting more and more involved into is collecting shrimp fry from streams which are later sold in the market. These marginal activities help the women to contribute to the family income thereby enhancing their family earning in addition to their contribution in household work.

As in other chapters of this report, the 29 blocks of the district are further classified into three regions, depending on the perceived notion of development that is likely to have taken place: Region I representing the blocks closer to the metropolitan centre with better

infrastructure, Region III covering mainly the Sundarbans consisting of the riverine blocks of the district in extreme South and Region II locationally representing the central region of the district.

The regionwise break up of workers shows that in 2001 all the three regions on an average had no less than half of the male population engaged in some form of economic activity with region I registering the highest share of employment. In case of female workers however, Region III has almost double work participation rate (16.40 %) compared to Region I (9.88 %) and Region II (8.07%). The phenomenon of high female participation in Region III can probably be explained to a certain extent by the rising prospect of pisciculture in the region where the women members of the family are being engaged on marginal basis.

Table 4.8 shows that in the municipal areas no less than 52 per cent of the male population were engaged in economic activity in 2001. Very little variation is registered in male work participation rate across municipalities. In case of women, work participation rate is once again low varying between 4.46 per cent in Budge Budge to 12.17 per cent in Rajpur-Sonarpur municipality. The gender gap in work participation rate is evident even in municipal areas. In fact, female work participation rate in many blocks of rural Sundarbans is much higher than the participation rate of women in the municipal areas.

Table 4.7: Municipality-wise Percentage of Workers in the Population by Gender in South 24 Parganas in 1991

Municipality	Male			Female		
	% of Main Workers	% of Marginal Workers	% of Total Workers	% of Main Workers	% of Marginal Workers	% of Total Workers
Budge Budge (M)	51.49	0.25	51.74	2.21	0.61	2.81
Rajpur (M)	47.27	0.05	47.33	4.79	0.04	4.83
Baruipur (M)	44.42	0.42	44.84	4.73	0.16	4.89
Diamond Harbour (M)	47.68	1.08	48.76	5.76	1.06	6.82
Joynagar Mazilpur (M)	44.79	0.74	45.53	4.98	0.55	5.53

Source: Census of India 1991

Table 4.8 : Municipality-wise Percentage of Workers in the Population by Gender in South 24 Parganas in 2001

Municipality	Male			Female		
	% of Main Workers	% of Marginal Workers	% of Total Workers	% of Main Workers	% of Marginal Workers	% of Total Workers
Maheshtala (M)	48.34	5.03	53.37	4.67	1.72	6.39
Budge Budge (M)	49.81	4.12	53.93	3.62	0.84	4.46
Pujali (M)	39.25	13.52	52.77	5.58	5.85	11.43
Rajpur Sonarpur (M)	48.47	5.47	53.94	9.07	3.11	12.17
Baruipur (M)	49.91	2.44	52.35	8.52	1.20	9.72
Diamond Harbour (M)	48.30	3.67	51.97	9.17	1.85	11.02
Joynagar Mazilpur (M)	47.70	4.40	52.10	7.22	2.66	9.88

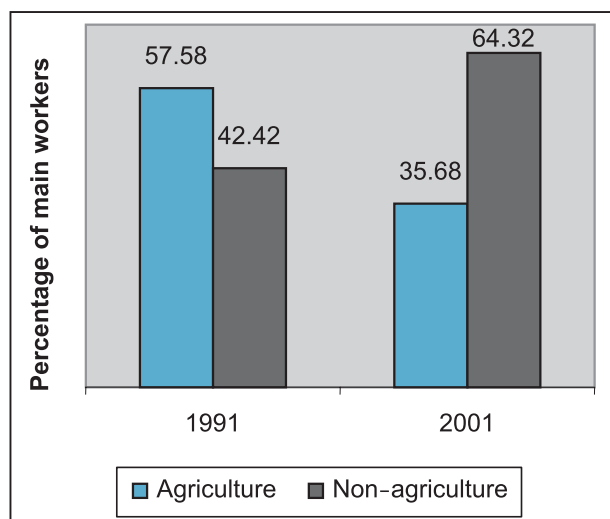
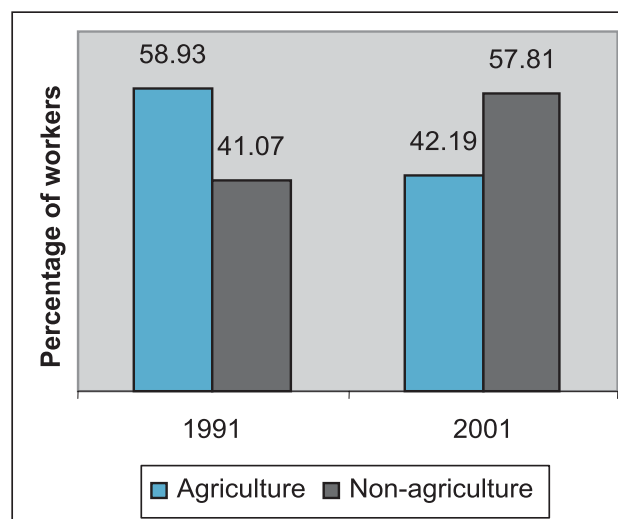
Source: Census of India 2001

4.3 Occupational Diversification

4.3.1 The District Level

Given the work participation trends of the district, it is important to identify the type of employment in which the workforce is absorbed. In the labour market, the obvious source of employment is either the agricultural sector or the non-agricultural sector. Predominantly rural economies are characterized by large dependence on agriculture as the main source of employment if not the main source of income. On the other hand, increasingly greater dependence on non-agricultural

sector i.e. the structural transformation of employment from the agricultural sector to the non-agricultural sector is often seen as a precursor of development in the economic literature. However, it is important to identify whether such structural transformation is due to progressive labour saving technique of productive agriculture releasing labour which can be readily absorbed in the modern industrial sector, or it is the distress in agriculture that is pushing workers out of it into a semi-saturated non-agricultural

Figure 4.4: Sectoral Distribution of Main Workers in South 24 Parganas**Figure 4.5: Sectoral Distribution of Total Workers (Main + Marginal) in South 24 Parganas****Table 4.9: Percentage Distribution by Occupation of Male Main Workers by Sector in South 24 Parganas**

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	32.47	20.31	33.73	24.66	3.00	4.16	30.79	50.87
Urban	2.32	0.44	7.24	1.18	7.73	5.49	82.72	92.88
Total	28.42	16.78	30.17	20.49	3.63	4.40	37.78	58.33

Source: Census of India 1991, 2001

Table 4.10: Percentage Distribution by Occupation of Female Main Workers by Sector in South 24 Parganas

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	18.78	11.93	27.23	14.02	15.02	15.49	38.98	58.57
Urban	1.51	0.92	4.78	1.00	9.03	4.99	84.68	93.09
Total	16.01	9.78	23.63	11.48	14.06	13.44	46.29	65.29

Source: Census of India 1991, 2001

Table 4.11: Percentage Distribution by Occupation of Main Workers (Male + Female) by Sector in South 24 Parganas

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	31.76	19.49	33.40	23.61	3.62	5.27	31.22	51.63
Urban	2.27	0.49	7.08	1.16	7.81	5.44	82.84	92.91
Total	27.75	16.09	29.82	19.59	4.19	5.30	38.23	59.03

Source: Census of India 1991, 2001

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Table 4.12: Occupational Diversification of Male (Main + Marginal) Workers (in percentage) in the District of South 24 Parganas

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	32.75	19.14	33.71	30.74	3.05	4.16	30.49	45.97
Urban	2.39	0.47	7.70	2.15	7.76	5.57	82.15	91.81
Total	28.70	16.09	30.25	26.08	3.68	4.39	37.37	53.44

Source: Census of India 1991, 2001

Table 4.13: Occupational Diversification of Female (Main + Marginal) Workers (in percentage) in the District of South 24 Parganas

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	35.90	18.43	27.35	29.01	11.34	14.64	25.41	37.92
Urban	2.51	0.82	5.96	1.69	10.23	8.59	81.30	88.91
Total	33.19	16.40	25.61	25.87	11.25	13.94	29.95	43.79

Source: Census of India 1991, 2001

Table 4.14: Occupational Diversification of (Main + Marginal) Workers (in percentage) in the District of South 24 Parganas

Sector	Cultivators		Agricultural Labourers		Household industry workers		Other workers	
	1991	2001	1991	2001	1991	2001	1991	2001
Rural	33.09	19.01	33.01	30.42	3.97	6.09	29.93	44.48
Urban	2.40	0.51	7.58	2.09	7.93	5.97	82.09	91.43
Total	29.17	16.15	29.76	26.04	4.48	6.07	36.59	51.74

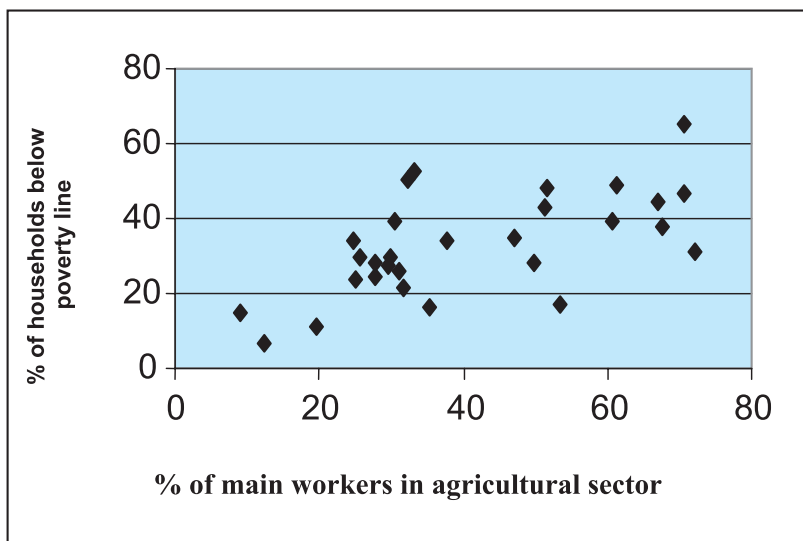
Source: Census of India 1991, 2001

sector often characterized by low return.

In the district of South 24 Parganas, about 84 per cent of the population resided in the rural areas in 2001. So the district is predominantly rural in nature. As is expected in a rural economy, agriculture had been the main source of employment in the district over time. The scenario has, however, changed completely by the turn of this century. Agriculture is no longer the main source of employment or earning in the district. In 2001, majority (about 58 per cent) of the total workers (main + marginal)

were employed in the non-agricultural sector. The situation was just the reverse in 1991, when majority (nearly 59 per cent) of the workers in the district were engaged in the agricultural sector (Figure 4.5). So there has been a decline in the share of agricultural workers (i.e. cultivators and agricultural labourers) by 17 percentage points over the decade of nineties. Considering main workers only, the decline in percentage of agricultural workers has been far more striking. In 1991 nearly 58 per cent of the workers had agriculture as

Figure 4.6: Scatter Diagram depicting the Relationship between Incidence of Agricultural Workers and Percentage of Households below Poverty Line



their main occupation. Compared to this, in 2001, only 36 per cent of the workers could depend on agriculture as their main source of livelihood (Figure 4.4). This current trend of relatively less dependence on agriculture holds both for male and female workers. Thus by 2001 agriculture was no longer the main source of employment in the district as it was till 1991 – neither for the men nor for the women.

If decline in the percentage of agricultural workers is precursor to development, then no doubt that the district of South 24 Parganas has seen such occupational diversification away from agriculture. However, a note of caution that needs to be sounded here is the fact that together with a drop in the percentage of agricultural workers,

absolute number of agricultural workers (both for main and main plus marginal workers) in the district dropped between 1991 and 2001. For the main workers only, the number of agricultural workers dropped drastically by about 2.6 lakhs from 858567 in 1991 to 598661 in 2001.

