

Material Conditions and Standard of Living

3.1 Introduction

The West Bengal Human Development Report 2004 recognized West Bengal as a middle income state – ranked ninth among the fifteen major states in terms of both per capita income as well as per capita consumption expenditure at the turn of this millennium. The district of

South 24 Parganas portrays a less impressive scenario among the districts of West Bengal. It ranks eleventh among the eighteen¹ districts of the state in terms of per capita income in 2000-01. In 2000-01, an average person living in the district earns 88 per cent of the per capita income of the state, 68 per

Table 3.1 : Estimates of Per Capita Income by Districts of West Bengal at Current Prices

District	1993-94		2000-01		2003-04	
	Per capita income (in Rs.)	Per capita income rank	Per capita income (in Rs.)	Per capita income rank	Per capita income (in Rs.)	Per capita income rank
Kolkata	10464.88	1	31986.66	1	46833.85	1
Darjeeling	7715.18	4	20996.60	2	23967.49	2
Burdwan	8726.05	2	18136.68	3	23769.90	3
Howrah	6910.56	5	17123.41	4	22565.69	4
Hooghly	7806.88	3	16682.20	6	22397.81	5
Medinipur	6789.38	6	17040.37	5	20914.35	6
Nadia	6494.00	9	16334.30	7	19980.67	7
Jalpaiguri	6512.35	8	15960.37	8	19103.63	8
Malda	5493.04	15	14485.46	11	18643.99	9
Bankura	6130.52	11	15459.48	9	18236.17	10
Dakshin Dinajpur	5389.39	16	14793.98	10	17895.20	11
South 24 Parganas	6230.73	10	14204.78	12	17759.77	12
Murshidabad	5788.67	12	13375.86	13	17486.22	13
Coochbehar	5564.27	14	13093.14	15	16657.68	14
North 24 Parganas	6526.61	7	12832.88	16	16502.79	15
Birbhum	5668.10	13	12823.18	17	16466.24	16
Purulia	5262.84	17	13128.74	14	16182.38	17
Uttar Dinajpur	4825.01	18	11264.34	18	14046.26	18
West Bengal	6755.95	–	16145.87	–	20895.64	–

Source: BAE&S, GoWB

¹ The data for per capita income is available only for the combined Medinipur district in 2000-01.

cent of the per capita income of the highest ranked district (Darjeeling) in the state other than Kolkata and 44 per cent of the per capita income of Kolkata. The situation is not encouraging at all to say the least. Over the last few years the relative position of the district vis-à-vis the other districts remains almost the same (Table 3.1).

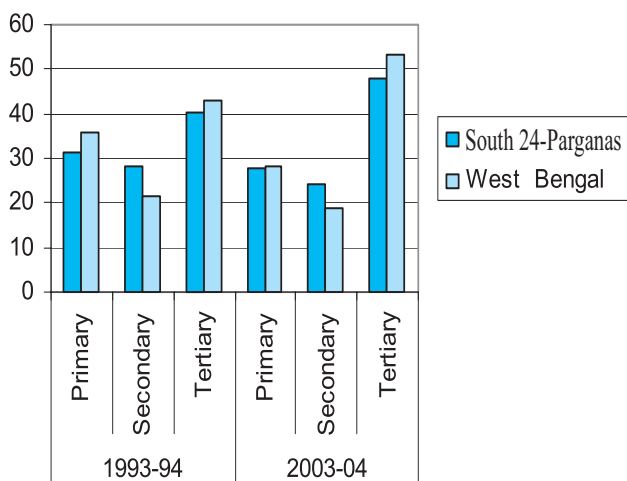
Table 3.1 reflects a picture that does not speak well for the district. From 1993-94 to 2003-04, the relative position of the district in the state has worsened, even though marginally. Even predominantly

rural districts - located far from Kolkata-like Malda and Dakshin Dinajpur have performed much better than South 24 Parganas in terms of achieving higher per capita income. The Bureau of Applied Economics and Statistics (BAE&S), Government of West Bengal, reported that the average annual growth rate of per capita income at constant price in South 24 Parganas between 1996-97 and 2003-04 was 5.68 per cent, which, while not bad, is by no account remarkable.

3.2 Sectoral Composition of Output

The share of primary sector in net domestic product declined both in the state of West Bengal as well as in the district of South 24 Parganas between 1993-94 and 2003-04. One observation that is particularly

Figure 3.1: Sectoral Shares of Net District Domestic Product at Current Prices



Source: BAE&S, GoWB

heartening for the district is the healthy rate of growth of output in the secondary sector. According to the report published by BAE&S on the state and district domestic products of West Bengal, the secondary sector output at constant prices has doubled between 1993-94 and 2003-04, with the growth evenly spread among the manufacturing, construction and electricity, gas and water supply. The annual average compound growth rate in the secondary sector was 7.18 per cent over this period; this outstrips the state average for the same by more than one percentage point. If the construction of the proposed Kulpi port takes off, it will give great impetus to the manufacturing sector in the

Table 3.2: Annual Average Compound Growth Rate of Net Domestic Product between 1993-94 and 2003-04 at Constant Prices

District	Annual average compound growth rate of net domestic product		
	Primary	Secondary	Tertiary
South 24 Parganas	3.79	7.18	8.98
West Bengal	3.64	5.95	9.91

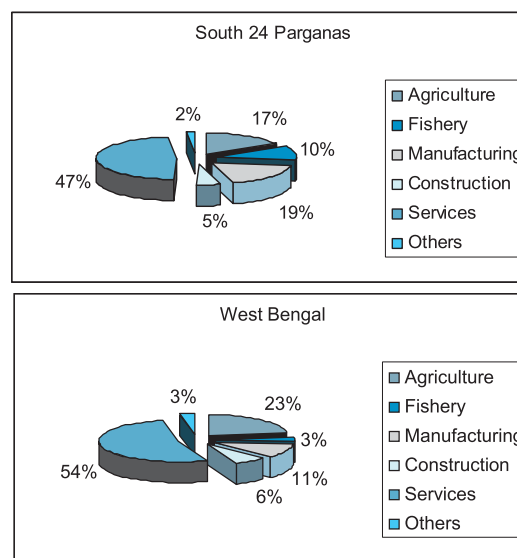
Source: BAE&S, GoWB

district for generating productive employment and improving the standard of living in the district. Having an already established industrial base in the Budge Budge – Maheshtala industrial belt and Falta Export Processing Zone and being located close to Kolkata geographically can only help its cause in becoming a first-choice location for manufacturing investment. The share of registered and unregistered manufacturing in the net domestic product of the district was 19 per cent in 2003-04 compared to 11 per cent for the state as a whole.

