Chapter-3

Demographic status of urban centres

3.1. Nature of population distribution

The demographic structure is one of the most important criteria of an urban area. The demographic structure deals with various aspects of the population like the number, growth rate, density, and their socio-economic status. The coastal areas are significant in terms of the gradual increase of population pressures and coastal vulnerability in the recent context (McLaughlin et al., 2002; Kumar & Kunte, 2012; Behera et al., 2019). Most of the major large cities around the world exist in coastal areas. In Purba Medinipur littoral-coastal tract also the similar condition of population pressures observed particularly in the selected urban centres of Digha, Contai and Haldia. The plenty of resources and occupational opportunities acting as a pull factor to migrate people in the coastal area which leads to increase the population along with the natural increase of population within a particular coastal area (Leach et al., 1999; Robson & Nayak, 2010). The three urban areas were setup depending on the diversified urban activities leading to immense population pressure. However, in the recent context of coastal hazards, the vulnerability of the coastal people are increasing at a significant rate associated with resource sharing and conflicts (Turner et al., 1996; Duxbury & Dickinson, 2007; Nicholls et al., 2007). In this perspective, the assessment of changing demographic structure is necessary for improving the demographic structure of the study area. The demographic status of the municipality areas has been assessed considering the Indian census data of the year 1991, 2001 and 2011.

3.1.1. Increase of population

The census data of 1991, 2001 and 2011 have been considered for the area of Digha and Contai, and census data of 2001 and 2011 are considered for the Haldia municipality area. But the census data of 1991 is not considered for Haldia as the municipality was established in 1997. Although in case of Digha, under Digha-Sankarpur Development Authority (DSDA), the mouza areas have been incorporated in the different years of 1990, 1991 and 2004 (Fig. 2.8), the census data (1991, 2001 and 2011) of all mouza (51) have been considered under Digha urban centre. In the case of Contai and Haldia, the total population have been considered as per the expansion and redistribution of the municipality area (Fig. 2.9, 2.10).

According to the census, the year-wise population is gradually increased all the urban areas (Fig. 3.1) of the study area. In Digha, the total population remained as 28653, 38232 and 44403 respectively in the year of 1991, 2001 and 2011 (Table 3.1). Although, some mouza (Begunadiha, Digha, Jhawa, Kiagoria etc.) remain in the map of Digha without any population in the census data (Table 3.1). As per the existing records (BADP, 2014) and field observations,

most of those mouza are eroded or remain under the seawater due to severe shoreline erosion. In a similar way, the total population at Contai increases as 53484, 77513 and 92226 during 1991, 2001 and 2011, respectively (Table 3.2). Although, in Contai 21 wards are remained as per the recent municipality map (during 2018), but, 20 wards have been considered for the population study (as per the map of 2011). In this context, the ward-wise total population has changed during 1991, 2001 and 2011 (Table 3.1). However, in Haldia, the total population increases from 170673 to 200827 within a decade (2001 to 2011) (Table 3.3). Likewise the Contai, the ward-wise total population has been changed in Haldia (Table 3.3).

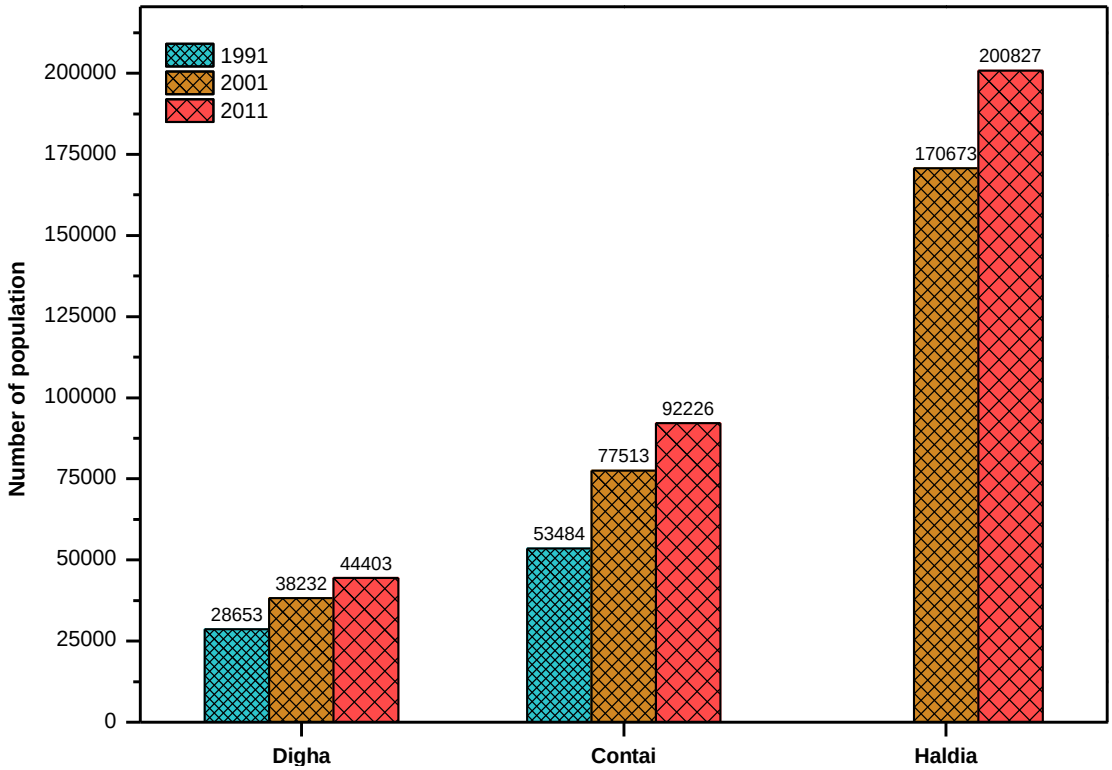

Fig. 3.1: Census Year-wise total population of three urban centres (1991-2011).

3.1.2. Population density

The mouza or ward wise population density has been estimated as per the 2001 census data. The total area of Digha (67.04 km²), Contai (14.35 km²) and Haldia (99.97 km²) have been considered as per the final administrative setup of the Digha (2004), Contai (2018) and Haldia (2011) (Fig. 2.8, 2.9 and 2.10). In Digha, the mouza-wise population density varies from 5/km² to 10899/km² at the Mrijapur (mouza number 19) and Mania (mouza number 47), respectively (Table. 3.1). However, the population density of the entire Digha area is 662/km² within the total area of 67.04 km². The seven classes of population density distribution (Fig. 3.2) reveals that only Mrijapur mouza remain under highest population density class (4438 – 10899/km²). Within the entire Digha area, 19 mouzas like Birampur, Jatimati, Khadalgobra,

Table 3.1: Total population, density distribution, year-wise growth rate and projected population for 2021 of Digha.

Mouza No.	Mouza name	Total population			Population density on 2011 (/km²)	Decadal growth rate (%)		Projected population (2021)
		1991	2001	2011		1991-2001	2001-2011	
1	Padima	1005	1311	1458	1057	30.45	11.21	1685
2	Duttapur	–	591	812	931	–	37.39	1218
3	Gadadharpur	380	348	588	230	-8.42	68.97	692
4	Bhagibaharampur	636	812	970	2362	27.67	19.46	1137
5	Chanpabani	523	746	1026	2008	42.64	37.53	1278
6	Palsandapur	–	116	210	603	0.00	81.03	315
7	Ratanpur	512	718	926	2713	40.23	28.97	1133
8	Jatimati	1399	1767	2133	3315	26.30	20.71	2500
9	Bilamria	1108	1287	1516	1613	16.16	17.79	1720
10	Khadalgobra (CT)	2863	4381	5344	2498	53.02	21.98	6585
11	Jagadishpur	864	645	1026	1489	-25.35	59.07	1107
12	Ghersai	603	727	901	705	20.56	23.93	1050
13	Gobindabasan	493	803	1007	1936	62.88	25.40	1264
14	Somaibasan	75	157	269	709	109.33	71.34	366
15	Gangadharpur	315	299	359	689	-5.08	20.07	381
16	Atili	8	91	42	262	17.50	-53.85	59
17	Jagaibasan	16	48	102	392	200.00	112.50	145
18	Maitrapur	811	1031	1204	1290	27.13	16.78	1401
19	Mrijapur	838	953	1037	10899	13.72	8.81	1137
20	Jhaugerya	533	657	746	815	23.26	13.55	853
21	Purba Mukundapur	2042	2436	2766	1207	19.29	13.55	3128
22	Begunadiha	–	–	–	–	–	–	–
23	Digha	–	–	–	–	–	–	–
24	Jhawa	–	–	–	–	–	–	–
25	Kiagoria	–	6	–	–	–	-100.00	–
26	Dakshin Balarampur	57	107	130	419	87.72	21.50	167
27	Birampur	0	794	975	4438	0.00	22.80	1463
28	Jashipur	361	421	470	426	16.62	11.64	525
29	Bodhora	1451	1496	1775	1412	3.10	18.65	1937
30	Tengramari	1223	1231	1460	1261	0.65	18.60	1579
31	Bherichauli	344	387	446	1166	12.50	15.25	497
32	Jaldha	1551	1807	2177	873	16.51	20.48	2490
33	Nilpur	0	–	–	–	–	–	–
34	Shankarpur	415	464	545	818	11.81	17.46	610
35	Chhota Balarampur	0	8	1	16	0.00	-87.50	2
36	Dalbaladya	154	160	177	376	3.90	10.63	189
37	Panch Daria	146	253	337	1078	73.29	33.20	433
38	Lachhimpur	692	709	842	1827	2.46	18.76	917
39	Kaema	171	246	248	525	43.86	0.81	287
40	Jamra Shyampur	514	608	702	1628	18.29	15.46	796
41	Raipur	131	141	168	338	7.63	19.15	187
42	Chandapur	1529	1693	1944	899	10.73	14.83	2152
43	Mandarmani	302	564	507	271	86.75	-10.11	610
44	Silampur	594	725	963	135	22.05	32.83	1148
45	Sona Muhi	701	725	712	231	3.42	-1.79	718
46	Dadanpatrabar	1020	1181	1391	381	15.78	17.78	1577
47	Mania	4	6	6	5	50.00	0.00	7
48	Dakshin Purushottampur	1255	1971	2394	251	57.05	21.46	2964
49	Tajpur	474	752	920	293	58.65	22.34	1143
50	Kshirpal	540	622	671	808	15.19	7.88	737
51	Berachana	0	1231	–	–	–	-100.00	–

Note: The symbol of '–' is used for depopulated area and therefore related estimations are not applicable.

Ratanpur, Gobindabasan, Jamra Shyampur, Padima has more than 1000/km² population density (Table 3.1). These mouza areas are mainly existed in and around the New Digha and Old Digha tourism sites.