Considering marginal workers in addition to main workers, the shrink in absolute number of agricultural workers is relatively less as the drop in number of cultivators in this period is largely compensated by the increase in the number of agricultural labourers. So it is obvious that instead of taking agriculture as the main source of employment, a large section of the workers are increasingly considering it as a marginal occupation to supplement income from some form of non-agricultural employment and income as the main source of living.

Agriculture is no longer able to provide a sustainable year round income to a large part of the working population. This can partly be explained by the constraints faced by agriculture in the district. Out of the 4,06,215 hectares of cultivable area in the district only 1,60,217 hectares of land is cropped more

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than once resulting in a low cropping intensity (141.20%) in the district. The mono-cropping pattern of cultivation is followed largely because of poor irrigation facilities and high soil salinity. Being close to the Bay of Bengal, the river waters are saline and are mostly unsuitable for the purpose of irrigation. As a result, minor irrigation particularly canal and tank irrigation remains the most important source of irrigated water in the district. Moreover, frequent floods is a major problem in a large part of the district – particularly so in the islands located in the Sundarban region. The major crop grown in the district is Aman Paddy. Although rice is the principal crop, cultivation of other crops such as cereals, oilseeds, cotton, jute, watermelons and other fruits and vegetables is steadily on the rise.

A pertinent question that arises at this juncture is that while the absence of intensive cultivation owing to constraints of low cropping intensity followed by poor irrigational facility had always been there in the district, the rapid occupational diversification towards the non-agricultural sector is a relatively new phenomenon. This can perhaps be explained by changes in broader macroeconomic perspective that has been taking place in the country as a whole. The shift from agriculture in the post-liberalization era particularly after the

macro-economic policies like withdrawal of subsidies from agriculture has become a common feature in many Indian states. Such policies have resulted in increasing cost of agricultural production. But the market prices of crops, particularly food-grains, did not escalate to the extent of rise in the cost of production. As a result, return from agriculture began to decline. Following this, a large section of the existing cultivators faced with constraints in agriculture were unable to derive their livelihood from only agriculture. As a result, not just the percentage of agricultural workers but the absolute number of agricultural workers in the district is also declining. So in the rural areas, agricultural employment is no more the prime economic source of sustenance. It is largely acting as a supplementary income to some form of non-agricultural income.

The likely explanation of occupational diversification away from agriculture thus points towards low return from agriculture, sole dependence on which often leads to poverty. Thereby comes up the hypothesis that greater dependence on agriculture is positively associated with higher incidence of poverty. The hypothesis needs to be tested empirically. The hypothesis is tested by identifying the relationship, if any, between the level of poverty and the

Table 4.15: Block-wise Percentage of Main Workers by Gender in Different Occupations in 1991 in South 24 Parganas

Block	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers
	M	M	M	M	F	F	F	F
Maheshtala	2.56	8.77	13.03	75.64	4.35	18.27	8.59	68.78
Thakurpukur-Metiabruz	3.68	11.16	16.73	68.42	2.62	17.42	15.78	64.18
Budge Budge I	3.02	23.15	2.97	70.87	1.25	9.38	20.72	68.65
Budge Budge II	9.71	29.80	2.69	57.80	9.29	23.84	10.91	55.96
Bishnupur I	28.98	34.28	4.96	31.78	18.85	38.48	14.71	27.97
Bishnupur II	19.32	28.63	8.76	43.28	8.39	22.37	37.71	31.54
Sonarpur	15.04	20.20	1.29	63.47	6.84	26.01	3.05	64.10
Region I	12.50	21.75	7.19	58.56	7.60	23.60	14.06	54.75
Baruipur	27.90	29.42	2.71	39.96	9.13	18.76	12.79	59.32
Bhangar I	42.53	28.09	4.09	25.30	16.00	46.66	18.12	19.22
Bhangar II	45.72	34.40	1.90	17.99	24.88	32.67	11.89	30.57
Falta	18.44	28.85	3.96	48.75	15.76	22.14	20.44	41.67
Diamond Harbour I	15.50	28.25	4.47	51.77	7.31	4.07	34.75	53.88
Diamond Harbour II	17.28	33.34	4.09	45.29	9.95	14.06	23.90	52.08
Magrahat I	22.81	36.68	4.80	35.72	12.76	21.95	22.08	43.20
Magrahat II	30.22	27.55	7.53	34.70	24.86	29.00	17.48	28.66
Kulpi	26.47	37.60	2.81	33.12	12.35	6.70	33.50	47.45
Mandirbazar	20.51	32.52	3.97	43.00	10.56	3.38	30.54	55.52
Region II	27.22	31.56	4.03	37.19	14.35	21.36	20.96	43.32
Canning I	31.28	35.09	0.86	32.76	8.80	10.04	6.78	74.39
Canning II	47.54	41.70	0.35	10.42	13.70	69.00	1.87	15.43
Basanti	41.35	43.29	0.90	14.46	19.56	44.36	3.91	32.17
Gosaba	49.96	37.23	0.80	12.01	24.30	54.89	1.40	19.40
Joynagar I	26.35	35.55	2.99	35.11	12.54	12.77	22.62	52.07
Joynagar II	32.43	44.44	3.63	19.51	14.53	17.67	33.19	34.61
Mathurapur I	28.13	34.91	4.68	32.27	12.59	6.01	33.15	48.25
Mathurapur II	36.99	41.52	2.70	18.79	26.31	16.20	30.98	26.51
Kultali	41.54	48.02	0.36	10.09	30.99	37.31	3.11	28.59
Patharpratima	55.26	30.45	1.05	13.24	50.81	26.22	3.35	19.62
Kakdwip	36.97	32.70	0.69	29.65	20.64	8.22	17.59	53.54
Namkhana	44.97	18.85	1.36	34.82	40.10	11.50	6.85	41.55
Sagar	53.58	25.85	0.81	19.76	28.02	18.31	7.43	46.24
Region III	40.96	36.32	1.55	21.17	25.12	28.04	10.72	36.11

Source: Census of India 1991



Table 4.16: Block-wise Percentage of Main Workers by Gender in Different Occupations in 2001 in South 24 Parganas

Block	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers
	Male	Male	Male	Male	Female	Female	Female	Female
Takurpukur–Maheshtala	5.65	6.88	8.52	78.95	5.33	6.49	7.56	80.62
Budge Budge I	2.35	6.76	2.34	88.55	2.97	3.47	6.86	86.70
Budge Budge II	7.18	18.27	6.70	67.86	5.48	9.60	20.38	64.54
Bishnupur I	17.06	19.20	10.23	53.51	8.55	17.99	25.49	47.98
Bishnupur II	7.05	13.74	12.63	66.58	3.10	5.49	40.07	51.33
Sonarpur	14.45	11.47	1.55	72.53	8.78	11.19	4.63	75.41
Region I	9.96	13.63	7.65	68.76	6.24	10.08	18.75	64.92
Baruipur	15.22	17.72	3.94	63.12	7.87	8.21	13.21	70.71
Bhangar I	26.09	24.97	3.83	45.11	11.49	27.04	16.00	45.48
Bhangar II	30.30	24.70	3.32	41.67	10.81	20.22	16.76	52.21
Falta	11.67	21.18	6.62	60.53	7.25	12.11	26.84	53.80
Diamond Harbour I	9.43	21.16	4.01	65.40	6.87	9.04	15.09	69.00
Diamond Harbour II	9.36	19.82	3.47	67.35	5.91	6.02	12.76	75.31
Magrahat I	11.09	17.48	8.55	62.88	6.86	11.65	33.59	47.90
Magrahat II	14.29	16.56	10.21	58.94	7.00	11.52	25.51	55.97
Kulpi	12.79	22.32	3.69	61.21	6.30	2.66	18.38	72.65
Mandirbazar	10.17	17.24	3.15	69.44	7.79	3.79	15.62	72.80
Region II	15.50	20.11	5.24	59.15	7.91	11.33	19.29	61.47
Canning I	16.20	19.64	2.48	61.68	4.46	6.32	16.85	72.36
Canning II	27.91	45.54	1.03	25.52	12.49	47.81	5.54	34.16
Basanti	33.35	39.74	1.33	25.57	20.50	25.24	6.83	47.43
Gosaba	34.36	34.67	1.23	29.75	19.24	32.71	2.64	45.40
Joynagar I	13.16	19.38	3.90	63.55	7.85	7.60	17.88	66.66
Joynagar II	19.85	34.85	5.19	40.11	10.91	10.60	39.50	38.99
Mathurapur I	14.87	25.24	4.91	54.98	4.49	5.00	22.02	68.49
Mathurapur II	25.62	37.82	3.11	33.44	14.96	13.86	17.81	53.38
Kultali	35.95	37.06	1.14	25.85	13.38	21.21	7.98	57.43
Patharpratima	35.34	30.95	1.51	32.19	21.00	13.12	3.69	62.20
Kakdwip	21.13	27.65	1.91	49.30	18.89	11.90	12.09	57.11
Namkhana	31.91	20.99	1.23	45.87	27.39	14.70	5.70	52.20
Sagar	36.81	31.18	1.34	30.67	31.66	26.21	5.35	36.78
Region III	26.96	31.23	2.25	39.56	16.15	16.67	12.02	55.16

Source: Census of India 2001

Table 4.17 Block-wise Percentage of Main Workers in Different Occupation in 1991 in the District of South 24 Parganas

Block	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers	% of agrl workers workers	% of non-agrl
	(1)	(2)	(3)	(4)	(1+2)	(3+4)
Maheshtala	2.85	9.23	12.82	75.31	11.87	88.13
Thakurpukur-Metiabruz	3.61	11.61	16.66	68.12	15.22	84.78
Budge Budge I	2.89	22.15	4.26	70.71	25.04	74.96
Budge Budge II	9.70	29.59	2.97	57.74	39.29	60.71
Bishnupur I	28.29	34.56	5.63	31.52	62.95	37.15
Bishnupur II	16.68	26.27	10.46	42.59	46.95	53.05
Sonarpur	14.36	20.68	1.44	63.52	35.04	64.96
Region I	12.19	21.86	7.83	58.32	34.05	65.95
Baruipur	26.87	28.83	3.27	41.03	55.70	44.30
Bhangar I	41.14	29.06	4.82	24.98	70.20	29.80
Bhangar II	45.21	34.36	2.14	19.29	79.57	20.43
Falta	16.28	26.41	5.08	49.29	48.88	53.34
Diamond Harbour I	15.06	26.94	9.11	51.89	42.00	58.00
Diamond Harbour II	16.02	32.40	5.06	45.62	49.32	50.98
Magrahat I	22.47	36.18	5.38	35.97	58.55	41.35
Magrahat II	29.95	27.83	8.04	34.39	57.57	42.43
Kulpi	26.07	36.74	3.67	33.52	62.91	37.19
Mandirbazar	20.14	31.43	4.96	43.47	51.57	48.43
Region II	26.53	31.09	4.61	37.47	57.72	42.28
Canning I	30.05	33.71	1.19	35.08	63.76	38.24
Canning II	45.77	43.12	0.43	10.68	98.99	11.11
Basanti	40.23	43.36	1.05	15.37	93.58	16.42
Gosaba	47.85	36.68	0.85	12.62	96.53	13.47
Joynagar I	25.61	34.86	3.78	35.78	60.47	39.53
Joynagar II	31.75	43.43	4.74	20.08	75.16	24.92
Mathurapur I	27.49	33.72	5.86	32.93	61.21	38.79
Mathurapur II	36.51	40.39	3.96	19.13	76.90	23.10
Kultali	41.28	47.74	0.43	10.57	99.01	10.99
Patharpratima	55.00	30.21	1.19	13.61	95.21	14.79
Kakdwip	36.19	31.53	1.49	30.79	67.72	32.28
Namkhana	44.52	16.17	1.87	35.45	62.69	37.31
Sagar	52.79	25.82	1.01	20.58	78.40	21.90
Region III	40.14	35.89	2.02	21.95	76.03	23.97