Agriculture and pisciculture continue to be two very important sources of livelihood in the district of South 24 Parganas. According to 2001 census, 49 per cent of rural workers were then engaged in agriculture, while in 2003-04 agriculture has contributed only 16 per cent of net domestic product of the district. This shows the enormous labour-absorbing power of agriculture. Agricultural output has grown by 3.40 per cent per year on average during the decade 1993-94 to 2003-04. This is

marginally lower than what the state as a whole experienced over the same period. The population pressure on land has been historically very high in West Bengal and the district of South 24 Parganas is no exception. The amount of cultivable

Figure 3.2: Sectoral Composition of Net Domestic Product of South 24 Parganas and West Bengal in 2003-04



land per agricultural worker is only 0.41 hectare in the district. Moreover, while one of the reasons behind the progress of agriculture in the districts like Hooghly and Burdwan is the enhancement of ground-water irrigation thus inducing more intensive cropping pattern and cropping diversity, the irrigation facilities in South 24 Parganas have not been extended to a satisfactory scale. In fact, in 2001-02 only 29 per cent of the cultivable area was irrigated. As a result, agriculture in the district mostly



remains a mono-crop activity. The agricultural employment in a large part of the district is thus of seasonal nature.

In 2003-04, almost 10 per cent of net domestic product of South 24 Parganas is generated in pisciculture. Being a riverine district with almost a third of the population living in islands of the southern Sundarban blocks, fishing is a natural occupational choice for a large portion of the population. Historically, the district has both saline and sweet water fisheries. As reflected in the district statistical handbook published in 2005, only about 40 per cent of total area available for pisciculture is being put to effective use

in the district presently. This is a serious under-utilization, particularly considering the natural propensity and specialization of the people of the district in this particular profession. In 2005, almost 3.75 lakh persons were engaged in the professions related to pisciculture and this number is about 17-18 per cent of total rural workers.

The service sector has grown rapidly in South 24 Parganas over the decade spanning 1993-94 to 2003-04. The share of services in NDP was 47 per cent at 2003-04 as against 40 per cent in 1993-94. The major contributory services are trading, banking and insurance and real-estate.

3.3 Structure of Landholding

South 24 Parganas is a land scarce economy just like the rest of West Bengal. Though the population density for the district is lower than the average for the state, 44 per cent of the reported area of the district is forest area, making the effective density of population much higher. With 85 per cent of the total population living in rural areas with limited livelihood opportunities other than agriculture, the pressure on land is immense.

Availability of cultivable land is a critical determinant in the choice of livelihood in rural areas of the district. While per capita

cultivable land for rural population is the lowest at 0.019 hectare in Thakurpukur-Maheshtala block, the same is 0.126 hectare in Patharpratima block and 0.106 hectare in Kultali block. Consequently, while only 19.48 per cent of total workers depend on agriculture for their livelihood in Thakurpukur-Maheshtala, this percentage is more than 60 in many Sundarban blocks including Patharpratima and Kultali. Generally, the settlement density is lower in the Sundarban region, thereby making the land availability scenario better than the rest of the district. On the flip side,

many of the Sundarban blocks are close to the Bay of Bengal and being enclosed by rivers with saline water have very limited irrigation facilities. Thus, Sundarbans remain mostly a mono-

cropped area making earning a proper livelihood from land more difficult.

The scope for generating additional employment in land is also very limited unless the cropping intensity of the district

Table 3.3: Land and Agricultural Workforce Relations in Blocks of South 24 Parganas, 2001

Block	Net Area under Cultivation (in ha)	Rural Population	Total Agricultural Workers ^a	Relative availability of cultivable land (ha per capita)	Cultivable land per agricultural worker (in ha)	Agricultural workers as % of total workers
Thakurpukur-Maheshtala	2030	109134	7439	0.019	0.273	19.48
Budge Budge - I	2193	48936	3786	0.045	0.579	25.03
Budge Budge - II	5187	152086	16528	0.034	0.314	33.82
Bishnupur - I	9363	191645	27280	0.049	0.343	43.34
Bishnupur - II	6720	177369	14115	0.038	0.476	24.18
Sonarpur	8532	167408	15483	0.051	0.551	29.37
Baruipur	16705	351439	35373	0.048	0.472	33.78
Bhangar - I	12272	199369	33060	0.062	0.371	53.53
Bhangar - II	12026	207580	31655	0.058	0.380	53.77
Falta	10531	221695	30522	0.048	0.345	41.78
Diamond Harbour - I	3340	133366	13689	0.025	0.244	35.53
Diamond Harbour - II	7248	165233	18469	0.044	0.392	37.23
Magrahat - I	10316	228335	22228	0.045	0.464	30.79
Magrahat - II	11288	250901	25975	0.045	0.435	38.95
Kulpi	17665	242752	31981	0.073	0.552	44.74
Mandirbazar	10212	183131	19153	0.056	0.533	34.30
Canning - I	15862	244627	29359	0.065	0.540	37.13
Canning - II	15748	195967	43863	0.080	0.359	73.93
Basanti	26151	278592	66004	0.094	0.396	74.02
Gosaba	17000	222822	63277	0.076	0.269	73.53
Joynagar - I	9402	214026	22209	0.044	0.423	33.78
Joynagar - II	15539	209145	36698	0.074	0.423	54.08
Mathurapur - I	11980	164650	21303	0.073	0.562	46.73
Mathurapur - II	17878	198281	40558	0.090	0.441	62.54
Kultali	19923	187989	42135	0.106	0.473	71.61
Patharpratima	36429	288394	80887	0.126	0.450	65.84
Kakdwip	15973	239326	44487	0.067	0.359	53.26
Namkhana	16910	160627	43895	0.105	0.385	63.81
Sagar	17436	185644	55683	0.094	0.313	73.95

Note:a) Total number of agricultural workers is sum of cultivators and agricultural workers.

Source: BAE&S, GoWB and Census of India, 2001



changes significantly. Already, 2-4 agricultural workers are employed per hectare of cultivable land in most of the blocks though many of them are mono-cropped areas. In South 24 Parganas, the major crop is Kharif paddy with only some pockets of cultivation for other produces. Over the last few years, the price of food-grain, particularly rice, has increased at a relatively much lower rate to prices of purchased inputs. Post liberalization

withdrawal of input subsidies has reduced the return from cultivation significantly, thus making agriculture a less preferred choice of livelihood. The district is thus poised for a great degree of occupational diversification which is already in evidence in some blocks where alternative livelihood opportunities present themselves. The pattern and trend of occupational diversification towards non-farm sector is discussed in detail in a separate chapter of this report.

3.4 Land Reforms

It has been well recognized and documented by eminent social scientists that one of the major successes of the Left Front Government was the implementation of land reforms in the state after 1977. This not only changed the agrarian relations and the organization of agricultural production in the rural economy, but also went a long way in creating a democratic environment in the rural society where the peasantry became more conscious of their duties and rights. As rightly pointed out in the West Bengal Human Development Report 2004, land reforms represented the outcome of a long period of struggle by the peasantry and the social and political mobilization of the landless and the share-croppers in the countryside. At least two major peasant

movements that the state of West Bengal witnessed in the post-independence period had originated from the district of South 24 Parganas. The historical movement of the share-croppers in 1948 for three-fourth share of the produce – popularly known as ‘*Tebhaga Andolan*’- had started in the Kakdwip block. In 1967, the peasants of Sonarpur block started re-acquiring land which were rightfully theirs but were forcibly acquired and registered under false names by the landlords. It is not surprising, therefore, that the district of South 24 Parganas has done well in this front.