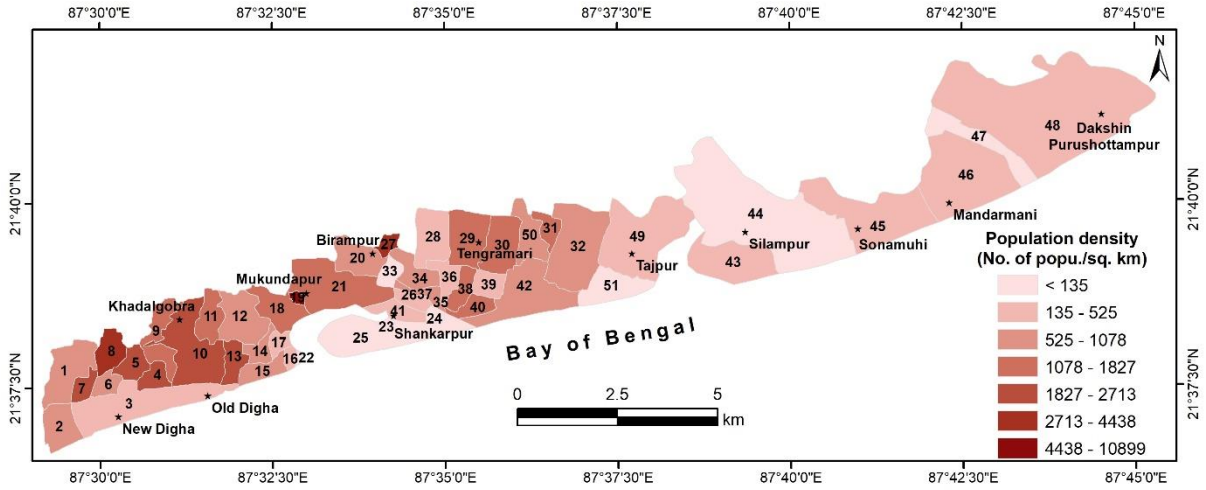

Fig. 3.2: Mouza-wise variation of population density at Digha urban centre (Census year-2011).

Table 3.2: Total population, density distribution, year-wise growth rate and projected population for 2021 of Contai.

Ward No.	Total population			Population density on 2011 (/km²)	Decadal growth rate (%)		Projected population (2021)
	1991	2001	2011		1991-2001	2001-2011	
1	3930	4236	6741	7770	7.79	59.14	8147
2	4774	3708	2482	3887	-22.33	-33.06	1336
3	4618	6408	5542	10947	38.76	-13.51	6004
4	3133	2497	2706	6325	-20.30	8.37	2493
5	3908	2831	4392	6588	-27.56	55.14	4634
6	3729	4030	3632	2895	8.07	-9.88	3584
7	4644	6683	3215	3468	43.91	-51.89	2501
8	3932	4523	4720	5537	15.03	4.36	5114
9	2742	4395	3528	13223	60.28	-19.73	3921
10	4005	5754	3720	20143	43.67	-35.35	3578
11	3224	3818	5101	9105	18.42	33.60	6040
12	4001	3682	4207	4998	-7.97	14.26	4310
13	3053	5585	3538	19924	82.93	-36.65	3781
14	3791	3398	6882	9821	-10.37	102.53	8428
15	–	4177	4670	19209	–	11.80	7005
16	–	3005	4741	13620	–	57.77	7112
17	–	5918	4719	9696	–	-20.26	7079
18	–	2865	3983	3172	–	39.02	5975
19	–	–	6914	6393	–	–	10371
20	–	–	6793	3334	–	–	10190

Note: The symbol of '–' is used to show the areas without municipality status during that period.

In the Contai municipality area, the population density varies from 20143/km² to 2895/km² respectively at ward number 10 and 6 (Table 3.2). More than 10000/km² population density has been observed in 6 wards (ward number 3, 9, 10, 13, 15 and 16). The population density classes also show that the higher (20143 – 133620/km²) density remains in the ward number 13, 10 and 15, whereas, lower density (2895 – 3468/km²) in the ward number 6, 7, 18 and 20 (Fig. 3.3). At the central part of the Contai municipality area, the higher number of population and population density is observed (Fig. 3.3; Table 3.2) where the built-up areas also comparatively higher (Fig. 2.19).

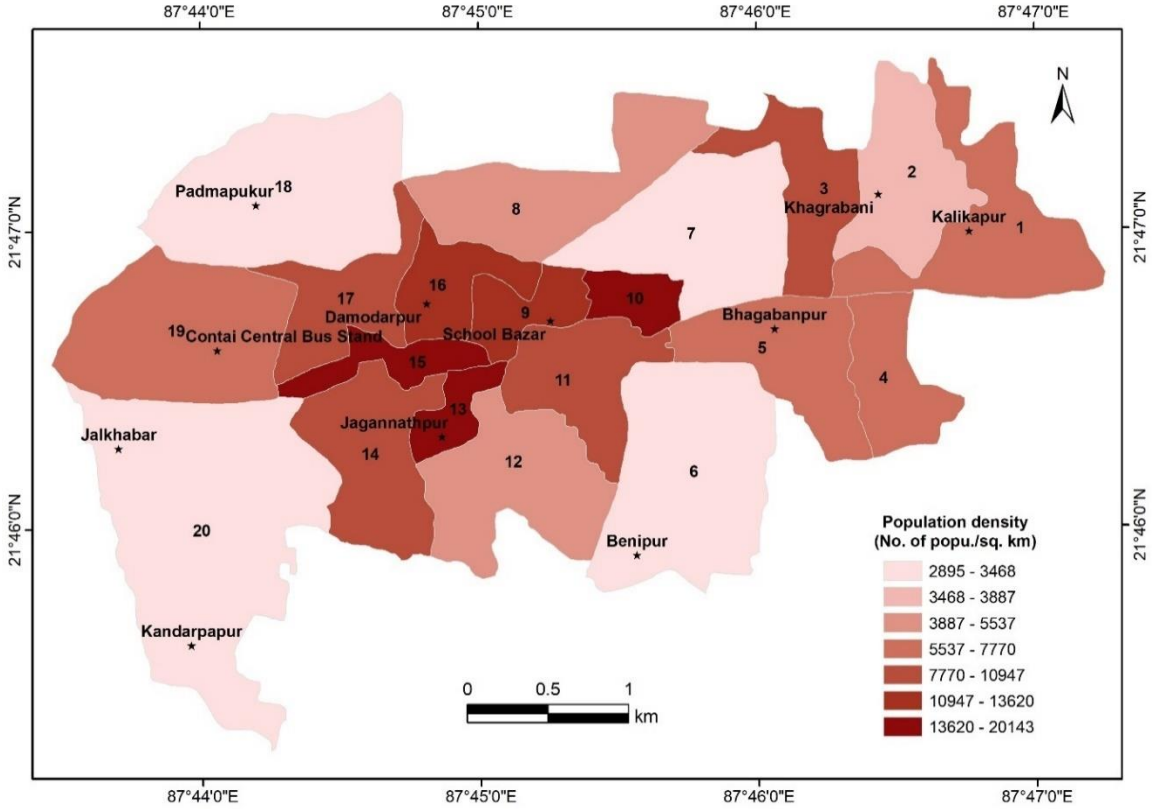

Fig. 3.3: Ward-wise variation of population density at Contai municipality area (Census year - 2011).

The highest (9415/km²) and lowest (652/km²) population density is observed in ward number 9 and 11, respectively at the Haldia municipality area (Fig. 3.4; Table 3.3). In 10 wards (7, 8, 9, 10, 15, 19, 20, 22, 24 and 25), the population density is more than 2500/km² along with the higher density residential households. Although, the high-intensity built-up areas observed in the ward number 11 and 21 due to the location of industries, and in the ward number 6 due to location of brick kilns (Plate 2.15) which does not contribute in the dwelling population. Moreover, the high level of urban expansion is observed during 2011 – 2018 in the different wards (Fig. 2.23, 2.24). Therefore, the population density is lower in ward number 6, 11 and 12 (Fig. 3.4).

Table 3.3: Total population, density distribution, year-wise growth rate and projected population for 2021 of Haldia.

Ward No.	Total population 2001	2011	Population density on 2011 (/km²)	Decadal growth rate (%) 2001-2011	Projected population (2021)
1	5834	6308	2173	8.12	6782
2	7652	9919	2150	29.63	12186
3	6603	8095	1701	22.60	9587
4	9223	10834	1777	17.47	12445
5	7439	9253	1658	24.39	11067
6	5227	6708	866	28.33	8189
7	9156	9095	3288	-0.67	9034
8	5440	5659	4499	4.03	5878
9	8331	12315	9415	47.82	16299
10	9071	8258	4143	-8.96	7445
11	7117	7310	652	2.71	7503
12	6205	6985	1041	12.57	7765
13	6790	6143	1845	-9.53	5496
14	5429	8082	1676	48.87	10735
15	7577	7916	2557	4.47	8255
16	7542	6647	1382	-11.87	5752
17	5134	4666	1673	-9.12	4198
18	7062	7795	2207	10.38	8528
19	9469	7012	2505	-25.95	4555
20	5823	6649	4449	14.19	7475
21	8040	6024	1792	-25.07	4008
22	7599	7038	2566	-7.38	6477
23	6260	6566	2345	4.89	6872
24	6650	9396	4797	41.29	12142
25	–	8293	4599	–	16586
26	–	7861	2130	–	15722

Note: The symbol of '–' is used to show the areas without municipality status during that period.