Source: Census of India, 1991



Table 4.18 Block-wise Percentage of Main Workers in Different Occupation in 2001 in the District of South 24 Parganas

Block	% of Cultivators	% of ag. Labourers	% of hh. Ind. Workers	% of other workers	% of agrl workers	% of non-agrl workers
	(1)	(2)	(3)	(4)	(1+2)	(3+4)
Thakurpukur-Maheshtala	5.81	6.82	8.39	79.18	12.43	87.57
Budge Budge I	2.40	6.54	2.65	88.42	8.93	91.07
Budge Budge II	7.06	17.67	7.64	67.63	24.73	75.27
Bishnupur I	16.12	19.07	11.91	52.90	35.19	64.81
Bishnupur II	6.84	12.89	15.47	65.00	19.53	80.47
Sonarpur	13.76	11.44	1.93	72.88	25.19	74.81
Region I	9.57	13.26	8.82	68.35	22.83	77.17
Baruipur	14.47	16.74	4.88	63.90	31.22	68.78
Bhangar I	24.70	25.16	4.99	45.15	49.87	50.13
Bhangar II	29.15	24.43	4.12	42.30	53.58	46.42
Falta	11.32	20.46	8.22	60.00	31.78	68.22
Diamond Harbour I	9.26	20.36	4.74	65.64	29.62	70.38
Diamond Harbour II	9.08	18.73	4.21	67.99	27.81	72.19
Magrahat I	10.74	17.00	10.62	61.64	27.74	72.26
Magrahat II	13.67	16.13	11.51	58.68	29.80	70.20
Kulpi	12.33	20.94	4.72	62.01	33.28	66.72
Mandirbazar	9.93	15.87	4.43	69.78	25.79	74.21
Region II	14.86	19.37	6.42	59.35	34.23	65.77
Canning I	14.61	17.83	4.43	63.13	32.43	67.57
Canning II	26.55	45.74	1.43	26.28	72.29	27.71
Basanti	32.22	38.47	1.82	27.50	70.69	29.31
Gosaba	33.07	34.50	1.35	31.08	67.57	32.43
Joynagar I	12.51	17.95	5.61	63.93	30.46	69.54
Joynagar II	18.91	32.28	8.83	39.99	51.18	48.82
Mathurapur I	14.09	23.72	6.19	56.00	37.81	62.19
Mathurapur II	24.73	35.81	4.35	35.12	60.54	39.46
Kultali	34.53	36.06	1.57	27.84	70.59	29.41
Patharpratima	33.05	28.10	1.86	36.99	61.15	38.85
Kakdwip	20.92	28.17	2.87	50.04	47.09	52.91
Namkhana	31.39	20.26	1.74	46.60	51.65	48.35
Sagar	36.33	30.72	1.72	31.24	67.04	32.96
Region III	25.83	29.70	3.28	41.19	55.53	44.47

Source: Census of India, 2001

percentage of agricultural workers at the block level. In order to test the hypothesis over the cross section, data on poverty at the block level is required. Now the

conventional measure of poverty is based on the existence of a threshold level of per capita income. Failure in achieving this minimum level of income is said to signify

Figure 4.7 Occupational Diversification in South 24 Parganas



poverty. Then a head-count measure is commonly made to identify the percentage share of poor in the population. Since it is well known that income data required for the head-count ratio is unavailable at the block level, so

a proxy measure is used to calculate poverty of the households at the block level. The estimation is based on data from Rural Household Survey (RHS) undertaken by the Government of West Bengal in 2005. The parameters on which information are available

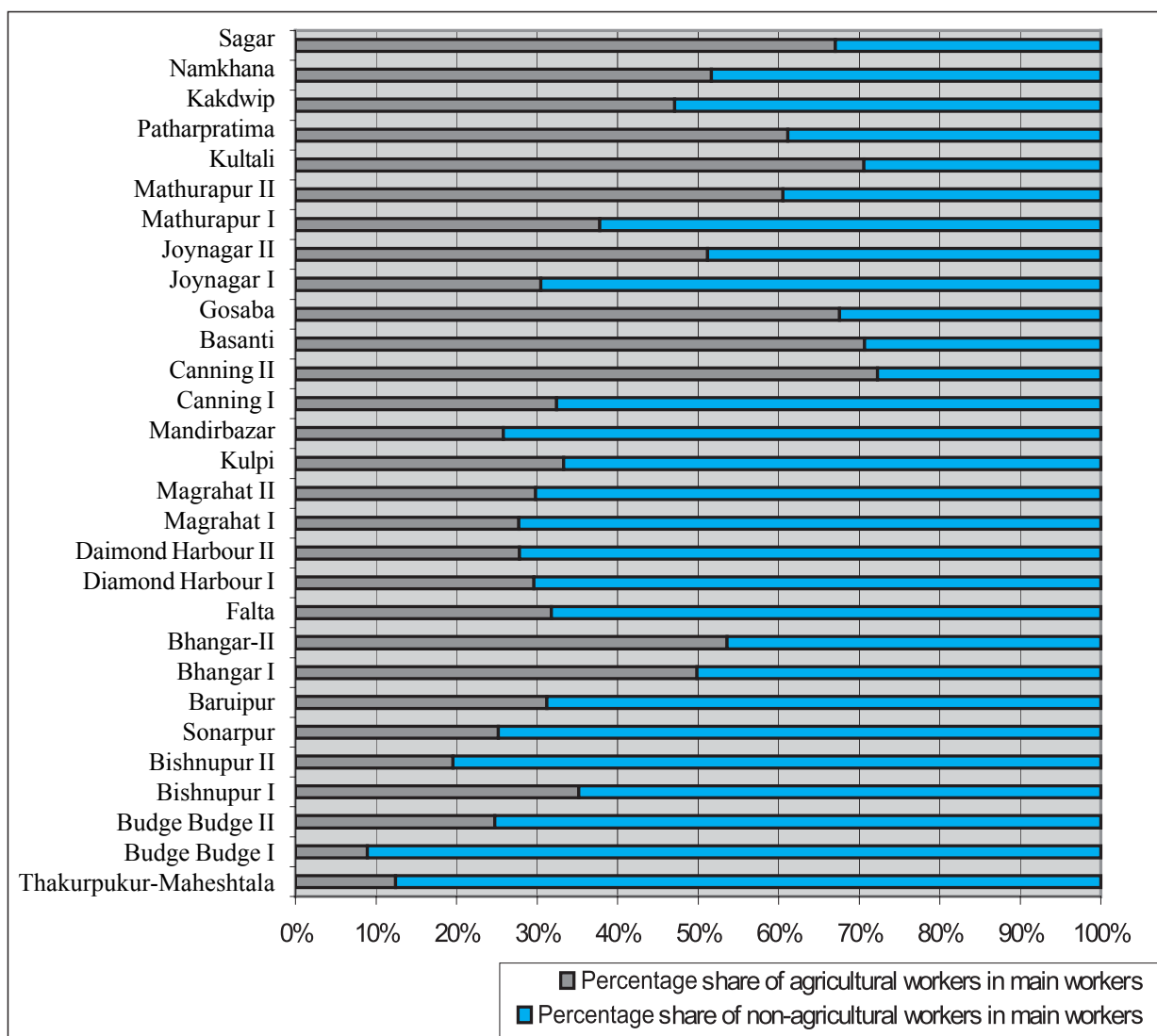
in the RHS and the nature of that information are discussed in Chapter 2 of this report.

A distinction between the poor and non-poor households is made on the basis of the score they achieve out of a possible maximum of 60. A household getting less than or equal to 33 (determined by the Planning Commission of India) on the achievement scale is considered to be a

poor household. In this way the total number of households scoring less than or equal to 33 out of the total number of households in each block can be found out. The details of percentage of households lying below the poverty line are discussed in the previous chapter.

Finally, after obtaining the information on household level poverty across the blocks, we try to identify if there is at all

Figure 4.8: Percentage Shares of Main Workers in Agriculture and Non-agriculture in different Blocks



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any observable correlation between the dependence on agriculture and incidence of poverty among households in 29 blocks. For this we calculate the rank correlation coefficient between percentage of agricultural main workers and percentage of households below poverty line in the blocks. The result found is a positive relationship (Figure 4.6) between the two variables with statistical significance at 1 per cent. In fact, the rank correlation coefficient between percentage of agricultural workers and percentage of households below poverty line is 0.627. The hypothesis is thus accepted implying greater dependence on agriculture is associated with higher incidence of poverty.

Figure 4.6 depicts the relationship between incidence of agricultural main workers and percentage of households below poverty line. It can be seen in the diagram that, on the whole, the blocks that have high incidence of agricultural workers are mostly the blocks that are associated with higher incidence of poverty among households.

If we consider distribution of workers in the agricultural and non-agricultural sectors by blocks, obviously wide variation can be seen though the trend of transformation towards the non-agricultural sector holds everywhere. In

fact the regionwise classification of blocks with regard to dependence on agriculture gives distinctly different pictures of the three regions (Tables 4.15 and 4.16). Expectedly in the blocks of Region I situated in the close proximity of the Kolkata metropolis, overwhelming majority are involved in the non-agricultural sector for their livelihood. Percentage of non-agricultural main workers increased from 66 per cent to 77 per cent in the decade of nineties in this region (Tables 4.17 and 4.18). In Budge Budge I as many as 91 per cent of the population were engaged in non-agricultural activities in 2001 (Table 4.18). Also large areas of Mahestala and Thakurpukur-Metiabruz have high dependence on non-agricultural sector. So this region shows the characteristics of a *semi-transformed or semi-urban economy*.

The situation in Region III is just the reverse. Here majority of the working population draws their livelihood from the agricultural sector though the structural transformation in favour of non-agricultural sector is also in progress in the blocks of this region covering the Sundarbans. In 1991, 76 per cent of the working population depended on agriculture here (Table 4.17). The same figure came down to 56 per cent in 2001 (Table 4.18). Although blocks like Canning-I, Joynagar-I and Mathurapur-I have greater dependence on non-agricultural sector, the blocks like Canning-II, Basanti,

Kultali in this region had more than 70 per cent of the main workforce engaged in agriculture even in 2001 (Table 4.18). So in a way region III is *predominantly rural and backward* in nature.

In the blocks of Region II there is once again pre-dominance of non-agricultural employment. Though these blocks are not necessarily very close to Kolkata, a large number of them are well connected with the urban centers. As a result, some medium and large scale industries including a special economic Zone has developed in the areas of Falta and Diamond Harbour block of this region. Also being well connected through roads and railways from many blocks of this region, on the one hand it becomes easier to commute regularly for employment to the urban centres while residing in the rural areas; on the other hand, better road connection leads to better marketing channels for homegrown products. As a result 66 per cent of the main workers in this region depended on the non-agricultural sector in 2001 (Table 4.18). This region may be identified as the *transforming region of the district*.