The process of land reforms took shape in the form of (i) acquisition of excess land over that permitted by land ceiling and redistribution of vested land and

(ii)securing of tenancy rights through a programme of universal registration of tenants called 'Operation Barga'. According to the latest available information from the Office of the District Land and Land Reforms Officer, 126818 bargadars are registered in South 24 Parganas. As on 2001, the extent of such registration as proportion of total cultivators in the district is 31.7 per cent which is slightly higher than the state average. So far 1.02 lakh acres of land have been identified as vested land in the district out of which 70 per cent have been distributed among 164670 pattadars giving each beneficiary 0.43 acre of land on an average.

Though overall 70 per cent of the total amount of

vested land has been distributed in the district, a look at the more disaggregated data reveals that there is yet scope for improvement here. Even after accounting for the fact that some amount of vested land may be kept aside for other uses,

Table 3.4: Block-wise Distribution of Vested Land

Block	Amount of vested land (in acre)	Amount of land distributed (in acre)	Land distributed as percentage of vested land	Total no. of patta holders
Thakurpukur-Maheshtala	98.96	19.20	19.40	47
Budge Budge - I	231.58	15.06	6.50	83
Budge Budge - II	61.97	55.83	90.09	548
Bishnupur - I	205.92	87.77	42.62	565
Bishnupur - II	111.03	84.81	76.38	424
Sonarpur	3020.43	1245.06	41.22	2992
Baruipur	1512.20	1409.09	93.18	3309
Bhangar - I	2223.47	1292.81	58.14	4364
Bhangar - II	969.24	884.72	91.28	3240
Falta	742.19	395.71	53.32	2256
Diamond Harbour - I	480.93	211.67	44.01	1304
Diamond Harbour - II	692.65	236.96	34.21	1244
Magrahat - I	564.10	452.21	80.16	3294
Magrahat - II	407.19	287.23	70.54	1582
Kulpi	3855.09	1187.58	30.81	4769
Mandirbazar	1097.89	413.42	37.66	2116
Canning - I	3452.16	2831.61	82.02	9254
Canning - II	8190.21	4928.54	60.18	11125
Basanti	10057.41	5538.93	55.07	9397
Gosaba	13608.34	13084.98	96.15	26176
Joynagar - I	735.35	568.02	77.24	957
Joynagar - II	2264.39	2034.12	89.83	1342
Mathurapur - I	979.38	607.37	62.02	1787
Mathurapur - II	5107.33	4526.53	88.63	8310
Kultali	5859.51	5621.97	95.95	10375
Patharpratima	14660.14	8604.22	58.69	13246
Kakdwip	6277.82	3497.88	55.72	12021
Namkhana	6838.12	5757.18	84.19	15193
Sagar	7926.42	5680.89	71.67	13350

Source: Office of the DL&LRO, South 24 Parganas

large area of land is still available for distribution in blocks like Sonarpur, Kulpi, Canning-II, Basanti, Patharpratima, Kakdwip and Sagar. This should be immediately taken care of, particularly so in the blocks of the Sundarban region where agriculture still



remains the only source of livelihood for a majority of the people.

The success of the district of South 24 Parganas in implementing the land reforms, however, lies elsewhere. The district has been extremely successful in ensuring that the benefits of land reforms reach the most underprivileged sections of the society. Though only 32.12 and 1.23 per cent of the total population belong to the Scheduled Castes and the Scheduled Tribes

respectively, the persons belonging to these groups comprise 39.22 and 7.94 per cent of the total number of pattadars. While in West Bengal the single female and joint patta holders consist of only 15.6 per cent of total number of patta holders, the corresponding number for the district is 51.1 per cent. This is indeed a very laudable effort and has very positive implication for the cause of gender empowerment.

3.5 Distribution of Landholdings

The distribution of landholdings is extremely fragmented in South 24 Parganas. In all the blocks, even in the distant and almost completely rural blocks, more than 85 per cent of households are either landless or marginal farmers. This is not at all surprising, given the immense population pressure on land in absence of alternative livelihood opportunities. The successful implementation of land reforms in the district also played its part in fragmenting the land ownership structure. There are relatively few medium and large farms in the district.

According to 2000-01 Agricultural Census, only about 2 per cent of the farms in South 24 Parganas operate land larger than 2 acres. The total area under operation of these farms is about 9 per cent of the

Figure 3.3: Number and Area of Operational Holdings under Different Size Classes

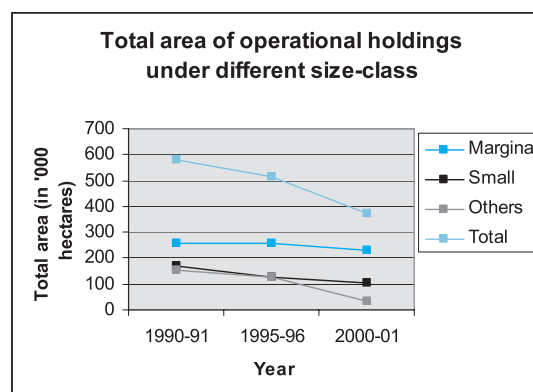
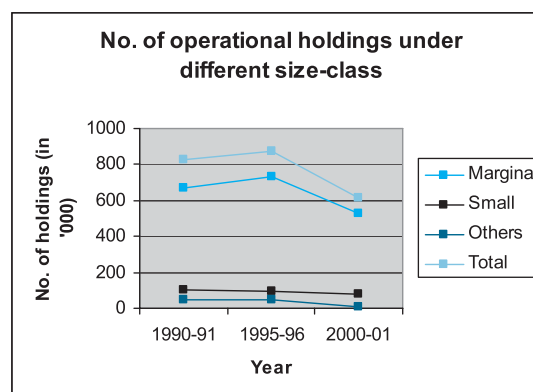


Table 3.5: Block-wise Distribution of Households based on Operational Land Holdings in South 24 Parganas