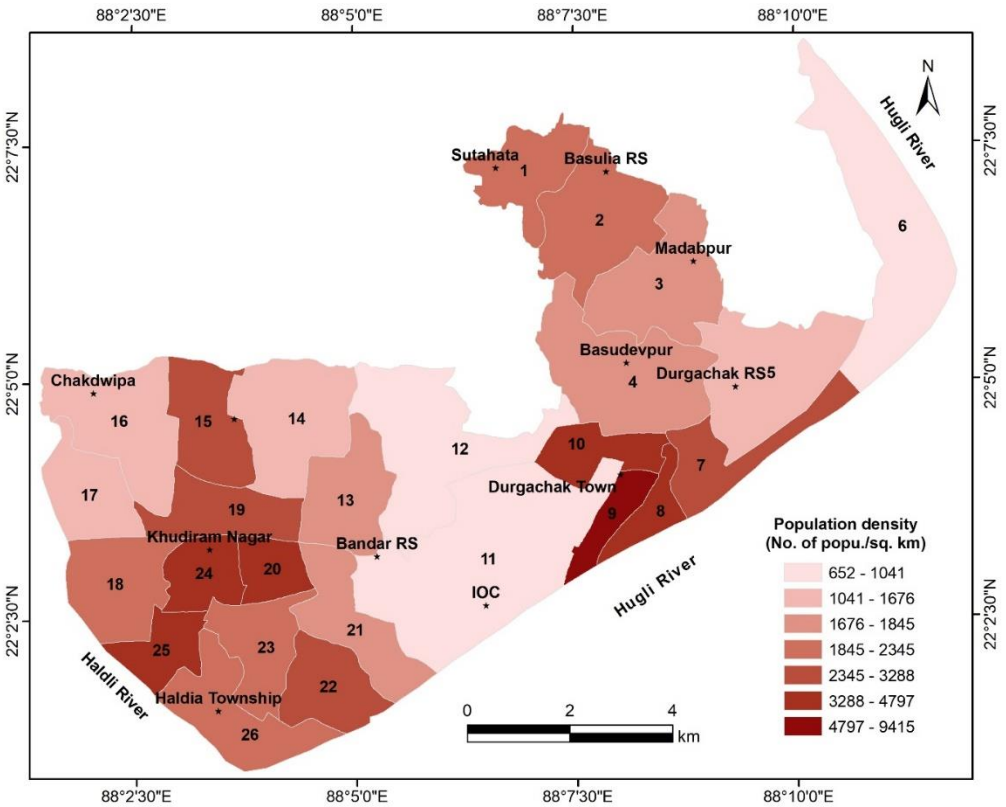

Fig. 3.4: Ward-wise variation of population density at Haldia municipality area (Census year - 2011).

3.1.3. Decadal population growth

The mouza and ward-wise decadal population growth rate has been estimated during the 1991 – 2001 and 2001 – 2011. For the Haldia municipality area, the growth rate has been estimated only during 2001 – 2011 considering only these two census years. Depending on the mouza-wise population distribution at Digha, the positive and negative growth rate is observed during 1991 – 2001 and 2001 – 2011 (Fig. 3.5; Table 3.1). During 1991 – 2001, the highest (200 %) and lowest (-25.35 %) decadal growth rate are found at the Jagaibasan and Jagadishpur mouza. Whereas, during 2001 – 2011, the growth rate is also highest at Jagaibasan (112.50 %) and lowest in the Kiagoria and Berachana mouza (-100 %) (Fig. 3.5; Table 3.1). At the shorefront mouzas, the population growth rate is gradually decreasing with the total population number due to shoreline retreat and severe land erosion. The extremely high growth rate of population and the total number of population are observed at the tourism dominated areas and its surroundings.

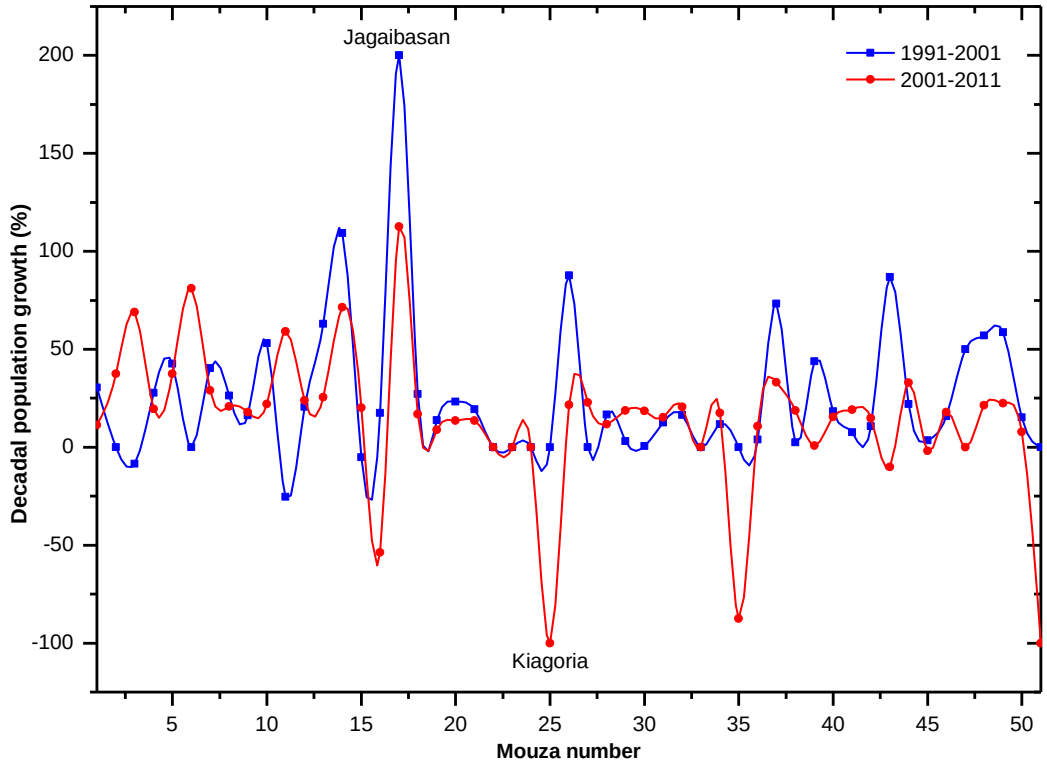

Fig. 3.5: Mouza-wise decadal population growth at Digha urban centre.

During 1991 – 2001 in Contai, the ward-wise decadal growth rate is highest (82.93 %) and lowest (-27.56 %) at ward number 13 and 5 respectively (Fig. 3.6; Table 3.2). Whereas during 2001 – 2011, the highest (102.53 %) and lowest (-51.89 %) growth rate are observed at ward number 14 and 7 respectively (Fig. 3.6; Table 3.2). In Haldia municipality area, the ward-wise decadal population growth shows the highest (48.87 %) and lowest (-25.95 %) rate respectively at the ward number 14 and 19 during 2001 – 2011 (Fig. 3.7; Table 3.3). The

negative growth rate is observed in the different wards due to ward redistribution at a different time for administrative or municipal activities.

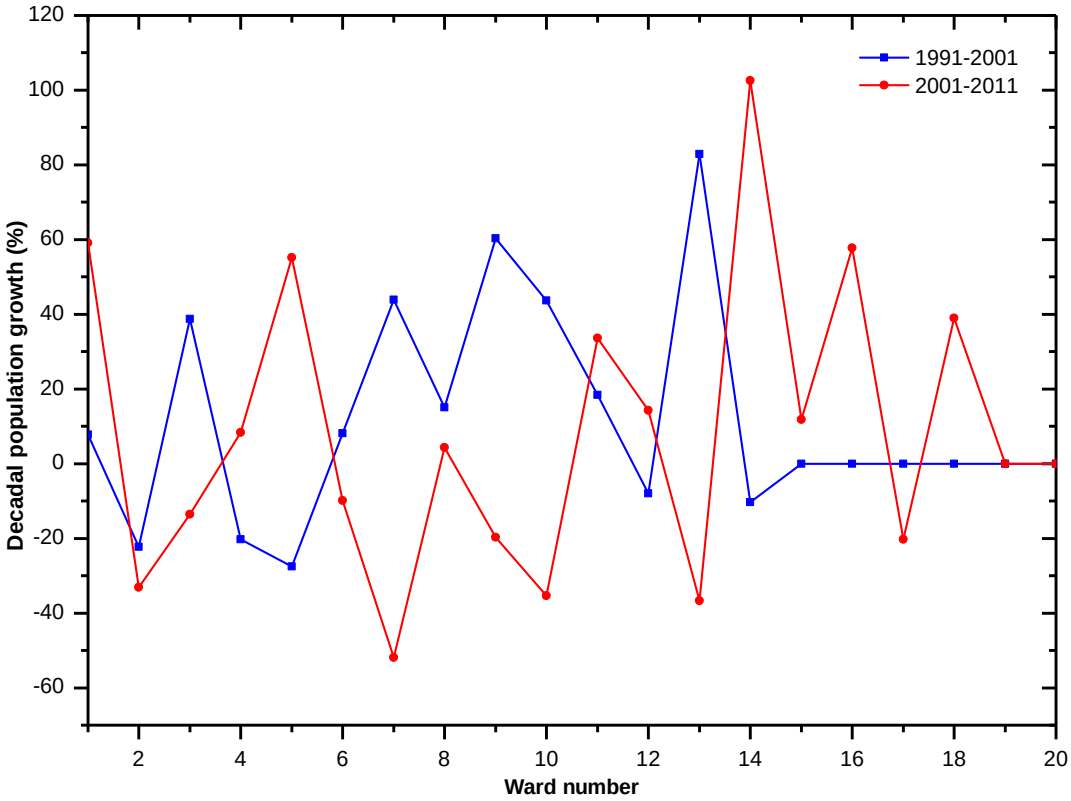

Fig. 3.6: Ward-wise decadal population growth at Contai urban centre.

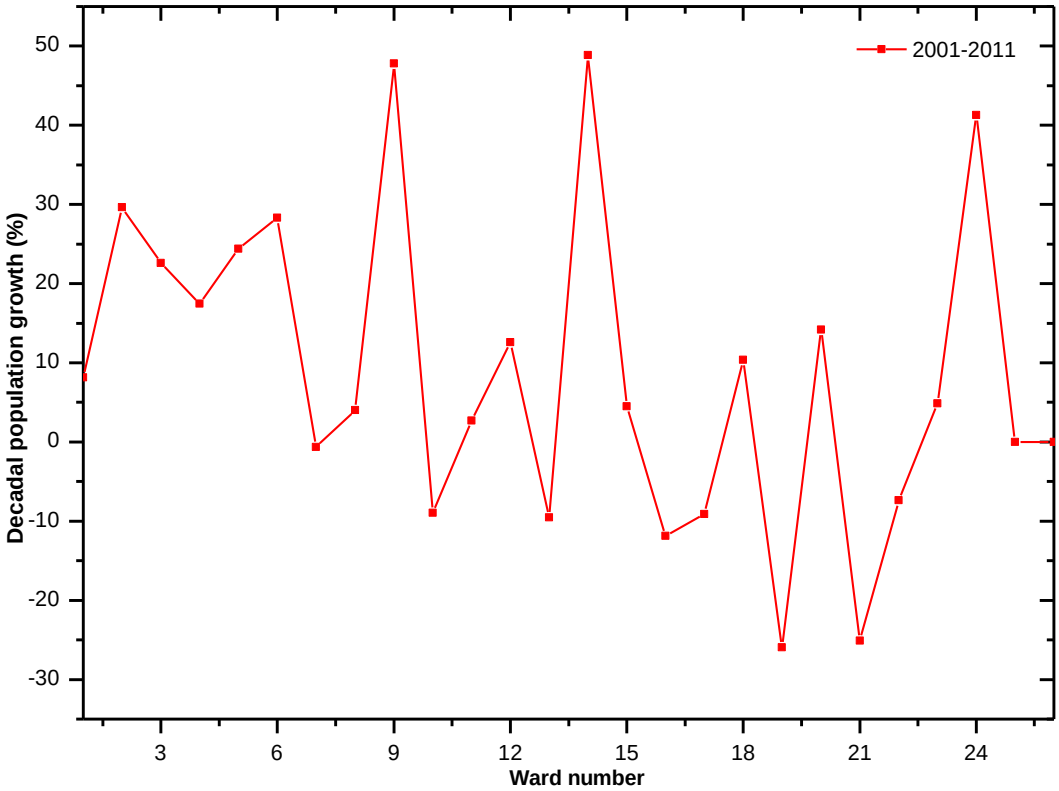

Fig. 3.7: Ward-wise decadal population growth at Haldia urban centre.