Overall, dependence on agriculture in the district is on decline irrespective of distance from Kolkata metropolis. Of course, the extent of transformation varies across regions. As a corollary to decline

in the percentage of employment generated in the agricultural sector obviously there has been expansion of non-agricultural activities in the district. The increase in non-agricultural employment is evident not only in percentage terms but also in absolute number. The number of non-agricultural workers in the main plus marginal category almost doubled from 663908 to 1296634 between 1991 and 2001 in the district. The Census of India further classifies non-agricultural workers as household industry workers and other workers. According to the census data, shifting towards the non-agricultural sector in this district has been more for other workers with a nominal increase in the share of household industry workers. So far as employment in quantitative terms is concerned, no doubt non-agricultural sector has absorbed greater number of labourers into it than it could do before. Whether this increased absorption of work force into the non-agricultural sector is the outcome of a vibrant “pull effect” of this sector or it is the “push effect” from agriculture which is dominating in the process of transformation, needs to be identified. In addition to the increase in quantity of employment generated in the non-agricultural sector, it is very important to identify the quality i.e., sustainability of the type of employment generated. Given

unavailability of any further break-up of Census data on exactly the type of employment generated based on the return from such employment, further probe in to the process of diversification of employment is done in the following section of livelihood strategies using RHS (2005) data for the district.

4.4 Livelihood Patterns

Contrary to the prototypical image of being purely dependent on either agriculture or non-agriculture, in reality the rural households rely on many activities and income sources for their livelihood. The rural economy is highly diversified depending on a range of activities from agriculture and allied activities i.e., from farm to the non-farm sector. The non-farm sector may include a variety of activities starting with those that are allied and complementary to agriculture or those that are not related to agriculture at all. It may be one of high return jobs requiring skill or a low return job which people are forced to pursue owing to their distress conditions. Within this diversified rural economy, a large part of household income comes from combined incomes from the different household members, each often specializing in one occupation. In case of low return activities particularly in the non-agricultural sector individuals even pursue different activities at the same time to smooth their income. The return on many of these activities is low and the diversity of occupations does not always transform into income diversification implying that one activity may be the dominant source of income.

In the Rural Household Survey of this district, the dominant income sources of the households have been used to classify rural households according to five different livelihood strategies. Some households derive the larger part of their incomes from wage work as daily labourer in the agricultural or non-agricultural sector which is seasonal and volatile in nature (*daily / agricultural / other physical labourer*). There are some landed households whose livelihood depends primarily on farming though they may use majority of their produce for home consumption (*cultivators*). There are others who are neither cultivators nor daily labourers but are self-employed in the rural non-farm sector like artisans or hawkers. They may include family members in the work but as such do not employ others (*self-employed rural artisan / hawkers who do not employ others*). There are still others who derive

Figure 4.9: Livelihood Patterns of Rural Households in South 24 Parganas

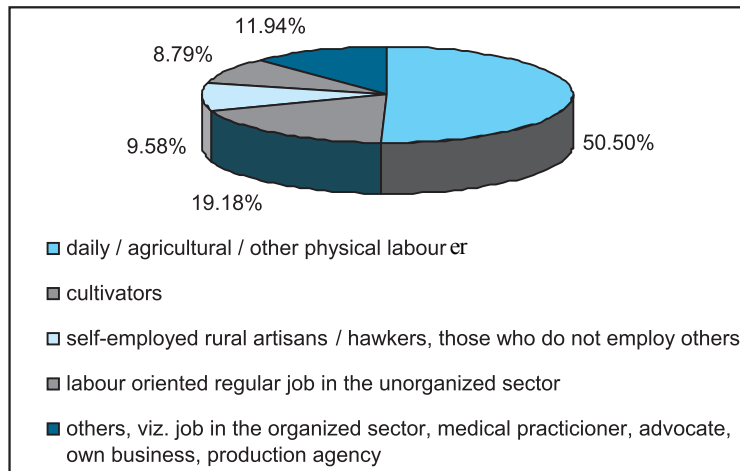
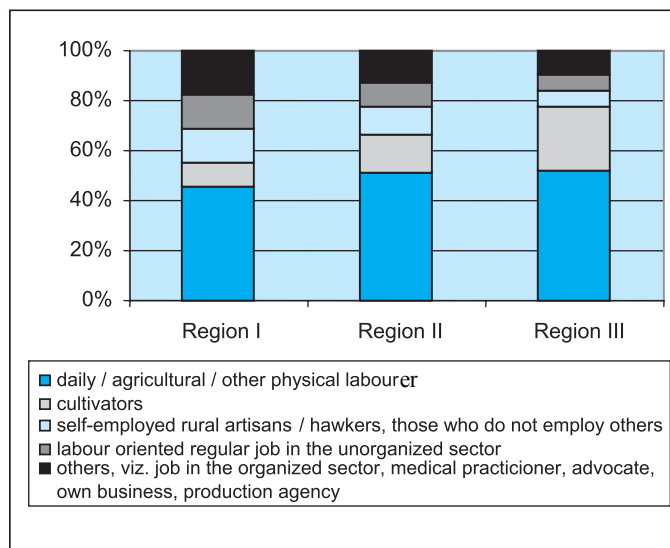


Figure 4.10: Region-wise Livelihood Patterns of Rural Households in South 24 Parganas



business or production agency (*others*).

Based on the above-mentioned five-way classification of livelihood, the major income generating activity database of the households in the district of South 24 Parganas reveals that for 51 per cent of the households, wage labour in the agricultural sector or in the informal non-agricultural sector is the main source of livelihood (Figure 4.9). Given the seasonality of agriculture and volatility of daily wage activities in the informal sector the return from this particular livelihood strategy is supposed to be least stable among the five strategies. Thus one might say that no less than half of the households in the

their main income through their employment as labour in the unorganized non-agricultural sector which is fairly regular in nature (*labour oriented job in the unorganized sector*). Finally, some households have members in the family who are either employed in the formal organized sector or are established as a medical practitioner or advocate or in own

district are economically vulnerable. Only 20 per cent of the households depend primarily on cultivation for their living. Not more than 12 per cent households in the district were involved in high return regular jobs in the organized sector or in some form of activities like business or production or services that fetch relatively high income. So, the fact that there has

Table 4.19: Livelihood Patterns of Rural Households at the Block Level

Block	Percentage of households				
	daily / agricultural / other physical labourer	cultivators	self-employed rural artisans/hawkers, those who do not employ others	labour oriented regular job in the unorganized sector	others, viz. job in the organized sector, medical practitioner, advocate, own business, production agency
Takurpukur - Maheshtala	37.12	8.51	9.47	18.64	26.25
Budge Budge I	43.12	7.16	11.15	15.09	23.49
Budge Budge II	52.64	9.65	9.71	13.47	14.52
Bishnupur I	44.65	13.20	18.22	10.17	13.77
Bishnupur II	43.28	6.50	14.90	16.91	18.41
Sonarpur	49.22	11.34	10.79	13.81	14.85
Region I	45.66	9.86	13.02	14.147	17.32
Baruipur	50.25	13.68	8.81	10.94	16.33
Bhangar I	47.12	20.40	9.60	7.97	14.92
Bhangar II	46.85	29.06	8.68	5.53	9.88
Falta	51.20	10.55	11.02	14.48	12.74
Diamond Harbour I	57.66	8.94	6.80	11.41	15.19
Diamond Harbour II	58.08	8.47	8.75	11.78	12.92
Magrahat I	45.82	12.78	17.33	12.01	12.06
Magrahat II	45.09	15.91	19.47	8.14	11.40
Kulti	67.74	11.00	6.07	6.31	8.88
Mandirbazar	43.04	19.45	19.40	6.83	11.27
Region II	51.22	15.09	11.47	9.54	12.69
Canning I	49.93	19.76	10.53	7.93	11.85
Canning II	61.56	24.81	5.11	3.63	4.89
Basanti	49.44	32.69	5.98	4.69	7.20
Gosaba	41.54	36.19	5.05	6.26	10.95
Joy nagar I	53.51	14.57	10.24	9.24	12.46
Joy nagar II	44.45	23.31	13.39	11.01	7.83
Mathurapur I	55.97	16.77	9.58	6.12	11.56
Mathurapur II	58.42	21.47	6.46	4.00	9.66
Kultali	47.45	36.67	5.76	4.92	5.19
Patharpratima	48.84	30.56	4.05	5.43	11.10
Kakdwip	54.93	20.39	4.72	8.80	11.16
Namkhana	58.54	23.64	5.42	3.87	8.52
Sagar	54.97	29.45	3.86	4.15	7.58
Region III	51.64	25.91	6.80	6.26	9.39
South 24 Parganas	50.50	19.18	9.58	8.79	11.94

Source: Rural Household Survey 2005, Government of West Bengal



been considerable amount of occupational diversification towards the non-agricultural sector in the district does not necessarily mean that the surplus labourer in agriculture is pulled into a flourishing non-agricultural sector. Otherwise, 51 per cent of the households in the district would not have derived their living from low return daily wage labour.

Region-wise break up of the livelihood pattern of the households shows some variation with similar trend of large dependence on daily physical labour either in the agriculture or in the non-agriculture and less dependence on regular jobs either

in the unorganized sector or in the organized sector (Figure 4.10). Deriving livelihood from the earnings of wage labourer or of a cultivator is relatively more common in Region III. On the other hand, accessing income from some form of regular jobs is relatively more common in region I compared to Region II or Region III, mostly due to its closeness to the urban centres where more job opportunities are expected to be available. Though the livelihood patterns show similarity across regions, it is easy to perceive wide variation across blocks from Table 4.19.

4.5 Potential Alternatives

Rural households design livelihood strategies to suit their asset endowments and account for the constraints imposed by market failures, state failures, social norms and exposures to uninsured risks. But their strategies compensate for only part of the constraints they operate under, leaving important roles for improvements in their access to assets and in the contexts for using these assets. The key, then, is to enhance collective action and mobilize public policy to maximise the livelihood of success for rural households. The daunting challenge for the policy makers is, therefore, to design public policies that can improve the living conditions of the

rural households. In this context we highlight some of the potential alternatives of the district where policy intervention can lead to further employment generation and thereby improve the livelihood condition of the people.

4.5.1 Agriculture

We, first of all, emphasize the need for tapping the potential of agriculture to the fullest. As has been discussed earlier, dependence on agriculture in the district is on decline. Agricultural work-force in the district has declined not only relatively but also absolutely. This is mostly due to low return followed by mono-cropping

pattern in agriculture of the district. Policies need to be taken for making agriculture more remunerative. For this, further technological percolation, particularly better irrigational facilities in rural areas, is required. This can increase the cropping intensity by allowing multiple cropping. Multiple cropping will, first of all lead to higher employment opportunities in the farm sector and to increase farm income, which, in turn, is likely to create a further consumption linkage into the non-farm sector by creating higher demand for locally produced goods and services. Expectationally there will be a 'demand pull' growth of the rural non-farm sector.

Facilitating irrigation would also promote intensive farming through agricultural crop diversification. In addition to increasing farm employment and income by ensuring year round employment opportunities and more remunerative prices, crop diversification can lead to forward production linkage into the non-farm sector too. A big share of non-farm jobs in the rural areas is very unproductive and unremunerative. Rural workers have to take up these jobs as a result of the lack of sufficient year-round jobs in the farm sector. Multiple cropping and crop diversification would allow the rural workers to get higher employment days in the farm sector and reduce distress

diversification. This will also lead to a more productive non-farm employment through various linkage effects.

Horticulture including floriculture activities offer considerable potential for employment generation and productivity growth in the district. For example, sunflower is being successfully cultivated in some areas of the district. Such cultivation is particularly made after boro cultivation in those areas where there is availability of irrigation. Enhancement of irrigational facility can spread the cultivation of such crops in addition to the major crops like paddy grown in the district.