Block	Percentage of households with				
	No land	Irrigated land less than one acre or non-irrigated land less than two acres	Irrigated land between one and two acres or non-irrigated land between two and four acres	Irrigated land between two and four acres or non-irrigated land between four and six acres	Irrigated land more than four acres or non-irrigated land more than six acres
Thakurpukur-Maheshtala	69.42	25.84	2.72	0.93	1.09
Budge Budge - I	71.51	25.74	2.09	0.35	0.32
Budge Budge - II	74.34	19.89	2.92	1.18	1.67
Bishnupur - I	70.36	24.08	3.45	0.91	1.19
Bishnupur - II	74.41	19.85	3.19	1.05	1.50
Sonarpur	63.78	27.41	5.37	2.29	1.15
Baruipur	65.68	24.14	6.44	2.43	1.31
Bhangar - I	54.54	33.04	7.64	2.99	1.78
Bhangar - II	56.49	32.52	8.33	1.92	0.74
Falta	73.95	21.45	3.59	0.54	0.47
Diamond Harbour - I	76.76	18.96	3.07	0.65	0.56
Diamond Harbour - II	74.20	21.69	2.70	0.64	0.77
Magrahat - I	74.67	19.98	2.86	0.61	1.88
Magrahat - II	67.69	26.55	4.02	0.75	0.99
Kulpi	68.89	23.19	5.34	1.41	1.17
Mandirbazar	65.83	26.01	6.01	1.22	0.94
Canning - I	58.92	31.43	6.68	2.53	0.44
Canning - II	55.86	34.38	7.26	1.68	0.82
Basanti	43.97	44.80	7.15	2.91	1.17
Gosaba	35.59	48.28	11.67	3.22	1.23
Joynagar - I	69.38	23.20	4.88	1.79	0.74
Joynagar - II	52.09	37.48	7.78	2.17	0.49
Mathurapur - I	61.65	29.60	5.83	1.37	1.55
Mathurapur - II	51.70	38.55	6.66	2.14	0.95
Kultali	31.25	53.45	11.50	3.23	0.57
Patharpratima	30.66	53.99	10.50	3.06	1.80
Kakdwip	56.58	32.78	6.72	2.95	0.97
Namkhana	39.00	51.22	7.41	1.99	0.38
Sagar	31.61	55.61	10.11	2.08	0.59

Source: Rural Household Survey, 2005, Office of the District Magistrate, South 24 Parganas

total area operated in the district. On the other hand, almost 86 per cent of the holdings are marginal holdings less than one acre of land in size. This is a clear

indication of how fragmented the distribution of land is in the district.

A disturbing feature becomes evident once one looks at number and area-wise



distribution of holdings under different size classes over time. Even in the early nineties, there has been increasing marginalization of landholdings. From the early to mid nineties, the number of marginal holdings increased whereas the total area of operation under marginal holdings remained more or less stagnant. During the same period, there has been a fall in the area operated by other types of holdings. One can attribute this event to increasing population pressure on land when there are few other livelihood opportunities. But from the mid nineties onwards, both the number of holdings and area under operation fell across all size classes, indicating an increasing alienation from land. One possible reason for this is the steep rise in the cost of purchased inputs after post-liberalization withdrawal of agricultural subsidies without any compensating increase in either farm productivity or in the price of output. As a result, the marginal farmers are either forced to put their

small pieces of land into alternative uses wherever the opportunities present themselves, or in some cases may even be involved in distress sale of land.

Looking at a more disaggregated level, in no block of South 24 Parganas more than 5 per cent of households have more than two acres of irrigated land or more than 4 acres of non-irrigated land. Even among the Sundarban blocks where hardly any alternative exists only Gosaba and Patharpratima have more than 15 per cent of the households with larger than one acre farms. Given the present state of agriculture in the country as a whole and the state in particular, it is extremely difficult for tillers of such small plots of land to maintain a living in a district with relatively backward agriculture. Consequently, diversification into non-agriculture has become a prominent phenomenon whenever an opportunity presents itself. But in areas where such opportunities are missing, there is rising impoverization of people dependent on agriculture.

3.6 Agricultural Production and Yield

South 24 Parganas, unfortunately, is a district where the potential in agriculture is severely underutilized. The district represents mostly mono-crop cultivation with kharif paddy being the dominant one. With only about 30 per cent of net

cultivable area having irrigation facility, increasing cropping intensity and crop diversification remain difficult for the farmers. As a result, the employment opportunities in agriculture become limited, besides, decreasing the return from land for

the cultivators. The following table shows the meagre amount of land put into use for cultivating crops other than rice and their levels of production in the district.

It is clear that except for *aman* rice and to a little extent oil seeds, area and production of all other principal crops in the district have declined over the five year period between 2000-01 and 2004-05. Oil seeds cultivation in the district is mainly limited to Bhangar-I and Bhangar-II blocks where almost 100 per cent of the agricultural land are irrigated. Blocks like Sonarpur and Bishnupur-I have satisfactory irrigation facilities, but being close to Kolkata, are consequently subjected to rapid urbanization and corresponding shrinking of agricultural activity. The

Boro rice cultivation which is more dependent on irrigation because of its intensive use of water has suffered a dip both in terms of area under cultivation and level of production.

It is interesting to note that yield rate of rice in South 24 Parganas has always

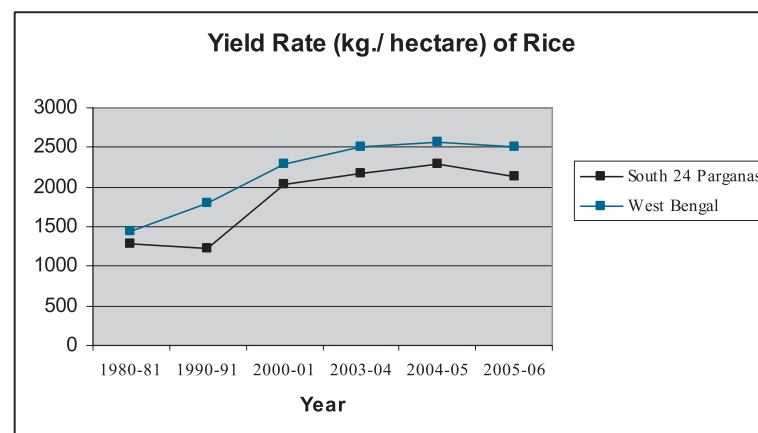
been lower than that in the State. There has been a tendency towards catching up in the 1990s, but unfortunately since 2000-01 the productivity growth of rice has been stagnated in the state. South 24 Parganas

Table 3.6 : Area ('000 hect.) and Production ('000 mt.) of Principal Crops in South 24 Parganas

Crop	Area		Production	
	2000-01	2004-05	2000-01	2004-05
Aman Rice	335.5	338.3	628.2	721.0
Boro Rice	83.5	55.9	226.2	184.2
Total Foodgrains	437.8	410.0	879.5	924.5
Oil seeds	5.7	8.1	4.0	10.3
Fibres	3.0	1.6	20.8	15.8
Other Crops	18.6	4.9	88.1	79.7

Source: BAE&S, GoWB

Figure 3.4: Rice Yield in South 24 Parganas vis-à-vis the State



is no exception. What is more worrying is that lately productivity of rice seems to be falling in the district, even if slightly. In near future, the performance of the district in agriculture will crucially depend on whether this trend of falling rice productivity is a transitory or permanent one.