3.1.4. Projected population

With the increase of urbanization and built-up areas, the number of population is increased in the different mouza and ward depending on the physical existence and urban activities. The population projection is a prior concern in the urban areas. Depending on the data availability and applicability, the population projection of 2021 (upcoming census year) is estimated for the three urban areas. In Digha, the projected population will be highest (6585) and lowest (2) respectively at the Khadalgobra and Chhota Balarampur (Fig. 3.8; Table 3.1).

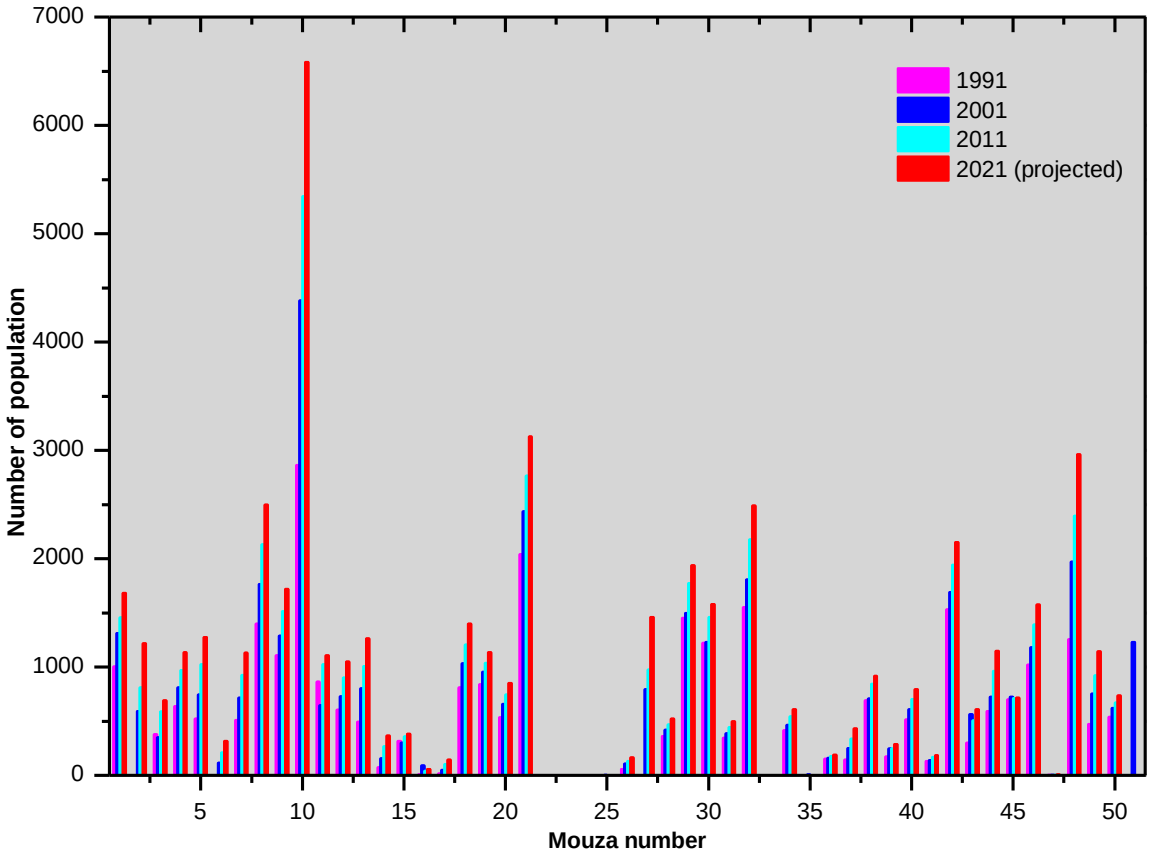

Fig. 3.8: Census year-wise population distribution and projected population (for 2021) at Digha urban centre.

The status of population projection reveals that there will be 21 mouzas with more than 1000 population in 2021, whereas, 11, 13 and 16 mouzas was found during the period of 1991, 2001 and 2011, respectively (Table 3.1). In the case of Contai, the highest (10371) and lowest (1336) projected population will be at ward number 19 and 2, respectively (Fig. 3.9; Table 3.2). There will be 11 number of wards with more than 5000 population, whereas, only 5 and 6 mouzas were with such kind of population number during 2001 and 2011, respectively (Table 3.2). However, during 1991, all the wards were below 5000 population. In Haldia, the immense population pressure has been observed along the entire municipality area. The highest (16586) and lowest (4008) projected population will be at ward number 25 and 21, respectively (Fig.

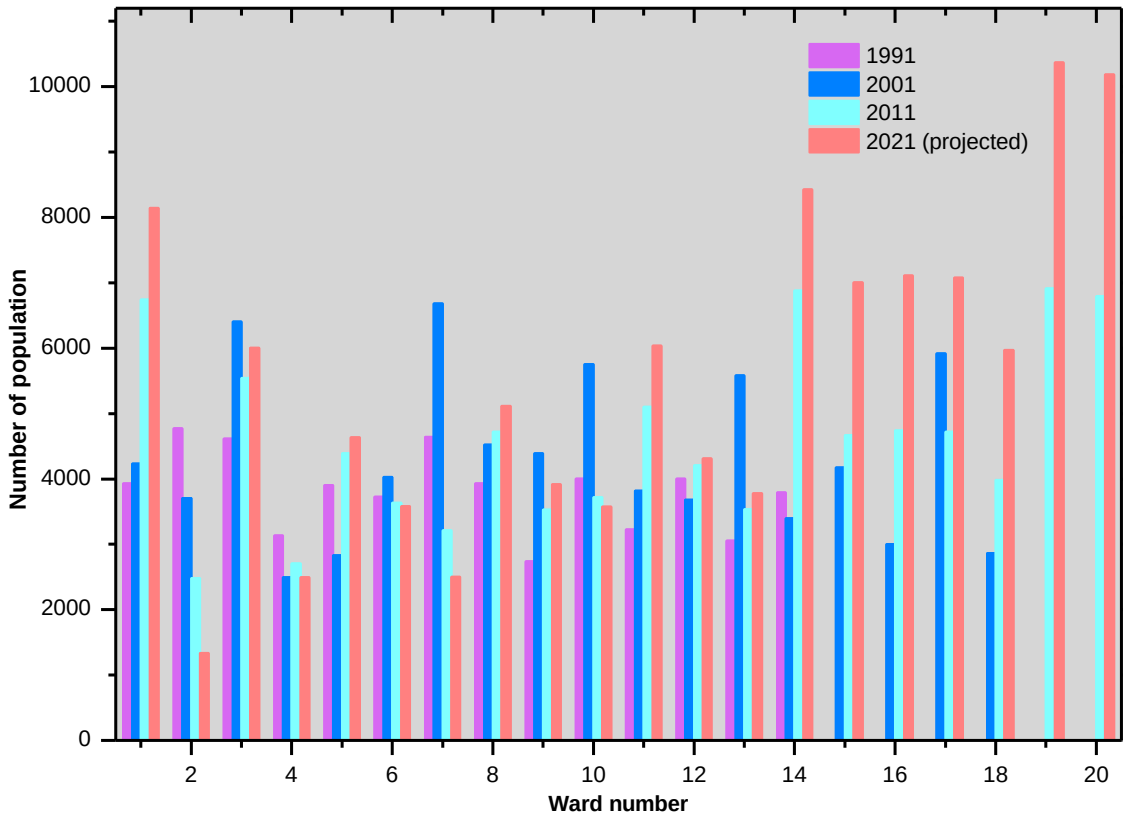

Fig. 3.9: Census year-wise population distribution and projected population (for 2021) at Contai urban centre.

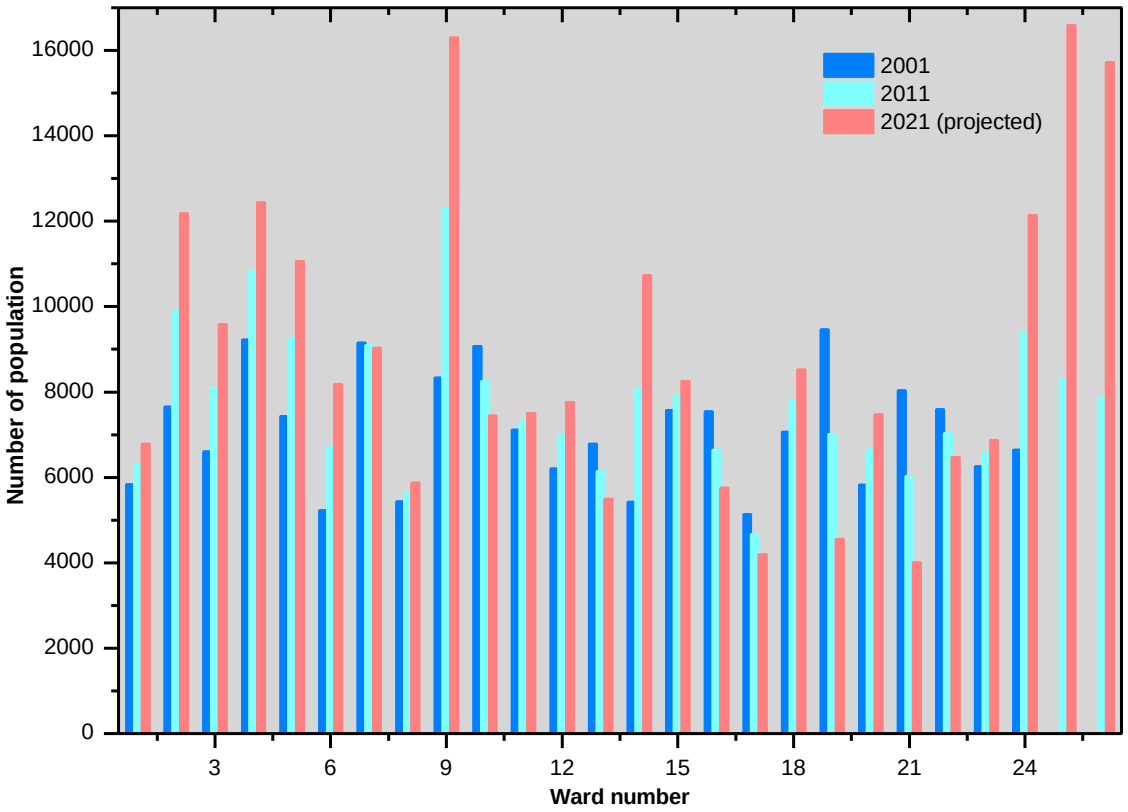

Fig. 3.10: Census year-wise population distribution and projected population (for 2021) at Haldia urban centre.