To reap the fruits of such crop diversification, however, development of agro-based industries in the rural areas is a necessity. Very little has been done in this regard. The development of rural infrastructure with proper marketing and storage facilities is a necessary prerequisite for successful rural agro-based industries. Moreover, the conditions of rural roads are often so bad that proper transportation of the output to export even to the neighbouring states is not feasible. The problem is more acute in the island blocks of the Sundarbans. The lack of infrastructure sometimes leads to huge loss on the part of the cultivators. For example, guava and lichee produced in Baruipur, mango in Bhangar, watermelon in

Kakdwip and Sagar, chilli in Patharpratima are widely known for their good quality. With good storage, transport and marketing facilities these non-foodgrain crops could be sold in distant places and could be highly remunerative.

4.5.2 Non-agriculture

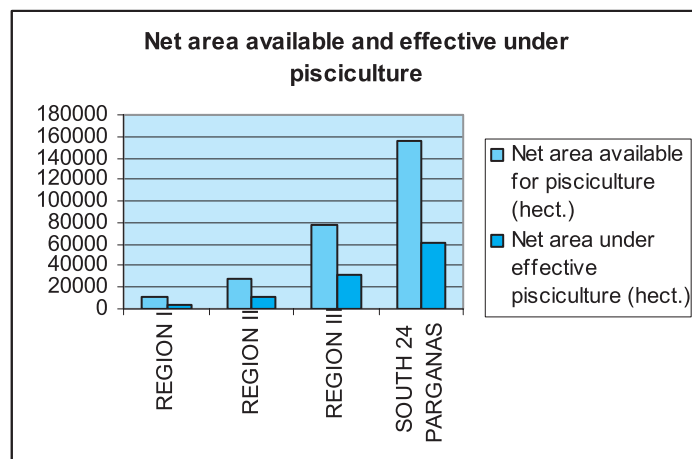
(i) Pisciculture

Within the non-agricultural sector an important source of employment which is worth-mentioning, particularly in the district of South 24 Parganas, is pisciculture. This is the natural outcome of the closeness of the district to the Bay of Bengal. The confluence of river Hooghly with the sea here is congenial to pisciculture. A large area of the district is riverine in nature. So the basic economics of the rural people residing particularly in delta islands and the areas near the Sundarbans are mainly based upon prawn seed collection and production and also fishing. Culture of coloured and ornamental fish has become popular in some parts of the district. The prospect of pisciculture in the district is excellent.

According to the District Statistical Handbook, 2004, for South 24 Parganas not less than 4.5 lakh persons in the district are engaged in pisciculture. Out of this, 2.57 lakhs are from the 13 blocks of the

Sundarbans. Even though a large number of persons are engaged in pisciculture, the capacity is far from being fully utilised. As can be seen from Table 4.20, only 39 per cent of the net area available for pisciculture in the district have been utilised so far. A region-wise break up of the same shows that area available for pisciculture are 11778, 27483 and 77063 hectares in Regions I, II and III respectively. But only 36 per cent, 38 per cent and 40 per cent of the area available respectively for pisciculture in these three regions has

Figure 4.11: Net Area under Pisciculture



been effectively utilised.

The maximum area available for pisciculture are in the blocks of Canning I and II followed by Patharpratima, Sagar, Gosaba, Kultali, Namkhana and Kakdwip in the Sundarbans. Canning is the gateway to the Sundarbans. It is situated on the south bank of the Matla River. Being part of the Kolkata Suburban Railway system and connected to Sealdah station as also to

Box 4.1: How life has changed for Swarup Patra!

Life has changed for Swarup Patra. When he looks back at the struggling old days of his and his family he wishes that those who are struggling today be inspired with his way of life now. Swarup had to struggle a lot to complete his studies as a graduate while staying in their mud house near Dighirpar Bazar at Daulatpur village of Falta. His father was the only earning member with unstable income supporting a family of five. He being the elder son of the family tried his best to go on with his studies so that he could do something in the near future to help his family. After graduation he became a private tutor to earn about Rs. 2000 per month. Though this income was unstable even then it gave some amount of stability to their struggling family. When he came to know about ornamental fishery i.e., culture and marketing of fish that are kept in aquarium, he thought of starting a business with the same to supplement his unstable income that supported his family.

Swarup started ornamental fish culture in 2003 with four varieties of coloured fish. Then he got training on ornamental fish culture and breeding etc. from the District Fisheries Department. This technical assistance, together with financial support through government subsidy and bank loan, has made him successful and established ornamental fish farmer at the age of thirty today. At present, he cultures about ten varieties of coloured fishes of which four varieties are produced in his own farm. In addition to culture and production he procures fishes from local farmers (individuals and co-operative societies) and supplies to bigger market at Howrah and Jabbalpur. His present income from fish culture even after repaying installments of loan regularly and other cost of production is Rs. 7000 to Rs. 8000 per month. Now they have a pucca house to stay. He has his own breeding farm which is just about to be converted into a bigger one with MPEDA assistance. His entrepreneurship has forced him to undergo a Certificate Course on ornamental fish culture which will help him to grow his farm even bigger. Swarup is happy to say that he employs two other boys of his locality in his farm whose families depend on their income too. He wishes that not just increasing his own farm income but the growth of his farm may help his locality by creating a source of livelihood for many others also.

Kolkata by road, Canning has emerged as a major market for supply of fish to Kolkata. The fishermen of the area bring their catch to the all-night fish market at Canning. Here the commission agents receive the fish and auction them. It is bought by the wholesalers and transported to Kolkata for sale to retailers, who sell it in different markets. However, as greater part of Kolkata's fish now come from South India and Madhya Pradesh, local wholesale trade at Canning has been lost out in the competition. There is, of course, scope of reviving this market once again. A large part of the area available for

pisciculture in the district particularly in the Sundarbans can be brought into effective use. Proper policies to enhance employment generation in this sector need to be taken. Such policies together with orientation for sustainable development to ensure renewal of natural resources can benefit the rural population to a large extent in the district.

Livestock and animal husbandry, poultry hatching, farming and processing, meat processing, fish processing (frozen and dehydrated fish), dairy farming and milk processing can be some other alternatives.

Table 4.20: Block-wise Employment from and Area under Pisciculture in South 24 Parganas: 2004

Block	Net area available for pisciculture (hect.)	Net area under effective pisciculture (hect.)	% of effective area under pisciculture	No. of persons engaged
Thakurpukur–Maheshtala	590	204.05	34.58	2316
Budge Budge I	600	202.18	33.70	1694
Budge Budge II	3000	1021.25	34.04	8009
Bishnupur I	810	290.05	35.81	2811
Bishnupur II	3000	1061.40	35.38	8529
Sonarpur	3778	1409.06	37.30	10603
Region I	11778	4187.99	35.56	33962
Baruipur	3000	1065.67	35.52	10603
Bhangar I	2080	730.30	35.11	7290
Bhangar II	3922	1933.42	49.30	15497
Falta	1600	566.76	35.42	5532
Diamond Harbour I	4420	1550.30	35.07	15920
Diamond Harbour II	2000	724.86	36.24	7182
Magrahat I	2456	863.67	35.17	7836
Magrahat II	2800	996.59	35.59	8833
Kulpi	4205	1628.55	38.73	1714
Mandirbazar	1000	350.00	35.00	3000
Region II	27483	10410.12	37.88	83407
Canning I	10660	4040.85	37.91	31316
Canning II	10800	4291.30	39.73	31922
Basanti	4355	1655.10	38.00	16283
Gosaba	6637	2577.38	38.83	2698
Joynagar I	3000	1100.00	36.67	9025
Joynagar II	3500	1419.00	40.54	11548
Mathurapur I	1553	624.56	40.22	6303
Mathurapur II	4285	1883.40	43.95	18826
Kultali	6592	2685.00	40.73	21387
Patharpratima	8815	3914.02	44.40	39357
Kakdwip	5111	2187.36	42.80	20826
Namkhana	5355	2277.72	42.53	22900
Sagar	6400	2520.80	39.39	24898
Region III	77063	31176.49	40.46	257289
South 24 Parganas	155585	60372.71	38.80	492027

Source: District Statistical Handbook 2004 for South 24 Parganas published by BAE&S, Government of West Bengal

Box 4.2: Development of a remote low-lying area through Integrated Fish Farming:

Satyendranath Malik, Dibakar Dalui, Gurupada Bar, Tulsi Charan Mondal, Shyamal Pramanik like many others are residents of some of the remotely located villages such as Magurpukur, Purba Ramnathpur or Kamarpukur within Amratala Gram Panchayet of Magrahat II block. The nearest railway station Dhamua on the Sealdah – Diamond Harbour railway line lies at a distance of about 3 kilometres. The nearest bus route to Kolkata lies at a distance of 6 kilometres from this area. These villages fall under a low-lying area where water-logging is a common phenomenon every year. As a result, cultivation of Aman Paddy – the major crop of the district - is not possible in these areas. To overcome this problem, a few local fish farmers started Integrated Fish Farming some twenty years back. Later on, a section of the pisciculturists came under the purview of Inland Fisheries Project of the government. Grass-root-level fishery training was imparted to them through Magrahat-II Panchayat Samity. The method of integrated fish farming was extended to other fish farmers of the locality also. Integrated fish farming is going on in the area in a sustainable way with the plantation of banana trees on the embankment along with pisciculture in the water body with compost manure. Most of the farms are rectangular in shape having an area of 0.5 hectare to 1 hectare. Multiple stocking and multiple harvesting is being carried out in the farms. Liberation of fish fingerlings 4 to 6 inches is made 2-3 times and harvesting is done 2-3 times in a year. Production of fish is more than 5-6 metric tons per year per hectare of water body. This, together with the banana plantation on the embankment of the farms, is fetching no less than Rs. 25000 to Rs. 30000 per hectare per year to the farmers of the area. The fish farmers are now carrying out integrated fish farming successfully in the area. In fact, Satyendranath Malik, one of the poor villagers, who took initiative in integrated fish farming to overcome the problem of water-logging in the area some twenty years back has got the first prize in fish production in the district of South 24 Parganas in 2004-2005. The area as a whole has been uplifted socially and economically through the entrepreneurship of the villagers and the co-operation from Panchayat body, Government officers of the district as well as the concerned banks.

(ii) Tourism Industry

Presently the tourism industry has earned prominence in the southern pockets of South 24 Parganas. Tourism can be a supplement to a part of the financial set up of the district. The tourism industry centers round the places like the Sundarbans, Sajnekhali, Bakkhali, Frazerganj, Henry Island and Diamond Harbour.

The tourism in the Sundarbans focusses on the vast tract of forest and the swampy land forming the lower part of the Ganga delta. The Sundarbans is the largest river delta in the world and also the largest estuarine mangrove forest in the world. The

principal attraction of the Sundarbans is the network of estuaries and the Royal Bengal Tiger. The Sundarbans is named so because the area is infested with the “forest of sundari”. The shallow swampy coastal area is crocodile-infested and is virtually uninhabited. The world’s largest delta region, the Sundarbans, spreads over two countries (India and Bangladesh) and over 54 islands. The Sundarbans present a unique ecosystem in this part of the world. The Sundarbans is declared by UNESCO as a heritage site. It holds the largest number of wild tigers in its core. The Sundarbans is the key interest of tourism in South 24

Parganas. The scenic beauty and the bird sanctuary is the primary attraction of the Sajnekhali division. The Mangrove Interpretation Centre is also of interest to the visitors. There are watch-towers in the Sajnekhali region and in the adjacent parts.

Bakkhali beach resort by the Bay of Bengal is only 132 kms from Kolkata. Very close to Bakkhali, there is Frazerganj beach resort, which is equally important as a tourist spot and also one of the fishing harbours of the district. Henry island near Bakkhali is also attracting tourists in the recent times.