3.7 Infrastructural Facilities

The extent of economic development and the opportunity for employment for the common people in an area significantly depend on the development of basic infrastructural facilities. The development of physical infrastructure like

Table 3.7: Irrigated Area in the Blocks of South 24 Parganas in 2003-04

Name of Block	Total irrigated area (2003-04) (in hectares)	Net area under cultivation (2001-02) (in hectares)	Irrigated area as percentage of net area under cultivation
Thakurpukur Maheshtala	1510	2030	74.38
Budge Budge - I	934	2193	42.59
Budge Budge - II	1947	5187	37.54
Bishnupur - I	5639	9363	60.23
Bishnupur - II	1447	6720	21.53
Sonarpur	6228	8532	73.00
Baruipur	2351	16705	14.07
Bhangar - I	13124	12272	106.94
Bhangar - II	9648	12026	80.23
Falta	5678	10531	53.92
Diamond Harbour - I	1635	3340	48.95
Diamond Harbour - II	3191	7248	44.03
Magrahat - I	1944	10316	18.84
Magrahat - II	5056	11288	44.79
Kulpi	4657	17665	26.36
Mandirbazar	2788	10212	27.30
Canning - I	1859	15862	11.72
Canning - II	2362	15748	15.00
Basanti	6950	26151	26.58
Gosaba	6400	17000	37.65
Joynagar - I	1311	9402	13.94
Joynagar - II	2732	15539	17.58
Mathurapur - I	1753	11980	14.63
Mathurapur - II	3411	17878	19.08
Kultali	1822	19923	9.15
Patharpratima	6720	36429	18.45
Kakdwip	2500	15973	15.65
Namkhana	3440	16910	20.34
Sagar	2410	17436	13.82

Source: BAE&S, GoWB

Note: The total irrigated area in Bhangar-I is higher than the net cultivable area in the Table. Notice that while the data on irrigated area is for the year 2003-04, the data on net cultivable area is for 2001-02. This has caused the discrepancy.

roads, electricity, banking etc. plays a very crucial role not only in enhancing the productivity and marketability of agricultural products, but also is immensely important for development of small business enterprises on which a very large section of rural population depends for their livelihoods. In the industrial map of South 24 Parganas, organized manufacturing sector has a very small presence except for in some pockets in Sadar sub-division and the export processing zone in Falta. A vast majority of the rural workers outside the agricultural sector are employed in micro business enterprises. The difference in the physical infrastructural facilities across the blocks is an important determinant of the

variation in the livelihood patterns of the people, and thus in the standard of living.

Since agriculture continues to remain a major livelihood for a large number of people in rural South 24 Parganas, the lack of irrigation remains a major infrastructural bottleneck, specially for the rural areas of the district. Only about 30 per cent of the cultivable area in the district is irrigated with the two major sources of irrigation being canal irrigation and irrigation from stored rain-water in the tanks. The rapid expansion of minor irrigation with shallow and deep tube-wells that brought about almost revolutionary change in agriculture elsewhere in West Bengal, specifically in the districts like Burdwan and Hooghly, did not take place in this district. In fact, only about 10 per cent of the total irrigated area of the district is covered by shallow and deep tube-wells. Lack of access to electricity in many areas is possibly an important reason behind failure of minor irrigation facilities in the

district.

A block level analysis of the irrigation facilities available highlight the precarious scenario even more (Table 3.7). Out of the total twenty-nine blocks, twelve blocks have

Table 3.8: Physical Infrastructure in the Blocks of the District

Block	Percentage of households with access to electricity*	Length of surfaced roads (in km.) per sq. km. area [§]	Number of bank branches per 10000 population [§]
Thakurpukur Maheshtala	67.37	3.43	0.71
Budge Budge - I	55.16	10.34	1.00
Budge Budge - II	42.00	4.97	0.45
Bishnupur - I	28.79	1.74	0.53
Bishnupur - II	39.44	4.82	0.48
Sonarpur	37.24	2.61	0.67
Baruipur	34.26	0.86	0.45
Bhangar - I	20.16	0.70	0.34
Bhangar - II	14.51	1.05	0.38
Falta	28.30	1.01	0.31
Diamond Harbour - I	22.52	2.32	0.59
Diamond Harbour - II	22.95	1.04	0.30
Magrahat - I	14.52	2.09	0.48
Magrahat - II	15.59	2.04	0.34
Kulpi	11.03	0.48	0.42
Mandirbazar	15.60	1.95	0.32
Canning - I	13.80	0.73	0.29
Canning - II	3.09	0.26	0.30
Basanti	0.44	0.46	0.18
Gosaba	0.92	0.13	0.27
Joynagar - I	15.21	1.75	0.50
Joynagar - II	5.80	0.64	0.29
Mathurapur - I	11.18	2.06	0.24
Mathurapur - II	5.75	0.60	0.20
Kultali	0.15	0.41	0.21
Patharpratima	0.72	0.23	0.34
Kakdwip	12.82	1.21	0.29
Namkhana	5.80	0.31	0.27
Sagar	1.29	0.59	0.32

Source:* Census of India, 2001;

§ District Statistical Handbook, 2005, BAE&S, GoWB



less than 20 per cent of their net area under cultivation are irrigated, while only six blocks enjoy irrigated area of more than 50 per cent of their area under cultivation.

Table 3.9: Block-wise Infrastructure Development and Standard of Living Ranking

Block	Infrastructure development index	Infrastructure development rank	Standard of living rank
Thakurpukur Maheshtala	0.59	2	1
Budge Budge - I	0.73	1	2
Budge Budge - II	0.38	4	11
Bishnupur - I	0.36	6	4
Bishnupur - II	0.34	8	3
Sonarpur	0.48	3	5
Baruipur	0.20	14	6
Bhangar - I	0.38	5	12
Bhangar - II	0.32	9	8
Falta	0.25	10	7
Diamond Harbour - I	0.34	7	14
Diamond Harbour - II	0.21	12	9
Magrahat - I	0.20	13	10
Magrahat - II	0.23	11	13
Kulpi	0.16	17	23
Mandirbazar	0.18	16	15
Canning - I	0.09	21	16
Canning - II	0.06	26	28
Basanti	0.06	28	29
Gosaba	0.11	20	21
Joynagar - I	0.19	15	17
Joynagar - II	0.08	22	20
Mathurapur - I	0.11	19	19
Mathurapur - II	0.06	27	22
Kultali	0.02	29	25
Patharpratima	0.08	23	24
Kakdwip	0.11	18	18
Namkhana	0.08	24	26
Sagar	0.07	25	27

Out of the worse performing twelve blocks, ten are located in the Sundarban area while none of the Sundarban blocks have more than 50 per cent of their net area under

irrigated-cultivation. Lack of access to irrigation is a major problem in most of the blocks of South 24 Parganas, but the Sundarban region calls for a special mention here. Agriculture is the most important source of livelihood for the people in the predominantly rural Sundarban region where there is hardly any employment opportunities outside the primary sector. Underdeveloped irrigation facilities there - not just in absolute terms but also relative to the other regions of the district - besides, denying the people of the Sundarbans access to the most important source of livelihood, also increase the regional disparity within the district.

Availability of electricity, access to good quality roads and formal banking and financial institutions are other important indicators of physical infrastructure in the area. For any entrepreneurial activity - small or large - either in primary, secondary and tertiary sectors, these three are important ingredients. Thus, the development of these

infrastructural facilities has important implications for the livelihood of the people and their standards of living. These obviously have very important contributions towards provision of a range of basic services and utilities including health and education.

A blockwise analysis of physical infrastructure reveals many interesting observations (Table 3.8). According to 2001 Census, 258 persons per thousand population had access to electricity in the district. At the same time, only one person in Kultali, four persons in Basanti, seven persons in Patharpratima, nine persons in Gosaba out of one thousand enjoy the benefit of electricity. The district has about one kilometre of surfaced road per square kilometre area. The same figure is 0.13 kilometre in Gosaba, and 10.34 kilometres in Budge Budge-I. These are examples of striking regional imbalances.