3.10; Table 3.3). There will be 8 wards with more than 10000 population during 2021, whereas, such number of population was only in 2 wards in 2011, and it was nil (no ward with > 10000 population) during 2001.

The nature of year-wise population distribution and projected population in the different ward and mouza reveals that more and more people are concentrated within the thrusting urban zones due to urban infrastructural development, better facilities of the urban amenities and life-supporting occupations. Such kind of population increase leads to more risk associated with the urban-environment conflicts, population-resource sharing, occupational opportunities, and related socio-economic conflicts among the dwellers.

3.2. Educational status

Educational status is an important indicator to understand human development status. The increasing rate of the urban population influences the infrastructural development of an urban area. The per capita income increases with the better occupational opportunities of the urban population (Lanjouw & Shariff, 2004; Caron et al., 2020). As per the 2011 census, the average literacy rate in Purba Medinipur district is 87.02 % with the male and female literacy of 92.32 % and 81.37 %, respectively, which is the highest in West Bengal (DCH, 2011). In the Digha, Contai and Haldia urban areas have also a higher literacy rate. In this study, the mouza and wards-wise literate and illiterate population have been analysed based on the 1991, 2001 and 2011 census.

3.2.1. Educational status in Digha

In the Digha urban centre, the number of literate population is greater than the illiterate population in all the census year. The overall literacy rate is gradually increasing from 62.17 %, 69.94 % and 77.91 % in the corresponding years of 1991, 2001 and 2011. The female literacy rate is much lower than the male literacy rate (Table 3.4). However, the female literacy rate is gradually increased as 40 %, 42.22 % and 45.71 % in 1991, 2001 and 2011, respectively, whereas, the male literacy rate is gradually decreasing as 60 %, 57.78 %, 54.29 % in the respective years (Table 3.4). The mouza-wise overall literacy rate reveals that in 1991, the highest and lowest literacy rate was 79.87 % and 25 % at the Bhagibaharampur and Mania mouza, respectively (Fig. 3.11a). The highest literacy rate is gradually increasing as 94.51 % (Atili) in 2001 (Fig. 3.11b), and it again increased up to 100 % in 2011 at Chhota Balarampur and Mania mouza (Fig. 3.11c). Whereas, the lowest literacy rate was recorded at Silampur in 2001 (52 %) and in 2011 (63.24 %) (Fig. 3.11b, c). During 2011, only 1 and 6 number of people remained respectively in Chhota Balarampur and Mania mouza and all of them are literate. However, the literacy rate is not synchronized with the total number of literate and illiterate persons among the mouzas. During 1991, 2001 and 2011 the maximum number of literate persons remained at Khadalgobra respectively as 1849, 3216 and 4074. The minimum number

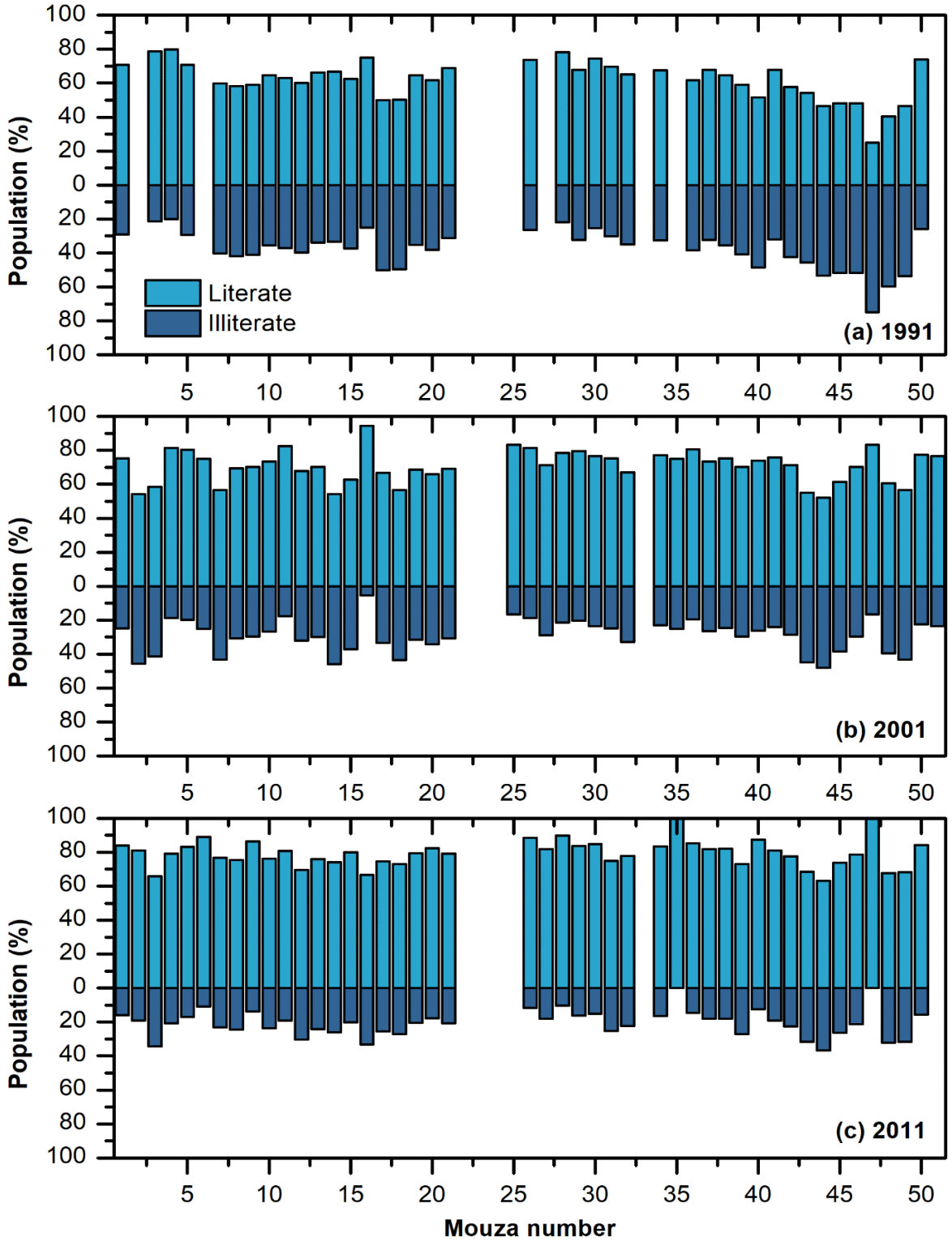

Fig. 3.11: Mouza-wise educational status during (a) 1991, (b) 2001, and (c) 2011 of Digha urban centre.

of literate persons varied as 01 (Mania), 05 (Kiagoria) and 01 (Chhota Balarampur) during 1991, 2001 and 2011 respectively. The total number of population also remained lowest as 4, 6 and 01 at Mania (1991), Mania and Kiagoria (2001), and Chhota Balarampur (2011) respectively (Table 3.1).

3.2.2. Educational status in Contai

According to census 1991, 2001 and 2011, the overall literacy rate is gradually increased in the Contai municipality area respectively as 76.08 %, 80.66 % and 85.12 %. The ward-wise status of literate and illiterate population varies accordingly (Fig. 3.12).

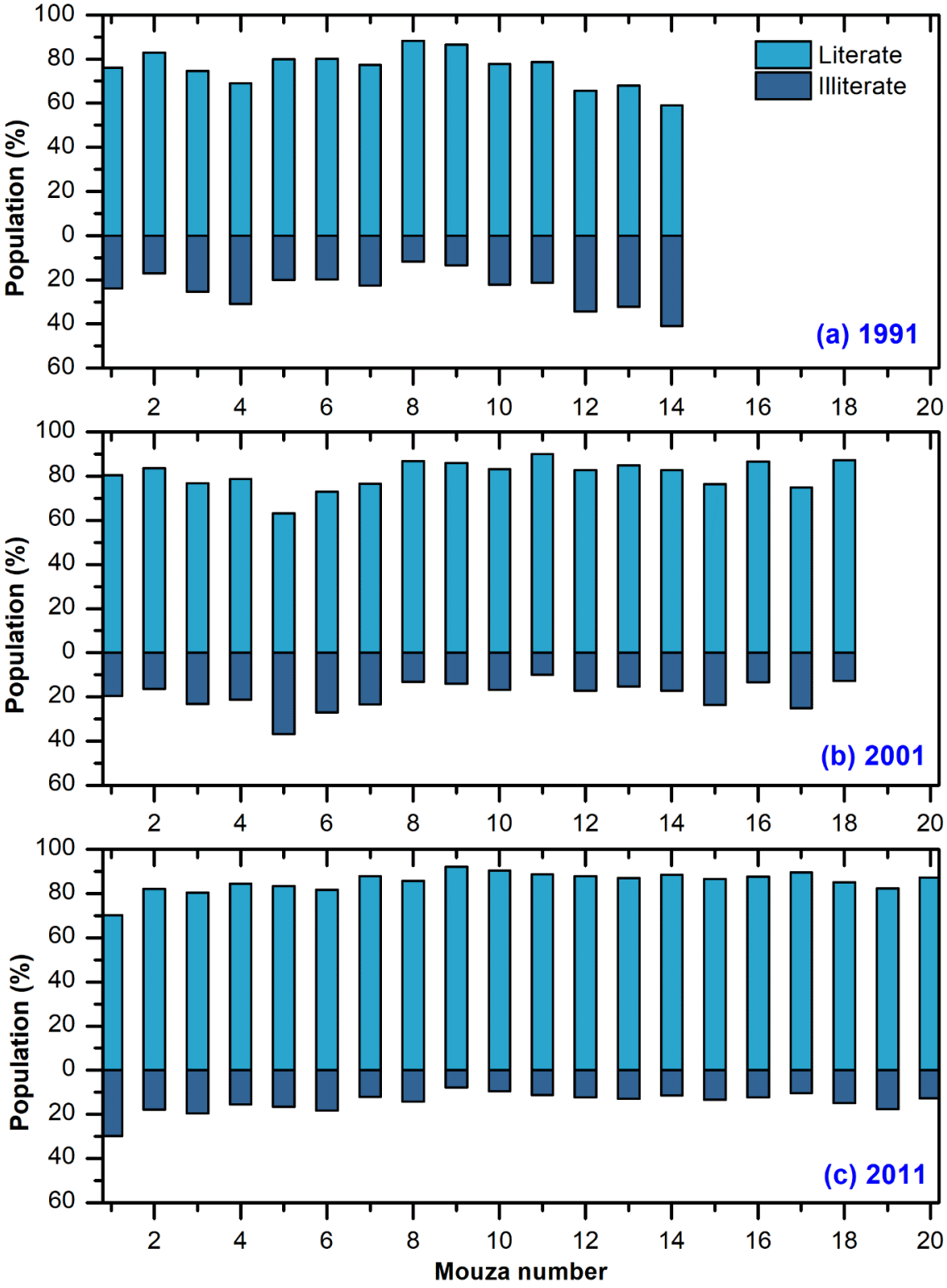

Fig. 3.12: Ward-wise educational status during (a) 1991, (b) 2001, and (c) 2011 of Contai urban centre.