Diamond Harbour located by the river Hooghly is a famous picnic spot because of its close proximity with Kolkata. The Diamond Harbour Road, which connects the town with Kolkata, has a number of lodges and resorts on the highway. Resort Radisson Fort is very close to Diamond Harbour and situated at Raichak. while the Export Promotion Zone of Falta is just 20 minutes away. This luxurious resort is located amidst 60 acres of landscaped greenery including artificial water bodies and a moat running around the resort to complement its fort theme and overlooks a dramatic bend of the river Hooghly.

Gangasagar is also a focus of tourist interest, specially on the occasion of Makar Sankranti. Thousands of devotees come to visit it and take a dip at the river-sea

confluence and offer worship in the temple of Kapil Muni on the occasion of Makar Sankranti. A big colourful fair, called Sagar Mela, is organized on that occasion.

(iii) Industry

Despite its proximity to Kolkata, the district has not been developed industrially. Except for the Budge Budge stretch and Metiabruz area, adjacent to Thakurpukur Mahestala block, there are no major industrial areas. However, some major industries have come up in the Falta export-processing zone. Falta Special Economic Zone is one of the eight Special Economic Zones of the Govt. of India, Ministry of Commerce & Industry, under the SEZ scheme. With a gross area of 280 acres in the Panchayat area of Falta block, the Falta Special Economic Zone is located in a pollution free environment, at a distance of about 55 kilometres from the heart of Calcutta city and about 45 kilometres from the southern suburbs. It is well connected by a developed network of roads including a state highway, two ports at Calcutta and Haldia and the International airport at Dum Dum. The units in the Zone have to export their entire production and are granted certain entitlements such as Duty Deferment on Import & domestic procurement, simplified operational regime, and access to the DTA market.

In 2004 there was another proposal to set up a special economic zone for leather and allied industries within the upcoming Leather Complex at Bantala, only 15 kilometres from the heart of Kolkata. The Rs. 350 crore complex, which is regarded as the largest of its kind in the world is spread over 1,100 acres. The leather complex was conceived in 1995-96 as a part of the Supreme Court directive against 500-odd highly polluting tanneries in the eastern fringes of Kolkata. Accordingly, a plan was made to shift the tanneries to an integrated complex containing common effluent treatment plants and other infrastructure facilities to avoid air and water pollution. In due course, however, the scope of the project was expanded towards attracting investment in leather and allied sectors from India and abroad. Out of a total of 1,100 acres about one half was used for providing infrastructure including roads, electricity, effluent treatment, processed water and other utility services. The rest of the space is used for industrial purposes. Of the same, about 320 acres is reserved for shifting the existing tanneries from Kolkata and new investments in the leather sector. The SEZ would occupy about 110 acres.

CESC Ltd. has taken up a 500 MW thermal power plant project at Pujali. A bottling plant at Budge Budge has started working. The Budge Budge stretch has five

jute mills on the banks of the Hooghly river and the famous Bata shoe factory. Some small and medium factories are located in Mahestala and Birlapur, while others are situated along the Garia-Baruipur Road, Diamond Harbour Road and Thakurpukur-Bakrahat Road.

(iv) Small Scale Industries and Handicraft Activities

The prospect of small scale industries and emerging handicraft activities in the district is immense. Different areas of the district are increasingly forming clusters of handicraft activities that are marketed not only within the state but also exported.

Some of the very popular clusters of handicraft activities in the district are those of surgical instruments, batik print, decorative palm leaf products, silver filigree, terracotta, embroidery works, kantha stitch, soft dolls, feather products (like magic flower, dusters, artistic products, cock neck etc.), dak foil, zari work, cane and bamboo products, jute products, different types of brush, sola pith, pottery, shaving brush handle, cane furniture, dry flowers, and turban (Arabian) which is an exportable item. These different types of handicraft activities are employing more and more local people and are increasingly taking the form of household industry in the district. The fact that the incidence of such activities, increasing can

be verified through the large increase in the number of small units registered with the District Industrial Centre. Owing to lack of capital, however, there are often constraints in initiating new businesses by the rural households. The government has to take greater initiative here by providing financial assistance for start-up capital. Small industrial estates with different infrastructural facilities might be set up in some viable rural areas of the district, which can act as “growth poles” and stimulate local economic activities. The present spread of small scale industries in the district of South 24 Parganas is shown in Figure 4.12.

(v) Government Support Programmes

a. Self-employment through Self Help Groups

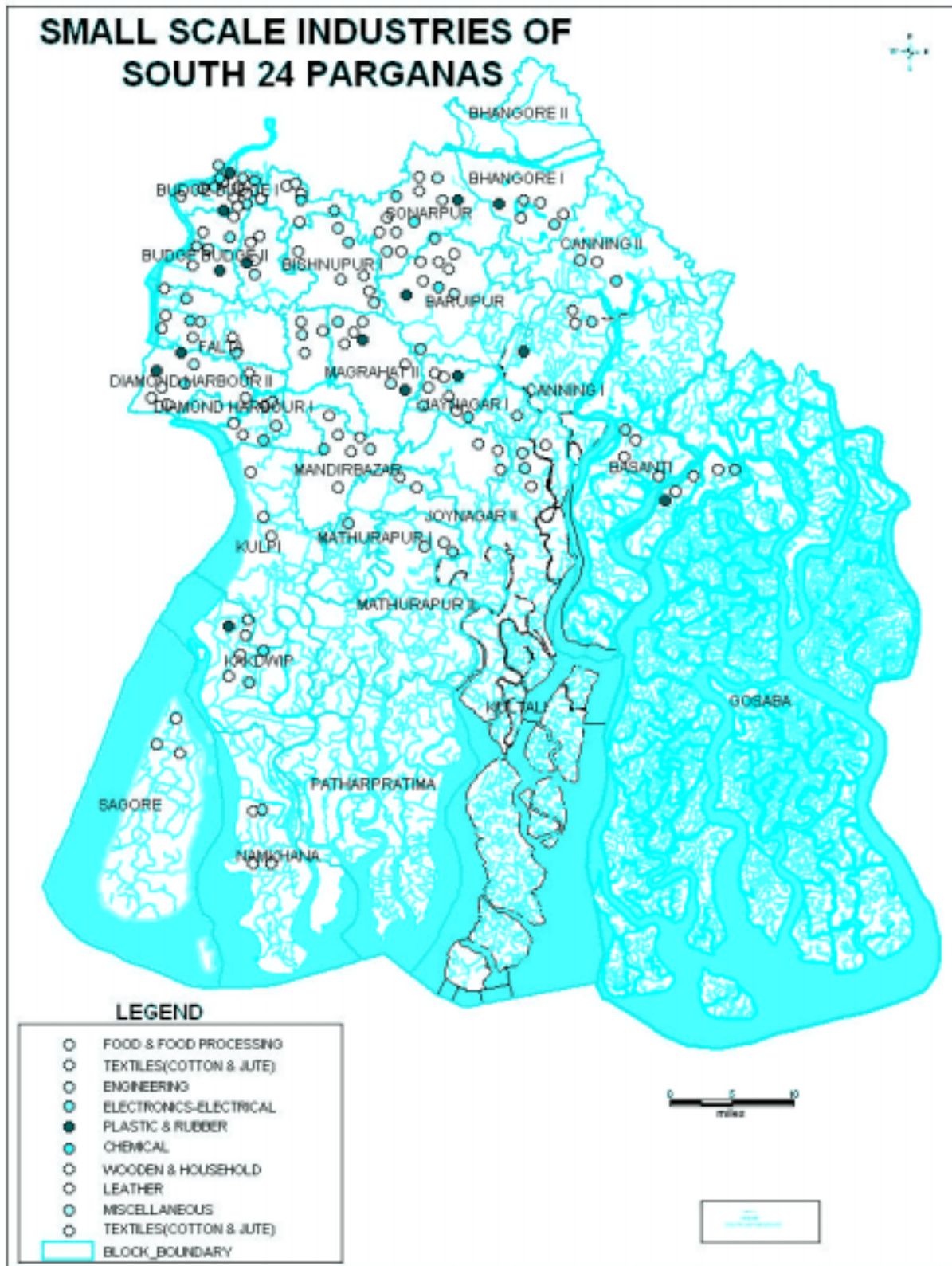
Reduction of poverty has been long emphasized strategy of the planners in India. Accordingly numerous target-oriented programmes have been undertaken from time to time by the Government of India for eradication of poverty. Mostly employment generation programmes for the poor persons have been the strategy taken for poverty reduction. Some of the earlier poverty alleviation programmes include Integrated Rural Development Programme (IRDP), Training Rural Youth for Self-employment (TRYSEM),

Development of Women and Children in Rural Areas (DWCRA), Supply of Toolkits in Rural Areas (SITRA), Ganga Kalyan Yojana (GKY), Million Wells Scheme (MWS) and others.

In recent times, however, providing credit to the poor persons, however small the amount might be, is considered as an important means to poverty reduction. The Indian microfinance has been trying for formal financial inclusion of poor households for quite a some time. Accordingly formation of self-help groups bank linkage programme (SBLP) is used as tool for advancing credit to start-up production. In addition to the SBLP model of progress in SHGs, the other most important form of self-help group introduced by the government that directly emphasizes creation of self-employment for the poor households is “Swarnajayanti Gram Swarozgar Yojana”, or SGSY. The previously existing poverty alleviation schemes are no longer effective since the initiation of SGSY in April 1999.

The core strategy of SHG – Bank Linkage Programme (SBLP) is building financial capabilities and self-confidence among the rural poor, through internal savings and lending from the owned funds of the SHGs as well as from formal financial intermediaries. The first official interest in informal group lending in India

Figure 4.12: Spread of Small Scale Industries in South 24 Parganas



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took shape during 1986-87 in the initiative of the National Bank for Agriculture and Rural Development (NABARD). However, it was only in 1992 that legal obstacles were removed and subsidies made available so that SHGs could take bulk loans from banks that could be further lent to group members who could use them to take up or expand micro-business. The financial intermediaries, mainly the commercial banks, regional rural banks and cooperative banks were allowed to count such lending towards their legal obligations to direct a fraction of their loans to the poor, and they were given access to subsidized NABARD refinancing to do so. This marked the gateway of mainstreaming of Indian microfinance. Growth in the number of SHGs formed, and the scale of their interaction with banks, has been very fast particularly since the turn of this century.

According to the data published by NABARD in March 2006, out of the total number of SHGs linked to banks in India 6.09 per cent belonged to West Bengal.

However, the amount of loan received is fairly conservative at 2.13 per cent of total loan disbursed by banks in India. Within West Bengal about 9 per cent of SHGs have been credit linked to banks in the district of South 24 Parganas. As can be seen from Table 4.21, about 12487 SHGs were credit linked to banks in the district by March 2006. The number was only 1905 in March 2002. Thus the number of SHGs in the district increased by about 6.5 times in the period between 2002 and 2007. Though the share of credit disbursed in the district is 6.56 per cent of the total credit disbursed in West Bengal, the amount of loan received by the members of the SHG increased by about 12 times from Rs 12.96 million in 2002 to Rs. 159.08 million in 2006.