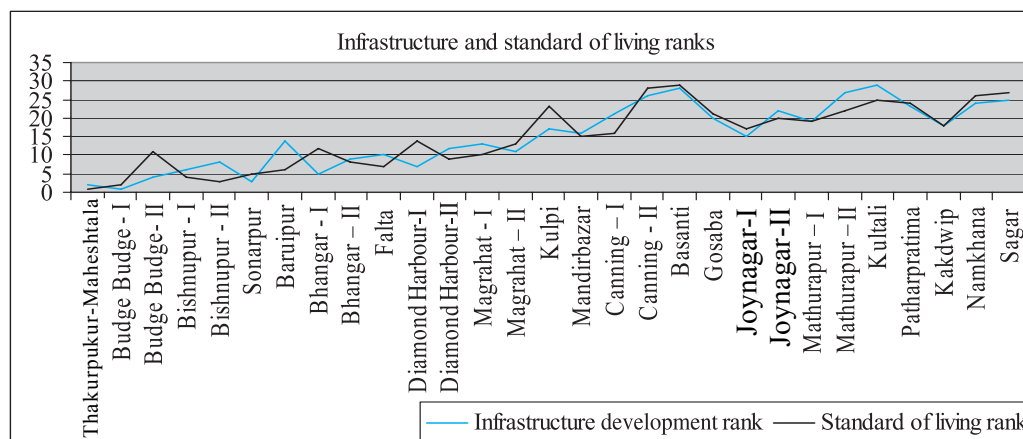
Based on the available data on physical infrastructure and irrigation facilities presented in the last two tables, it is possible to construct an infrastructure development index for the blocks of the district. The rank correlation of the standard of living index and the infrastructure development index is very high at 0.90. It appears to be the case that a significant amount of variation in the

standard of living in the district can be explained by variation in development of infrastructure. This leads to very important policy conclusions.

The top five blocks in terms of infrastructural achievement are all close to Kolkata except Bhangar-I. Bhangar-I moves up the ranking ladder in terms of available infrastructure because of its very good record in irrigating the agricultural land. If we reconstruct the infrastructure development index by excluding the index for irrigation, the rank of Bhangar-I drops significantly to 16. On the other hand, the bottom five blocks are all from the Sundarban region in terms of infrastructure development either including or excluding the irrigation index. In fact, the differences in available infrastructure even in absolute terms are huge. While only three blocks have an infrastructural development index above 0.45 – the highest being 0.73 for Budge Budge-I, nine out of 13 blocks in the Sundarban region have this index below 0.10. The worst performers here are Kultali, Basanti and Canning-II. Overall, there is definitely a strong case for immediate prioritization of the development of infrastructure in the Sundarban region.

The infrastructure development index is computed using the same procedure used to compute the HDI. Using the data presented in Tables 3.8 and 3.9, first the four component

Figure 3.5: Correlation between Block-wise Infrastructure Development and Standard of Living Ranks



indices for irrigation, electricity, roads and banking services are computed from the general formula:

$$\text{Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

For irrigation and electricity, the maximum and minimum values are chosen to be 1 and 0 respectively to represent the best and the worst possibilities and the relative

achievement of the block in the target scale. For roads and banking services, the maximum and the minimum values are the corresponding values of the best and the worst achievers in each dimension. Once the index for each component is computed, a simple average of four component indices is taken to constitute the infrastructure development index for each block.

3.8 Poverty Scenario in South 24 Parganas

The performance of South 24 Parganas in poverty reduction is very ordinary. As estimated from the Rural Household Survey 2005, more than 4 lakhs of households have been identified as Below Poverty Line households, pushing the poverty ratio in the district up to 34.11 per cent. This is way above the state as well as the national poverty ratio. Despite directed attempts at poverty reduction for a long time, the achievement is far from

satisfactory.

An examination of block-wise poverty ratios (Table 3.10) reveals that in Basanti 65 per cent of households are poor in 2005, making Basanti one of the poorest block in the whole country. Kulpi and Canning-II do not fare much better with poverty ratios of 53 per cent and 50 per cent respectively. The poverty rates are very high in the Sundarban region with all thirteen blocks registering poverty ratios

Table 3.10: Poverty in Blocks of South 24 Parganas

Block	Poverty Ratio (% of Households)	Poverty Rank	Standard of living rank
Thakurpukur-Maheshtala	6.44	1	1
Budge Budge – I	14.78	3	2
Budge Budge – II	34.04	16	11
Bishnupur – I	16.59	4	4
Bishnupur – II	10.82	2	3
Sonarpur	23.36	7	5
Baruipur	26.04	9	6
Bhangar – I	28.22	11	12
Bhangar – II	17.20	5	8
Falta	21.56	6	7
Diamond Harbour - I	24.27	8	14
Diamond Harbour – II	27.30	10	9
Magrahat – I	28.41	12	10
Magrahat – II	29.26	13	13
Kulpi	52.64	28	23
Mandirbazar	29.90	14	15
Canning – I	31.05	15	16
Canning – II	50.32	27	28
Basanti	64.89	29	29
Gosaba	38.03	19	21
Joynagar – I	39.57	20	17
Joynagar – II	42.60	22	20
Mathurapur – I	34.43	17	19
Mathurapur – II	39.59	21	22
Kultali	46.36	24	25
Patharpratima	49.13	26	24
Kakdwip	34.91	18	18
Namkhana	48.17	25	26
Sagar	44.46	23	27

Source: Rural Household Survey, 2005

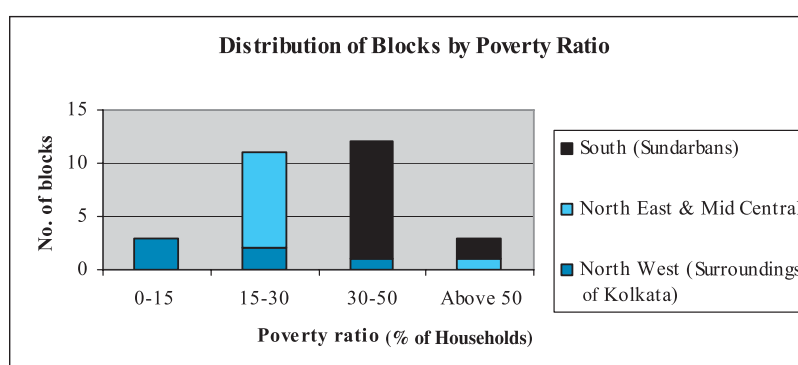
above 30 per cent and eight blocks having more than 40 per cent of households in the BPL category. In the North East and Mid Central region, all the blocks except Kulpi have poverty ratios below 30 per cent. In the North West region, Budge Budge-II has a relatively high poverty

ratio at 34 per cent and Sonarpur is a mediocre performer with 23 per cent

households living below the poverty line. The rest have poverty ratios below 20 per cent (Figure 3.6).