During 1991, the ward-wise literacy status was found as the highest (88.25 %) and lowest (59.06 %) in ward number 8 and 14, respectively (Fig. 3.12a), whereas, the total number of literate persons remained in ward number 2 and 13 respectively as highest (3957) and lowest (2072) among the 14 mouzas. Likewise the overall literacy rate, the ward-wise literacy rate is also increased in the following years. During 2001, the highest and lowest literacy rate was 90.13 % (ward number 11) and 63.12 % (ward number 5), respectively (Fig. 3.12b), whereas, it increased up to the 92.12 % (highest) and 70.20 % (lowest) respectively in the ward number 9 and 1 (Fig. 3.12c). The number of literate people was highest (5126) at ward number 7 and lowest (1787) at ward number 5. However, in 2011, with the increase of the total number of population (Table 3.2), ward number 14 experienced as the highest number of literate persons (6095), whereas, the lowest (2040) literate population is observed in ward number 2. The female literacy rate is increased from 44.20 % to 45.50 % during 1991- 2001, but it slightly decreased in 2011 (Table 3.4).

3.2.3. Educational status in Haldia

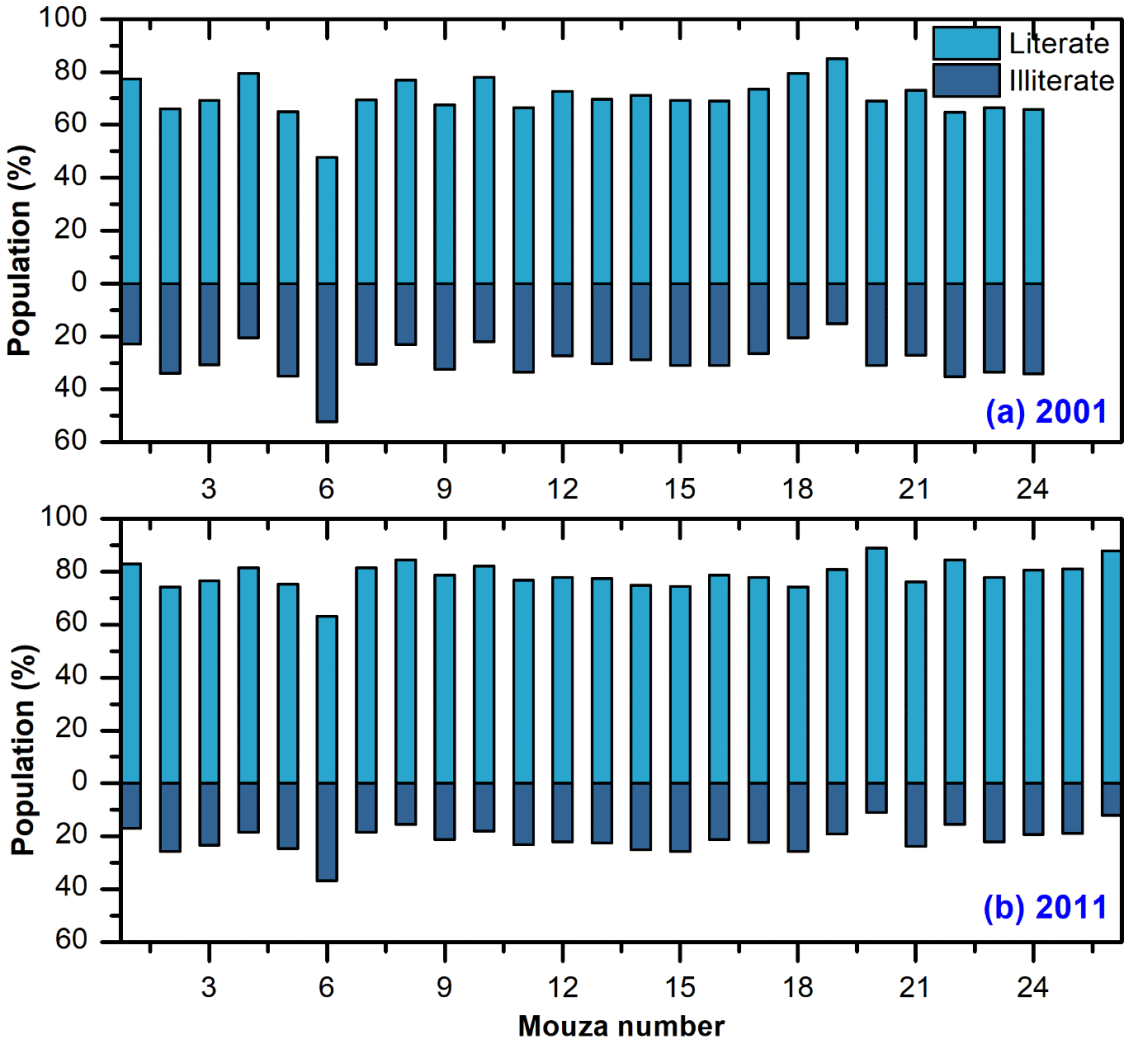

Fig. 3.13: Ward-wise educational status during (a) 2001 and (b) 2011 of Haldia urban centre.

In the case of Haldia, only census data of 2001 and 2011 have been considered to understand the literacy status. Likewise the other two urban centres, in Haldia, the overall literacy rate is increased from 70.96 % to 78.86 % respectively in 2001 and 2011. The literate and illiterate population number and percentage varied in different wards. In 2001 among the 24 wards, the maximum (8042) and minimum (2493) number of literate population and the highest (84.93 %) and lowest (47.69 %) literacy rate was in the ward number 19 and 6 respectively (Fig. 3.13a). However, the maximum literate population (9693) was seen in ward number 9, and lowest (3629) in ward number 17 during 2011. The percentage of the literate population was highest (88.96 %) and lowest (63.09 %) in ward number 20 and 6, respectively (Fig. 3.13b). In Haldia, the female literacy rate is gradually increased from 42 % to 44.86 % during 2001 – 2011 (Table 3.4).

The overall result of literacy status among the three urban sites of Digha, Contai and Haldia reveals that during 2011 the highest literacy rate (85.12 %) was in Contai urban centre in compared with the urban centre of Digha (77.91 %) and Haldia (78.86 %) (Fig. 3.14). However, among the three urban areas, the literacy rates remain highest always in the Contai urban centre (Fig. 3.14). Among the three urban centres during 1991 – 2011, the overall female literacy rate is highest in the Digha urban centre (45.71 %) in 2011, however, the female literacy rate is consistently higher in the Contai urban centre (Table 3.4). Although, it is very delightful to know about the gradual decreasing rate of overall illiterate population with time in all the urban areas, however, till now the status of female illiteracy rate (Table 3.4) are not pleasant to ensure the higher social as well as the human development status. In the recent context, the female literacy rate and the overall literacy is increased due to social awareness among the people and the government policies like Kanyashree, Sabooj Sathi, Mid-Day Meal and different scholarships.

Table 3.4: Educational status at three different urban centres with significant rate of increase of female literacy.

Sites	Census year	Literate			Illiterate		
		Total	Male (%)	Female (%)	Total	Male (%)	Female (%)
Digha	1991	17814	60.00	40.00	10839	37.94	62.06
	2001	26738	57.78	42.22	11494	37.35	62.65
	2011	34595	54.29	45.71	9808	41.82	58.18
Contai	1991	40691	55.80	44.20	12793	41.87	58.13
	2001	62523	54.50	45.50	14990	42.13	57.87
	2011	78500	54.73	45.27	13726	44.22	55.78
Haldia	2001	121111	58.00	42.00	49562	39.64	60.36
	2011	158380	55.14	44.86	42447	41.24	58.76