The SGSY is being implemented by District Rural Development Agencies (DRDAs) with the active involvement of Panchayats, Banks, the line departments and the NGOs. Under the SGSY, assistance is given to the poor families living below the poverty line in rural areas for taking up self-

employment. The persons taking up self-employment are called *swarozgaris*. They may take up the activity either individually or in groups, called Self-Help Groups. For successful Self-Employment, it is

Table 4.21 : Progress of SHG Bank Linkage in South 24 Parganas

upto 31st March	Number of SHGs			Amount of Bank Loan (in Rs. Million)		
	West Bengal	South 24 Parganas	% in South 24 Parganas	West Bengal	South 24 Parganas	% of South 24 Parganas
2002	17143	1905	11.11	127.19	12.96	10.19
2003	32647	3060	9.37	304.61	18.95	6.22
2004	51685	4903	9.49	604.57	41.54	6.87
2005	92698	9128	9.85	1262.77	109.67	8.68
2006	136251	12487	9.16	2424.52	159.08	6.56

Source: NABARD

necessary to take up the right activity. For this purpose, 4 to 5 activities are selected in each Block with the help of officials, non-officials and the Bankers. These are called 'Key Activities', and should be such that they may give the *Swarozgaris* an income of Rs. 2000 per month, net of Bank loan repayment.

The SGSY scheme of self-employment is well in progress in the district of South 24 Parganas. From the data given by the DRDC, South 24 Parganas Zilla Parishad there is sector-wise classification of key activities. The sectors are primary sector, secondary sector and the tertiary sector. Within the primary sector the key activities are projects related to irrigation, livestock and others. The secondary sector comprises village industries, handicrafts, handlooms and other activities. Activities related to tailoring, shops, bullock-carts and others are found in the tertiary sector. Out of these mentioned activities some of the SGSY programmes in the blocks emphasize some specific activities. The primary sector

Figure 4.13: Number of SHGs Linked with Bank Loans

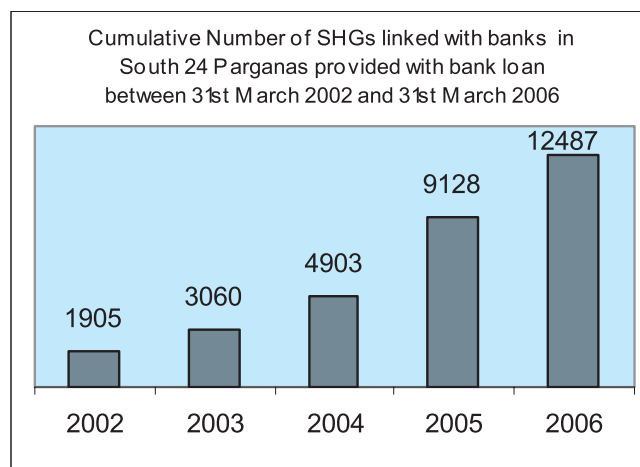
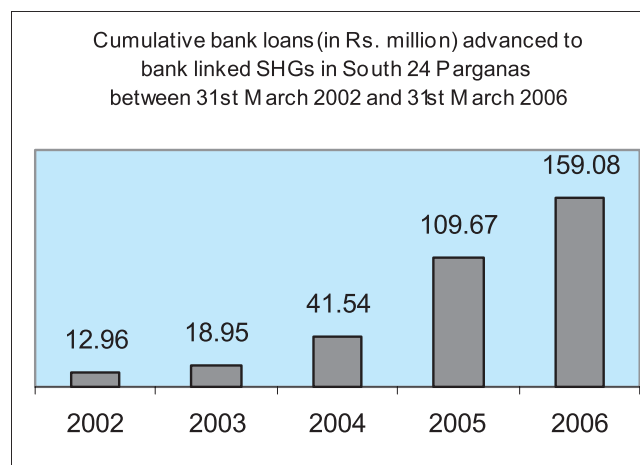


Figure 4.14: Amount of Bank Loans to Linked SHGs



activities are most common among the *swarozgaris*. Within the primary sector livestock related activities have been very popular in the blocks of Budge Budge-II, Canning-I, Gosaba, Thakurpukur-Mahestala, Diamond Harbour-I, Magrahat-I, Magrahat-II and Mathurapur I and II. Village industry is a key activity of *swarozgaris* in the blocks of Diamond Harbour-I, Magrahat-I, Magrahat-II and Namkhana. Handicrafts are very common in Magrahat-II. Tailoring is

popular in Thakurpukur-Mahestala, Diamond Harbour-I and Magrahat-II.

Effective self-employment not only means choosing the right activity but also carrying out the activity in the right manner. Self-employment involves procurement of raw materials, production, marketing of goods and dealing with finance. A single Swarozgari may not be able to do all this by himself/herself. It is, therefore, advisable for the Swarozgaris to form

Groups – the Self-Help Groups. SGSY actively promotes Self-Help Groups. A Self-Help Group (SHG) may generally consist of 10-20 persons. Generally, all members of the Group should belong to families below the poverty line. However, if necessary, a maximum of 20%, and in exceptional cases, where essentially required, upto a maximum of 30% of the members in a Group may be from families marginally above the poverty line if they are

Box 4.3 : Uttar Jafarpur Mahila Machhchas Samabaya Samity - a success story

Uttar Jafarpur is a village in Falta where masonry brush making had been the main source of non-agricultural income in most of the households for a long time. In recent times the main occupation of the households has changed to culture of ornamental fish. The change has been gradual and successful. We take a glance backward to know how and why it happened.

Being inspired by other groups in the locality and of course, the representative of the Fisheries Department, 15 women proceeded to a society that would practice ornamental fish culture. They got registered with the Department of Fisheries as Uttar Jafarpur Machhchas Mahila Samabaya Samity Limited. Since then the success story of the society has attracted not only other women of the village but has also become a model to have been visited, praised and complemented by Honourable Members of Standing Committee of the State Legislative Assembly, the Commissioner of Fisheries of the Government of Tripura, Honourable Members of the IFAD team as also by many researchers from different research institutes including Delhi University. At present, there are 28 members in the society.

The society was assisted technically, financially as well as in kind by the government. All the members got training on ornamental fishery under RSVY scheme from the Fisheries Department. Six managing committee members of the society got Co-operative Management Training. The members were provided with the first dose of loan amounting to Rs. 67150 each, of which Rs. 40290 was loan and Rs. 26860 was the state government share. After repaying the entire amount of the first loan they received the second dose of assistance of Rs. 30,000 as well. The society also received requisites and inputs like oxygen cylinders, dry-food making tools, dry-food etc. worth Rs. 52,000.

The outcome of all these forms of assistance is worth mentioning. First of all, the financial condition of the member households was very poor initially. In the last three or four years, the income level of each of the member households has changed from around Rs. 1000 to Rs. 5000 per month. In fact, all the members have opened individual bank accounts in at the local State Bank. Some of the members could even get their lives insured with LIC. In general, the living standard of each member woman and member households has developed. It is, therefore, no wonder that even the male members of the member households of the society are being attracted and gradually getting engaged in supplying products of ornamental fish farms to different markets and agencies.

acceptable to BPL members of the Group. In order to involve rural women in the process, 50% of the SHGs are exclusively for women.

Financial Assistance under the SGSY to individual *swarozgaris* or Self-Help Groups is given in the form of subsidy by the Government and credit by the banks. Credit is the critical component of the SGSY, subsidy being a minor and enabling element. SGSY promotes multiple credit rather than one-time credit injection. Subsidy under the SGSY is uniform at 30 per cent of the project cost, subject to a maximum of Rs. 7500/-. In respect of SC/STs and disabled persons, however, these are 50 per cent and Rs. 10,000/- respectively. For groups of *Swarozgaris* (SHGs), the subsidy would be 50 per cent of the project cost subject to per capita subsidy of Rs. 10,000/- or Rs. 1.25 lakh whichever is less. There is no monetary limit on subsidy for Irrigation Projects. Subsidy is back ended. It is financed on 75:25 cost sharing basis between the Centre and the States.

About 5 per cent of the total SHGs formed in the State under SGSY till date since its inception belong to the district of South 24 Parganas. For the 11928 groups formed in the district till January 2008, credit has been disbursed to the amount of Rs134.192 million in addition to the

subsidy component amounting to Rs. 93.038 million. Of the self-help groups formed in the district, about 57 per cent have been operative in the blocks of the Sundarbans. Maximum number of groups (1217) has been formed in Patharpratima against a minimum (63) in Thakurpurkur-Mahestala (Table 4.22). Such group formation is found to be comparatively lower in the blocks closer to urban centres. About 53 per cent of the groups formed in the district are groups formed by women.

Right from the beginning, it is necessary that the SHGs should be nurtured carefully. The objective is to identify the weaknesses, if any, and help the group to overcome the same through training and capacity building inputs, so as to develop into a good group. So it is necessary to subject each Self-Help Group to a test to assess whether it has evolved into a good group and is ready to go into the next stage of evolution. This is done through a grading exercise carried out at different stages.

The formation stage lasts for about six months or more depending upon the literacy, awareness levels, socio-economic background of the people being organised, as well as the capacity of the facilitator involved in the process of social mobilization and Group formation. At the end of the formation stage the groups are subjected to first grading immediately.

Indicators of evaluation considered for Grade I include regularity of meetings and attendance rate of the members in the meeting, transparency of rules of the group, regularity of savings and the share of savings forwarded as loan, repayment rate, maintenance of accounts, involvement in social activities, and presence in the meetings of assistants. A group scoring 60% in the evaluation process passes grade I. At this stage the group can open cash-credit account to the limit of four times the group corpus in the concerned bank. Also DRDC provides them with revolving fund of Rs. 5000. Small productive investments can be made by the group with credit obtained at this stage. Six months after the first evaluation, the group is liable to the second stage of evaluation called Grade II. For grade II, in addition to evaluation of indicators for Grade I, it is seen whether revolving fund has been rightly utilised, loan and repayment of loan is satisfactory or not, whether full knowledge has been obtained about the project and transactions with the bank. Groups scoring 80% or more pass Grade II and enters the third stage, wherein it receives credit from the bank as well as additional Revolving Fund to undertake major investment projects.

About 66 per cent of the groups in this district have passed Grade I. So 7876 number of groups were availing small credit

while 14 per cent passing Grade II could avail credit for major investment in production rather than consumption. However, only 9 per cent of the groups passing Grade I and 3 per cent of the groups passing Grade II have taken up economic activities. Though larger number of groups have been formed in the Sundarbans but in terms of taking up economic activities, Region II has been far more efficient. In fact 85 per cent and 47 per cent of the groups taking up economic activities after passing Grade I and Grade II respectively are from Region II. So, there is further scope of overcoming the problems of weak groups so that they can take up more and more economic activities successfully.

b. National Rural Employment Guarantee Act, 2005

NREGA, 2005 is an Act to provide for the enhancement of livelihood security of the households in rural areas of the country by providing at least one hundred days of guaranteed wage employment in every financial year to every household whose adult members volunteer to do unskilled manual work and for matters connected therewith or incidental thereto. Unlike any other government scheme, it gives a *legal guarantee of wage employment*. Every person who has done the work given to him under the Scheme is entitled to receive

Table 4.22: Block-wise Physical Progress of SGSY upto January 2008 since April 1999