In Table 3.10, the last two columns show excellent agreement. This suggests that the poverty ratio and the standard of living index across blocks are very closely related. In fact, the rank correlation coefficient between these two is equal to 0.96. However, one thing needs to be mentioned here. Both in terms of eradication of poverty and improvement in the standard of living of its inhabitants, the best and worst performing blocks are Thakurpukur-Maheshtala and

Basanti respectively. The standard of living

Figure 3.6: Regional Distribution of Blocks by Poverty Ratios

for an average person - captured by the standard of living index, in Thakurpukur-



Maheshtala is almost doubly better than that of an average person living in Basanti. At the same time, the poverty ratio in Basanti is ten times more than that in Thakurpukur-Maheshtala. This implies that improvement in material conditions has

disproportionately benefitted the relatively well off, particularly for the less developed blocks. The last observation calls for targeted intervention in the form of specific programmes or schemes for helping the poor come out of the shackles of poverty.

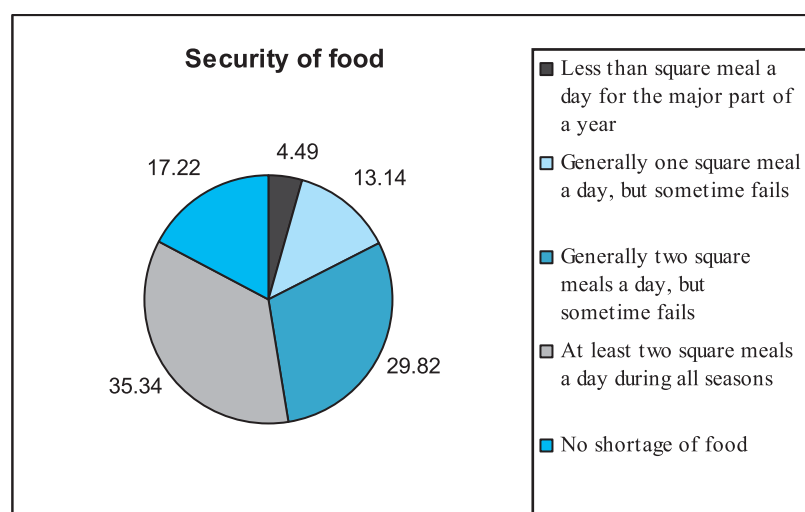
3.9 Basic Requirements of Human Life: Food, Clothing and Housing

The most common indicator used as a proxy for standard of living is per capita income. In absence of reliable block level data for per capita income, we looked at several household specific parameters that closely depend on the income of the households. We have mostly focussed on

and how much intra-district variations exist in them. We believe that the households' preferences are hierarchical. This means that the households spend their incomes on these items in the said order. Once the households meet their basic requirements in these items, they start spending their

extra incomes on other durable items. Hence, we also looked at the ownership pattern of the consumer durables for getting a better idea of the standard of living of the households across blocks. It may not be out of context to mention here that we have included these four parameters along with the livelihood patterns of the households in computation

Figure 3.7: Percentage of Households reporting Different Levels of Food Security in South 24 Parganas (2005)



the basic necessities of life – that is food, clothing and housing. It is interesting to note how the households fare in accessing these basic necessities in different areas

of standard of living index for each block.

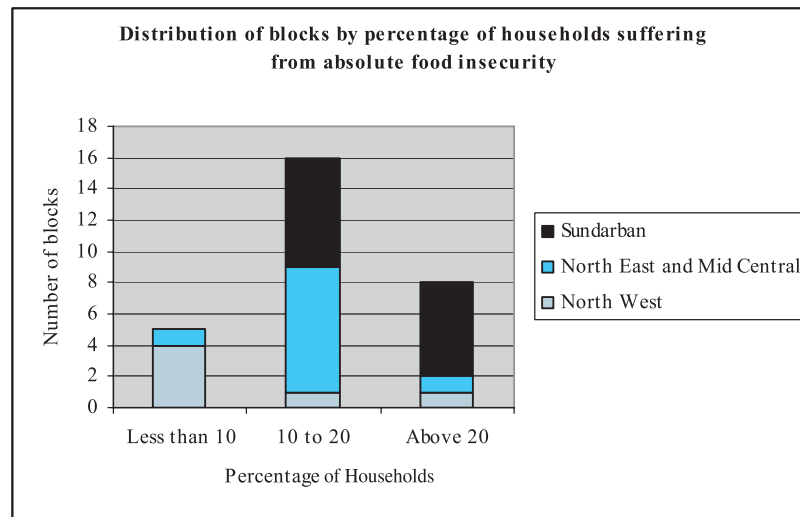
Though there are some doubts regarding the dependability of the Rural Household Survey 2005, the estimates on various

parameters obtained from it are truly alarming. The RHS data suggest that 2.18 lakh rural households in the district cannot manage to have even one proper meal everyday year round. The number is close to 18 per cent of total number of rural households in the district. The finding is very sobering for all concerned not just

for the level of underdevelopment in the district, but also on humanitarian grounds. The farthest point of South 24 Parganas is less than 100 kilometres away from Kolkata, one of the largest, and fastest developing metro cities in India. Yet, a large section of the population in the adjacent district cannot fulfil the most basic human requirements – food. Even in Sonarpur block which is literally a stone's throw away from Kolkata, about 14 per cent of the households live in perennial hunger (Table 3.11).

A block wise analysis of the situation of affordability of food to rural households reveals that Sundarban is once again the worst hit region. In all the thirteen blocks of Sundarban, more than 10 per cent of rural households suffer from absolute food insecurity

Figure 3.8: Regional Distribution of Blocks by Levels of Food Insecurity



meaning that they cannot even manage one square meal everyday year round. There are six Sundarban blocks where more than 20 per cent people suffer from such acute crisis with Basanti being the worst affected block in the district with 37 per cent of the households suffering. Out of the six blocks in the North West region, Budge Budge-II is surprisingly a bad performer in this count with about 25 per cent of households suffering from food insecurity. Given its performance in terms of the other parameters we discussed so far, Bhangar-II has done quite well in terms of this parameter probably for its relatively well-developed agriculture.

As estimated from the Rural Household Survey, 36 per cent of the rural households do not own any winter garments. South 24 Parganas being a district with very mild and short winter and with most of the relatively underdeveloped blocks located close to sea,



ownership of garments and proper clothing to remain prepared for the winter weather is not a major problem for the district. In fact, more than 57 per cent of the households in Basanti and 49 per cent in Patharpratima do not own any winter garments at all. But this probably is more a matter of choice for the households rather than access. The priorities of the people in the district are likely to be very different from a region where the weather is so harsh that proper clothing is an absolute necessity for survival and as a result the expenditure patterns also vary. Clothing probably is at a lower step in the priority-ladder of the people in South 24 Parganas.

It is unfortunate but true that even after sixty years of independence and thirty years of Panchayati system of administration, every four in hundred households do not have a shelter to sleep at night in the district of South 24 Parganas.