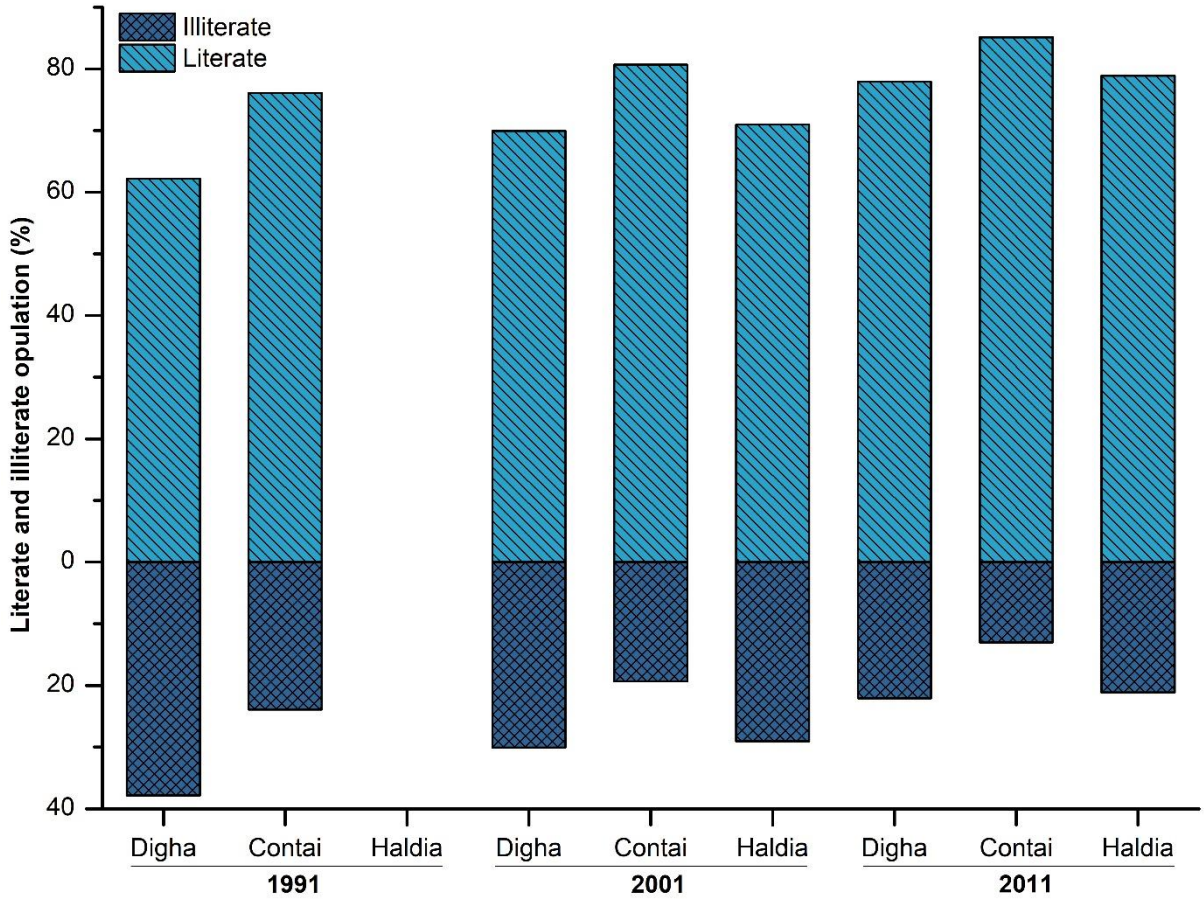

Fig. 3.14: Comparison of Census year-wise educational status of Digha, Contai and Haldia urban centres.

3.3. Occupational structures

The occupational structure is another important indicator of the demographic status of any area. Depending on the plenty of resources and occupational opportunities number of people are concentrated in the coastal areas. In this study, the diversified occupational structures have been observed in the different service sectors.

Table 3.5: Functions or activities under main working group of three different urban centres.

Urban centres	Digha	Contai	Haldia
Major activities	Agricultural & allied activities; Electricity, gas and water supply; Construction; Wholesale, Hotel and restaurants; Transport, Real estate, Other services	Agricultural & allied activities; Electricity, gas and water supply; Construction; Wholesale, retail trade & repair work, Transport, storage & communications; Financial intermediation, Real estate, business activities; Other services	Agricultural & allied activities; Electricity, gas and water supply; Construction; Wholesale, retail trade & repair work, Hotel and restaurants; Transport, storage & communications; Financial intermediation, Real estate, business activities; Other services

3.3.1. Occupational structures in Digha

In Digha, people are mainly involved in tourism-based economic activities and traditional fishing related activities. Along with these two main activities, people are also working in agriculture and allied activities, in supply and services of electricity, gas and water, road and building construction, wholesale and retailing, transport services, real estate and in other services (Table 3.5). The census year-wise occupational structure divulges that during 1991 there have only 29.12 % peoples remained as the total workers of the total population (28653), and rest 70.88 % remained as non-worker population. However, the working population percentage is somehow increasing as 29.12 % (1991), 31.68 % (2001) and 33.94 % (2011). Among the total number of the working population, the main worker population remains higher percentage (91.01 %) in 1991, and it significantly decreased as 71.68 % (2001) and 71.53 % (2011), with increasing marginal workers from 8.99 % to 28.47 % during 1991 – 2011 (Table 3.6). The mouza-wise working population distribution shows that most of the people remained as non-workers in compared with the total workers in different years (Fig. 3.15). The number of non-workers has gradually increased in a considerable period due to the total population increase, however, the percentage of non-workers have been decreased from 70.88 % to 66.06 %. Most of the people among the main workers are involved in other services like tourism, permanent job, transportation etc. and rest are engaged in cultivator, agricultural labour and household industry (Fig. 3.16). However, the number of the cultivator is gradually decreased during 1991 – 2011 (Fig. 3.16) as the young generation people do not aspire to involve in the traditional agricultural activities. But, they involved in more profitable economic activities like fisheries and other business activities.

The main workers remain busy with their works for 6 months or more period in a year, and marginal workers only access job for less than 6 months. In Digha, a huge number of people are engaged in marine fishing and tourism allied activities. Fishing activities do not allow during March-July and during this period the fishermen remained without work or a few numbers of fishermen working on the other sector like agricultural labour and tourism supporting activities. Although, tourism is the main economic sector in Digha, a limited number of local people directly involved with the tourism sector or gets work throughout the year. Also, tourism is only intensively active during the winter season and during the holidays. Therefore, the local people are engaged with the tourism and allied activities during the peak tourism period, although, a large number of people are compelled to survive their life other than tourism sector during the lean phase of tourism. Most of the people of the young generation are engaged in the transport business, local stalls and marketing, and other beach shacks which increases the percentage of marginal workers.

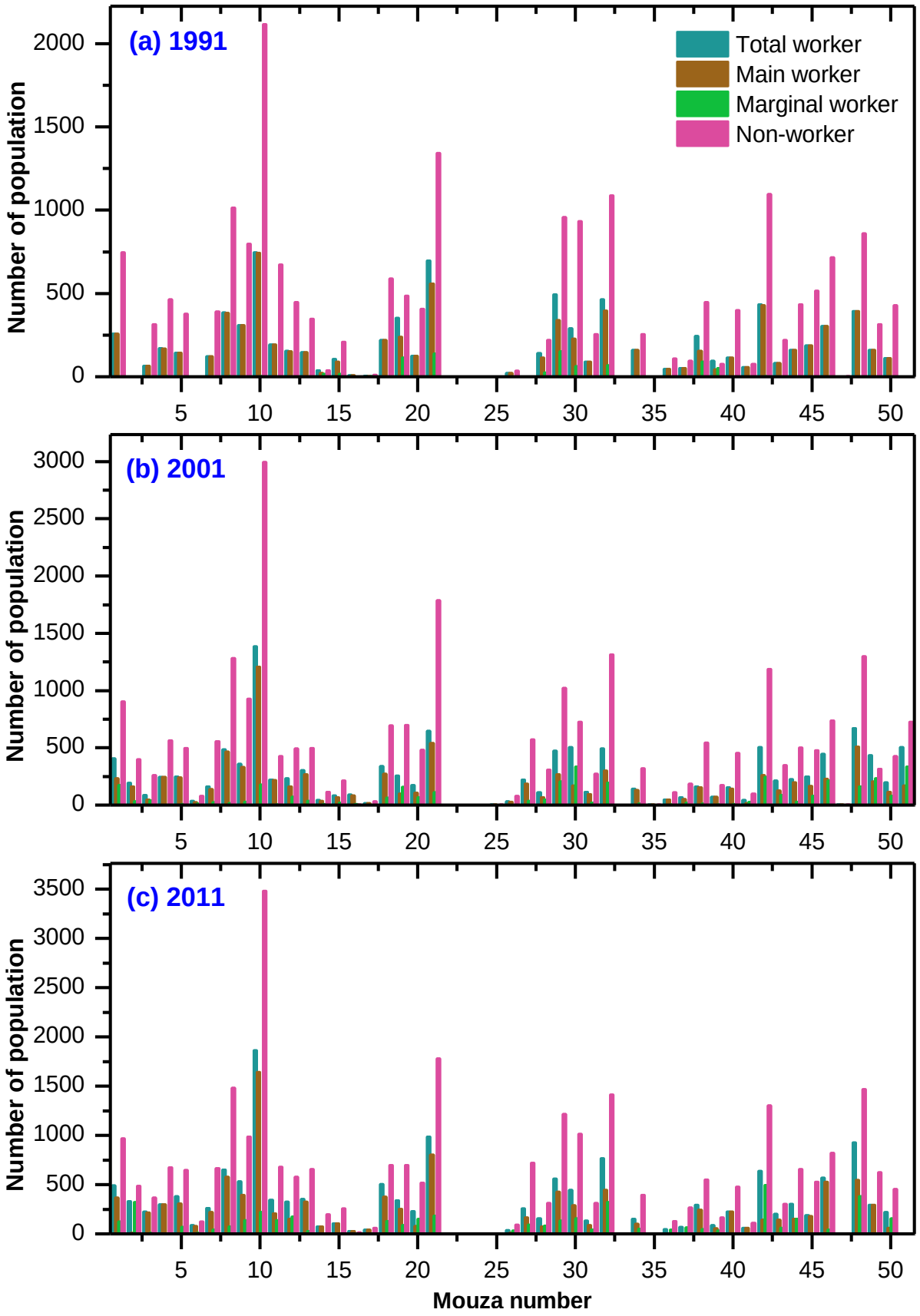

Fig. 3.15: Comparison of the involved population under different working groups at Digha during (a) 1991, (b) 2001, and (c) 2011.