Block	No. of SHGs formed	No. of SHGs passed Grade I	No. of SHGs passed Grade II	Number of SHGs taken up economic activities		No. of women SHGs formed
				Grade I	Grade II	
Thakurpukur Maheshtala	63	45	16	0	7	39
Budge Budge I	130	107	29	0	13	75
Budge Budge II	221	166	16	0	6	139
Bishnupur-I	376	280	19	0	1	187
Bishnupur II	218	204	54	0	22	137
Sonarpur	134	48	9	0	0	76
Region I	1142	850	143	0	49	652
Baruipur	423	304	25	142	13	243
Bhangar I	541	419	74	312	0	323
Bhangar II	233	79	3	32	0	127
Falta	374	209	11	0	2	228
Diamond Harbour I	353	360	90	32	48	188
Diamond Harbour II	281	238	80	0	49	181
Magrahat I	325	279	54	0	12	205
Magrahat II	868	670	135	355	38	503
Kulpi	449	437	95	0	16	276
Mandirbazar	121	30	14	0	0	52
Region II	3968	3025	581	873	178	2327
Canning I	348	145	47	0	17	201
Canning II	259	101	0	0	0	100
Basanti	432	168	11	85	5	151
Gosaba	681	353	95	0	13	389
Joynagar I	430	328	23	0	0	263
Joynagar II	628	430	57	14	29	302
Mathurapur I	419	177	16	0	13	142
Mathurapur II	419	298	10	0	6	195
Kultali	374	272	66	0	0	192
Patharpratima	1217	853	305	0	28	687
Kakdwip	614	321	96	0	6	281
Namkhana	592	319	187	33	27	262
Sagar	405	236	80	20	9	184
Region III	6818	4001	993	152	153	3347
TOTAL	11928	7876	1717	1025	380	6327

Source: DRDC, South 24 Parganas Zilla Parishad



Table 4.23 : Progress of NREGA in South 24 Parganas between April 2007 and January 2008

Blocks	No. of Applications Registered	No. of Job Cards issued	Demand for Employment		Employment Provided		No. of Works		Expenditure (in Rs. Lakhs)	No. of Mandays Created (in Lakh)
			No. of Households	No. of Individuals	No. of Households	No. of Individuals	Completed	In progress		
Thakurpukur-Maheshtala	4231	3847	642	657	642	657	17	7	8.42	0.087
Budge Budge I	6167	5907	1097	1106	1097	1106	21	4	10.57	0.092
Budge Budge II	21512	19051	7908	8514	7622	8189	46	106	58.84	0.638
Bishnupur I	17285	14365	1391	1555	1391	1555	16	45	16.94	0.159
Bishnupur II	16171	12764	2346	2346	2346	2346	29	33	30.26	0.315
Sonarpur	15082	12357	3736	4078	3736	4078	27	27	41.05	0.466
Region I	80448	68291	17120	18256	16834	17931	156	222	166.08	1.757
Baruipur	27895	26767	7719	12480	7719	12480	54	100	50.54	0.571
Bhangar I	16712	15049	4131	4258	4042	4172	34	40	41.34	0.439
Bhangar II	23024	21093	5802	5857	5802	5857	37	29	41.4	0.494
Falta	20284	19969	6316	15794	6316	15794	29	68	45.42	0.599
Diamond Harbour I	12352	12120	1914	3454	1914	3454	34	25	30.95	0.322
Diamond Harbour II	21285	21285	7328	7525	7253	7434	101	77	82.45	0.726
Magrahat I	22144	18237	4591	3969	3501	3289	21	22	37.49	0.368
Magrahat II	12591	12032	2510	2773	2351	2620	70	48	37.35	0.297
Kulpi	30824	29115	12029	20424	9329	17442	111	81	100.81	1.096
Mandirbazar	20757	20288	3855	4766	3625	4066	22	92	70.95	0.478
Region II	207868	195955	56195	81300	51852	76608	513	582	539	5.388
Canning I	19596	18341	6224	7492	6204	7443	30	11	61.25	0.741
Canning II	17241	12520	6992	10100	6611	6514	31	26	61.48	0.816
Basanti	33017	29382	7198	11578	7078	11485	35	44	41.83	0.579
Gosaba	40096	37737	15744	17625	15700	17581	78	57	93.3	1.297
Joynagar I	32031	25592	12420	12420	8143	8143	107	72	38.36	0.478
Joynagar II	26370	24126	6534	8169	6534	8169	76	20	73.1	1.041
Mathurapur I	23654	23114	15004	24899	15004	24899	60	35	85.51	0.894
Mathurapur II	34604	33711	17816	26983	10435	20970	135	51	149.35	1.256
Kultali	30338	28387	29267	57603	28466	46350	130	72	161.37	2.405
Patharpratima	52709	50083	32645	40563	31870	40330	430	317	630.94	8.331
Kakdwip	28495	27169	14175	17435	14054	17286	198	84	266.11	3.015
Namkhana	27922	26381	11038	12730	11038	12730	314	141	295.59	3.233
Sagar	25817	25817	12405	16271	12405	16271	72	73	175.46	2.034
Region III	391890	362360	187462	263868	173542	238171	1696	1003	2133.7	26.12
Total	680206	626606	260777	363424	242228	332710	2365	1807	2838.4	33.266

Source: NREGA Cell, South 24 Parganas

Box 4.4: Taramoni's day out

Taramoni Das of Bibir Chowk village is an illiterate middle-aged woman who lives with her husband, two children and mother-in-law. Bibir Chowk is a village in Langalberia Gram Panchayat of Sonarpur Block. Taramoni's husband is illiterate and works as a daily casual labourer who doesn't have any year-round employment. Both the children go to school – the boy studies in Class VII and the girl in Class III in local government schools. Taramoni wants her children to get proper education. Fluctuation in her family income due to the casual nature of employment for her husband compels Taramoni to look for supplemental income to ensure her children's education. Without any specialized skill, the only opportunity for Taramoni is to work as a daily labourer in the guava orchards of the locality at wage as low as Rs. 50 per day. But, even this opportunity is seasonal and comes only when the guava crop is harvested.

When we met Taramoni on January 30, 2008, she was working along with her mother-in-law Gouri Devi and 300 others in a project taken up jointly by the Gram Panchayat and Panchayat Samiti under National Rural Employment Guarantee Scheme. A pond on nine bighas of vested land, locally known as Hedupukur, was being digged and renovated by 300 workers – all of whom were poor residents of the area. Forty per cent of the labourers were women. Both men and women worked at a daily wage of Rs. 75. Each male labourer was supposed to dig and clear 88 cubic feet of mud and soil daily to earn his wage while each female worker was made responsible for clearing 75 cubic feet of soil. When we turned up at Hedupukur, the elected Gram Panchayat members were present at the site and inspecting the work. A conversation with one of them revealed that the Panchayat was planning for beautification of the pond and the surrounding area. A sweet-water fishery organized on co-operative basis by the local Self-Help Groups for income generation was one of the objectives behind the project. In an adjacent plot which is also vested, the Panchayat planned to develop a picnic spot with all the necessary facilities for renting out. This, the Panchayat members hoped, would somewhat enhance the GP's own revenue collection.

When we asked Taramoni whether she would be talking to us for a minute, she came up from the pond being covered in mud. She was toiling hard and earning little, but her face revealed that she was happy with her work. She expected to continue with the work for at least thirty days. The Panchayat member seconded this by stating that Rs. 10 lakh had already been sanctioned for the project most of which would be spent in labour payment. The Gram Panchayat was trying to get more funds from the upper tiers. Taramoni said that winter is a lean season for guava crop and it was very hard to find other work. So it was very good that the Panchayat took the initiative for the project which provided many like her the opportunity to earn some money for the family. She hoped for more initiatives like this in future. Her peers - among whom there was her mother-in-law, Gouri Devi-called her back to work and she joined them carrying her *jhora* (a bamboo basket). They started carrying loads of soil on a relay basis while laughing and joking among themselves. It was indeed a happy sight that NREGS - a Government programme – was bringing smiles to poor women like Taramoni.

wages at the wage rate for each day of work on a weekly basis or in any case not later than a fortnight after the date on which such work is done. The Panchayats at district, intermediate and village levels are the principal authorities for planning and implementation of the Schemes made under this Act. Any adult living in rural areas can apply for work. That is, the benefits of the Act are not restricted to households living below the poverty line.

The two steps followed to apply for work are: first, a household has to register with the gram panchayat. Then the adult members of the household have to apply for work. While registration of the household must be done only once every five years, individual applications for work have to be submitted each time work is sought. After registration of the household, a job card is issued to the household. This card records details of the number of days a person has

worked, wages received, unemployment allowances received, and so on. Applications for work are submitted to the applicant's gram panchayat or the state employment guarantee scheme's block-level programme officer. If an applicant for employment under the Scheme is not provided with such employment within fifteen days of receipt of his / her application seeking employment or from the date on which the employment has been sought in the case of an advance application, whichever is later, he is entitled to a daily unemployment allowance.

So far as the district of South 24 Parganas is concerned, much is yet to be achieved in terms of employment generation under this Act in this district. Only 2.6 lakhs of households in the district have demanded employment in a period of ten months between April 2007 and January 2008, whereas according to RHS 2005, there were about 4.2 lakhs households below poverty line in the district. Though NREGA is not meant for BPL households only but the number of households that are demanding such employment is not even equal to the number of BPL households in the district. Demand for employment and creation of employment through NREGA has been much higher in Region III compared to Region I or II. Per household

employment generated in Region III has been 15.05 mandays in the given period as compared to 10.44 mandays in Region I or 10.39 mandays in Region II.

A possible explanation for comparatively lower demand for employment under NREGA seems to be the fact that a minimum wage of Rs. 75 per manday would mean average yearly income of Rs. 7500 per household which is Rs. 625 per month per household at present minimum wage is Rs. 81 per manday. Such income can only be the supplement of the household income from some other form of stable income. It is instead natural for the household members to move in search of some form of regular income and smooth out the risk rather than wait and demand for such irregular type of employment. Perhaps that is the reason that only about one-third of the households registering their application have finally demanded such employment. Households from blocks of the Sundarbans have actually opted more for such employment due to the absence of other type of employment. Almost hundred per cent of the households demanding such employment have been provided with work though it was far below the targeted level of hundred mandays. This is where government intervention is strongly required so that the possibility of employment generation under this Act be fully exhausted.

4.6 Concluding Comments

The livelihood patterns in an area often depend on its prevailing economic, social and geographic characteristics. The district of South 24 Parganas is no exception and, due to the wide variation in topography of the district, the employment opportunities are different in different regions. Only 16 per cent of the district population resides in the urban areas. Among the rest, a large section, particularly in thirteen of the twenty nine blocks of the Sundarbans, lives in the riverine villages. While the blocks close to Kolkata metropolis have greater dependence on non-farm employment, dependence on agriculture and allied activities increases as one move farther south.

Agriculture in the district is turning out to be gradually unremunerative, high dependence on which is often leading to poverty. As a result, decline in the agricultural workforce is observed in the district. This in no way means that the potential of agriculture is exhausted in the district. There are constraints in agriculture which can be overcome in the future. Emphasis needs to be given particularly on making irrigation facilities available. In the absence of any such initiative to improve the return from agriculture, people are shifting towards other means of income in the non-agricultural sector. So a process of structural transformation is taking place in the district. However, it is indeed a matter of concern that this process is mostly towards a vulnerable low return non-agricultural sector. This together with the

crisis in returns to agriculture poses serious challenge to the development process of the district. Of course, besides improving the condition of agriculture, there are other areas of prospect and potential which need to be tapped immediately.

The importance of better communication network between the rural areas and the urban centers in promoting rural employment has also been revealed by our study. The existence of such a network can, on the one hand, allow 'temporary migration' between the rural and urban areas and, on the other, can lead to better marketing channels of the rural products. We also found the successful existence of sub-contracting in the areas that were in the urban proximity. Such vertical integration of industries can be emphasized further only when the transport and communication network between the villages and the closest industrial centers are good enough.

Among alternative sources of employment and livelihood, pisciculture is an area which already employs a large number of people, but large unutilized capacity still remains. Horticulture is another area that can be developed into a very remunerative employment generating activity with proper infrastructure development. The Sundarbans being a World Heritage Site, there is a lot of interest and if proper facilities are developed in an eco-friendly manner, tourism industry will have a huge potential in the district.

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