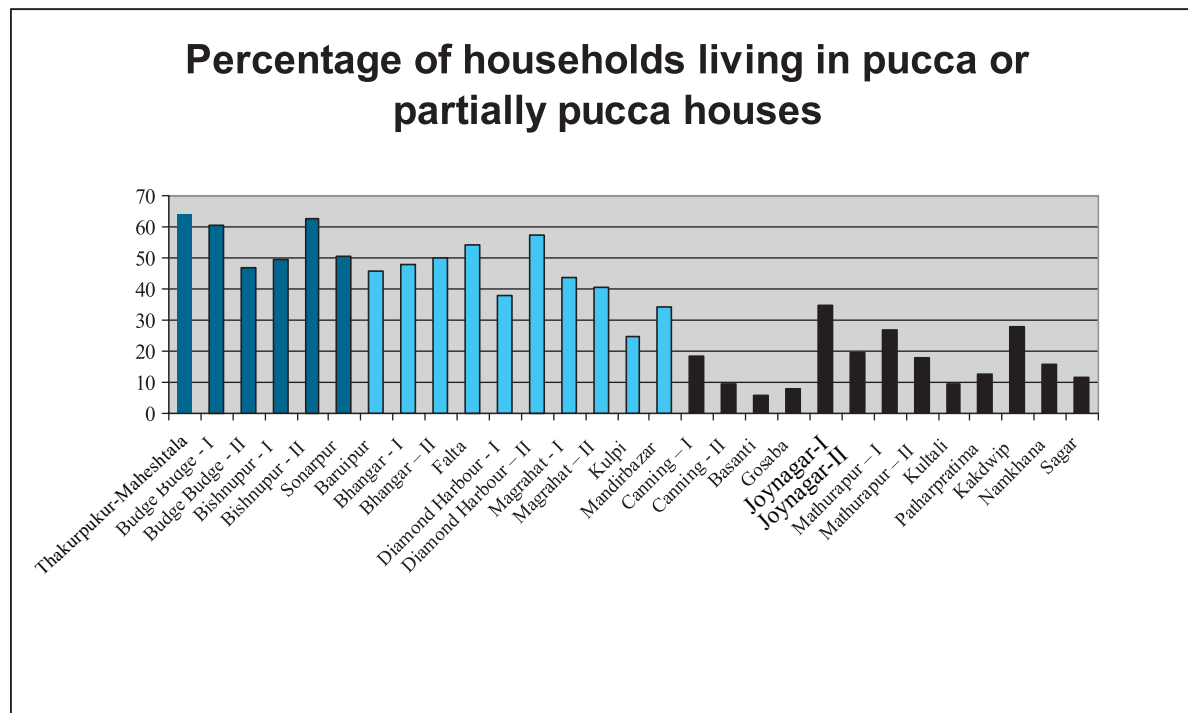
A further 50 per cent of the households live in a hut with only one room. A large part of South 24 Parganas, particularly the

Table 3.11: Distribution of Households according to Differential Access to Food

Block	Percentage of households with				
	Less than square meal a day for the major part of a year	Generally one square meal a day, but sometime fails	Generally two square meals a day, but sometime fails	At least two square meals a day during all seasons	No shortage of food
Thakurpukur-Maheshtala	1.61	4.63	13.26	52.13	28.37
Budge Budge - I	2.52	4.93	17.80	42.62	32.13
Budge Budge - II	10.01	14.17	22.55	32.84	20.42
Bishnupur - I	1.79	7.22	22.39	48.78	19.82
Bishnupur - II	1.29	6.09	20.29	44.73	27.61
Sonarpur	3.68	10.22	24.74	36.16	25.20
Baruipur	4.34	12.99	25.86	34.71	22.11
Bhangar - I	5.78	12.24	32.56	33.61	15.80
Bhangar - II	0.85	8.53	31.69	36.64	22.29
Falta	3.52	9.41	25.77	40.18	21.12
Diamond Harbour - I	3.76	11.61	25.29	38.93	20.41
Diamond Harbour - II	2.59	9.72	26.87	36.37	24.45
Magrahat - I	2.74	9.15	24.46	45.14	18.51
Magrahat - II	4.05	11.96	30.56	34.57	18.86
Kulpi	5.38	16.41	34.68	30.35	13.19
Mandirbazar	2.42	10.97	27.30	40.52	18.79
Canning - I	2.71	11.02	31.29	37.35	17.63
Canning - II	6.02	14.75	38.76	32.87	7.60
Basanti	11.22	25.71	33.81	22.72	6.54
Gosaba	3.68	11.74	33.15	33.91	17.52
Joynagar - I	6.77	13.21	26.67	34.49	18.87
Joynagar - II	4.39	14.58	36.79	33.44	10.80
Mathurapur - I	3.66	13.30	31.41	41.23	10.41
Mathurapur - II	4.29	16.11	34.33	31.58	13.69
Kultali	3.89	11.32	30.71	43.00	11.08
Patharpratima	7.20	20.17	35.77	25.80	11.06
Kakdwip	4.27	12.08	29.24	36.27	18.15
Namkhana	5.44	17.11	42.64	24.90	9.91
Sagar	3.82	24.48	40.35	22.38	8.97

Source: Rural Household Survey, 2005

Figure 3.9: Housing condition in Blocks of South 24 Parganas



Sundarbans, is very prone to natural disasters like tidal waves, storms and cyclones. Sadly, except in Joynagar-I, nowhere in the Sundarban areas more than 30 per cent households live in pucca or partially pucca houses. In blocks like Basanti, Gosaba, Canning-II and Patharpratima, even 10 per cent households do not enjoy the security of living in pucca or partially pucca houses. This is one area that requires urgent attention because it is associated with

security of human life and property. The situation though had been worse and has improved lately because of the importance the government has attached to housing for the poor. New houses though with very basic facilities have been built with direct assistance from the government and under the supervision of the local Panchayat under different government schemes, particularly the Indira Awas Yojana. But a lot is yet to be done (Figure 3.9).

3.10 Concluding Remarks

The analysis of the material conditions of the district reveals that lack of infrastructure in the rural areas remains

the major obstacle in the process of development in the district. The average standard of living in the blocks is significantly



correlated with the level of infrastructural development. In absence of irrigation facilities, agriculture in the district remains primarily mono-cropped. With the post-liberalization increase in the cost of purchased inputs, agriculture has become unremunerative in many areas. As a result, a significant decline in the number and area of different size classes of holdings have been observed in late 1990s. A major revamp of irrigation facilities is required to increase cropping intensity in agriculture.

However, given its proximity to Kolkata and the existing industrial base in the eastern bank of Hooghly river, the district has a real potential for industrial development. But, to achieve this end prompt action must be taken by identifying

potential areas for industries and developing these areas with appropriate infrastructure. Manufacturing growth in the district has exceeded the same for the state in the recent past. This needs to be maintained by encouraging small scale industries.

A high level of regional disparity is observed almost in all material aspects of life. The Sundarban remains the most backward region in terms of quality of life. This needs to be addressed urgently. Poverty remains a major problem in some blocks with poverty ratio exceeding 50 per cent. Targeted government intervention for eradication of poverty is earnestly required in these areas.