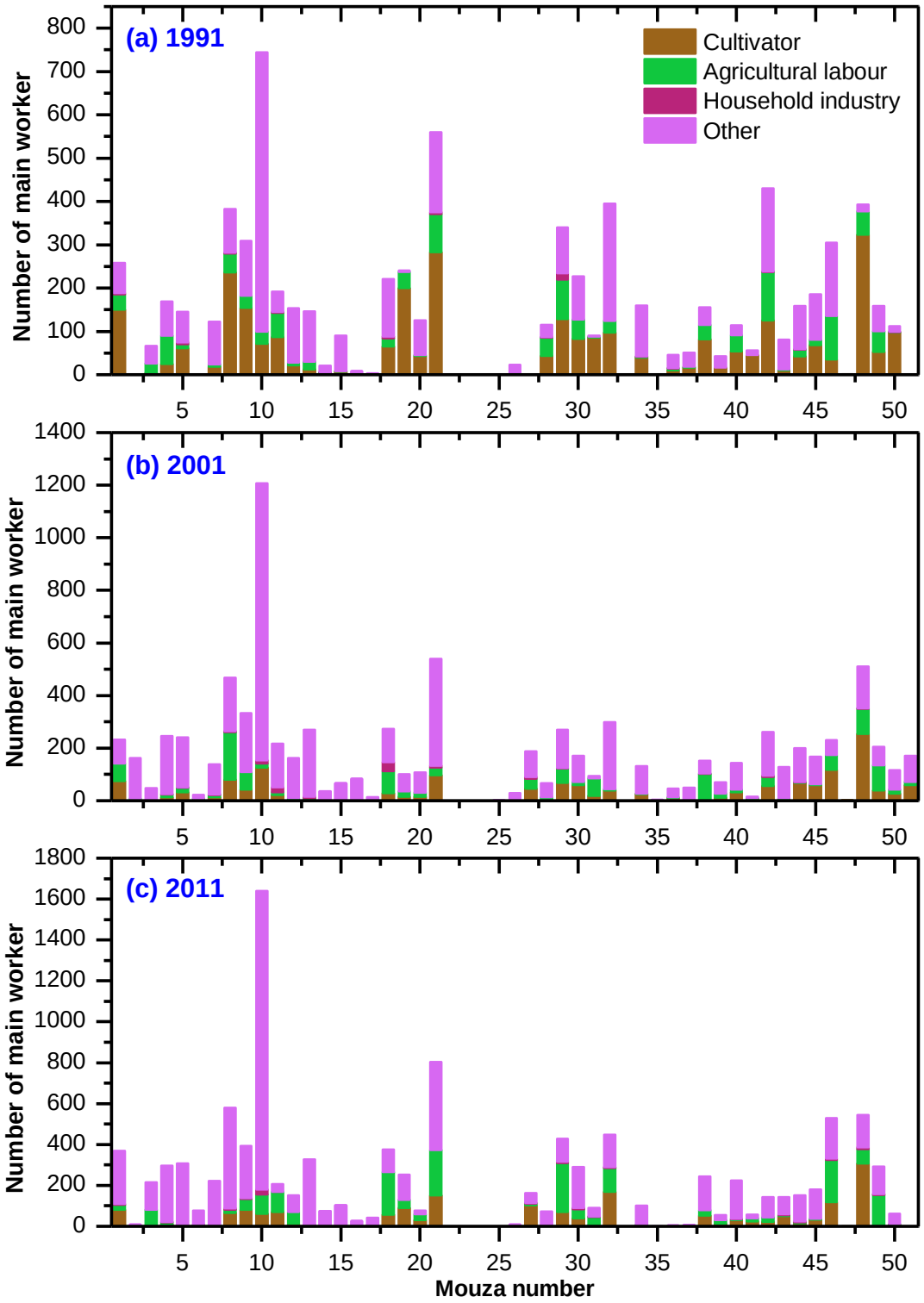

Fig. 3.16: Different types of main workers at Digha urban centre during (a) 1991, (b) 2001, and (c) 2011.

3.3.2. Occupational structures in Contai

In the Contai urban areas, most of the peoples are involved with the agricultural activities along with the other activities in the marketing sector of wholesale and retailing business. The other activities are the supply and services of electricity, gas and water, construction, repair work,

transport, storage and communications, financial intermediation, real estate, business activities and other services (Table 3.5). During the considerable periods, the percentage of total workers to the total population is increased as 26.73 %, 30.11 % and 32.76 % respectively in 1991, 2001 and 2011 with the decreasing trend of non-workers. But, the percentage of main workers in

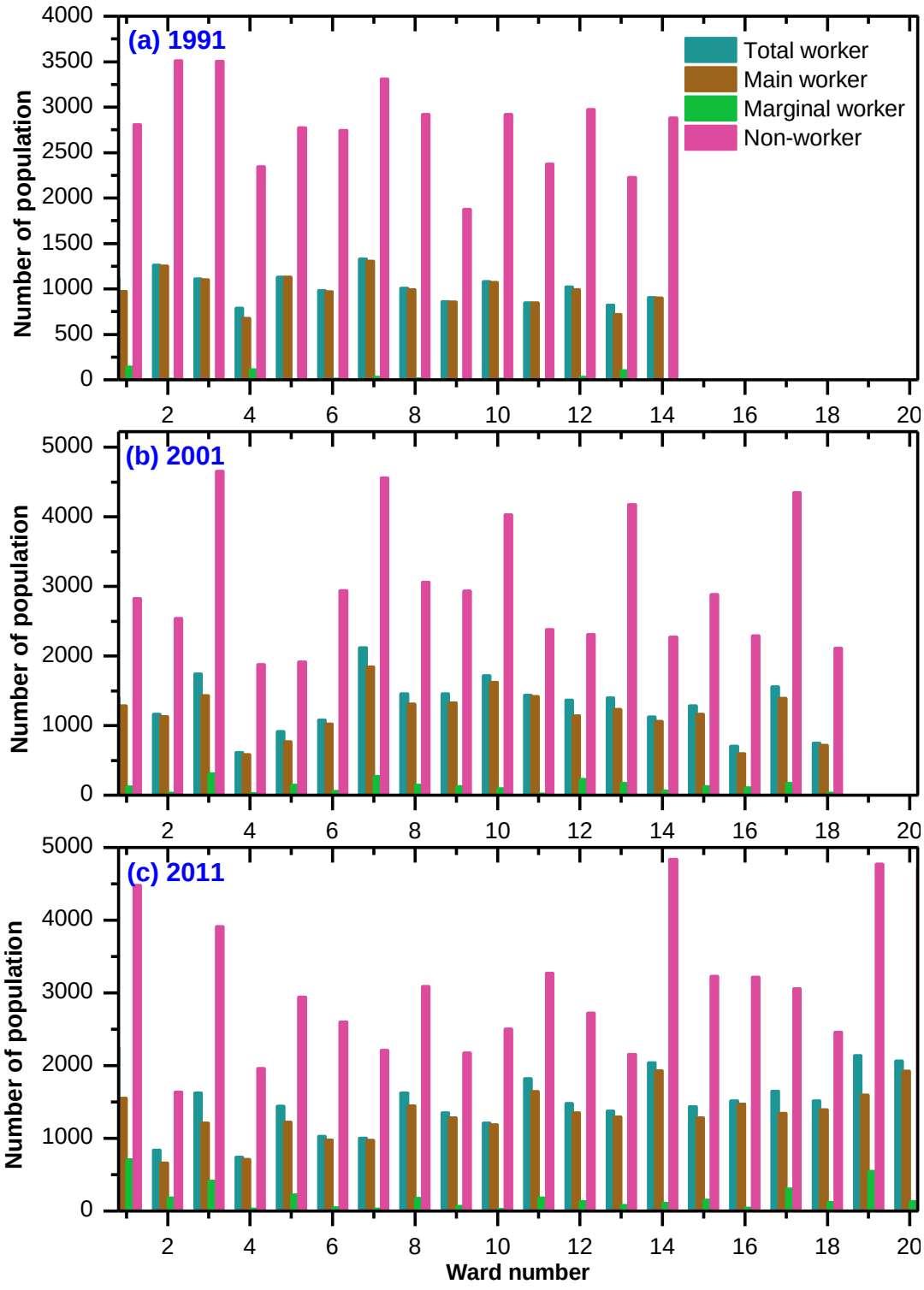

Fig. 3.17: Comparison of the involved population under different working groups at Contai during (a) 1991, (b) 2001, and (c) 2011.

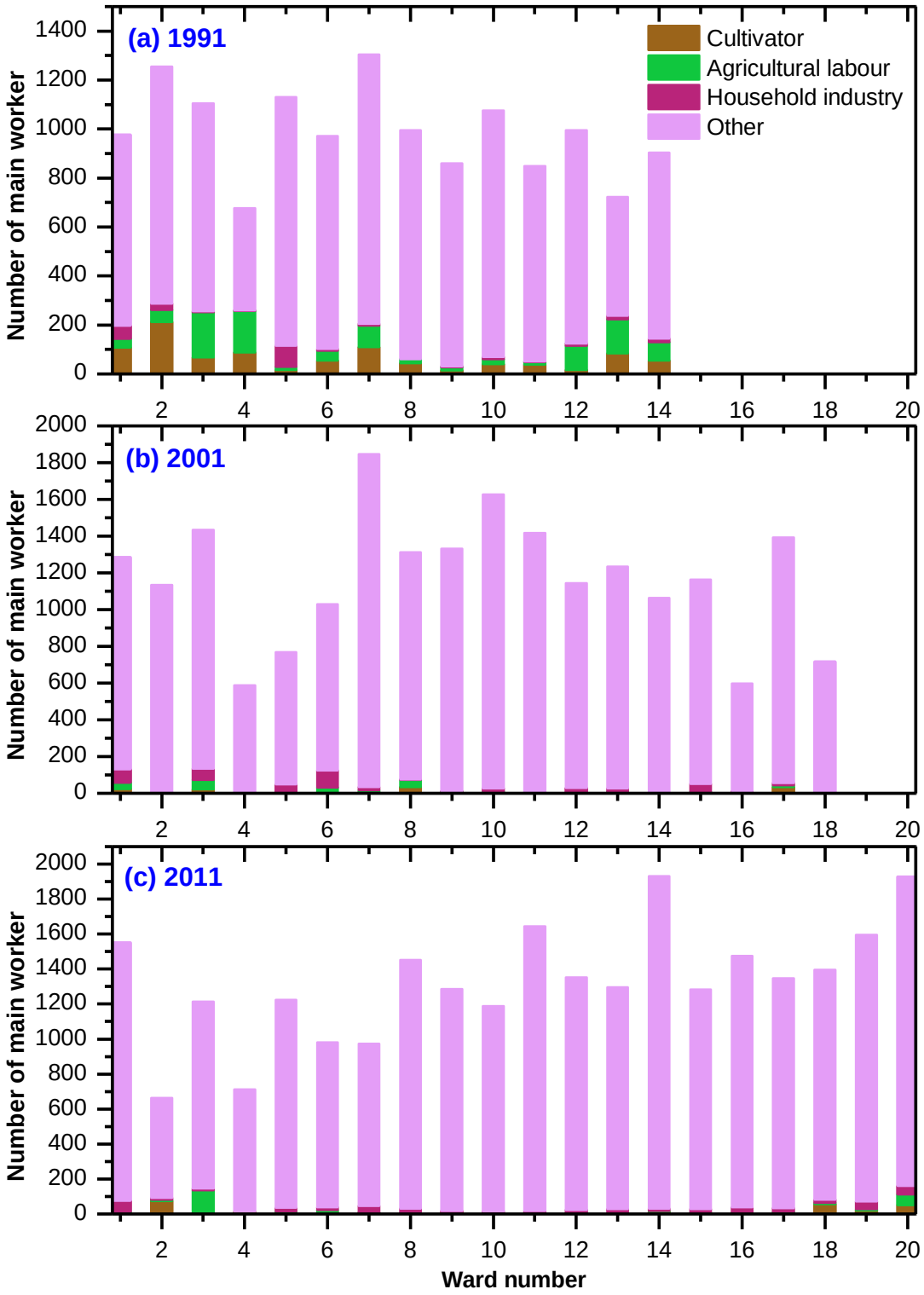

Fig. 3.18: Different types of main workers at Contai urban centre during (a) 1991, (b) 2001, and (c) 2011.

respect to the total workers is gradually decreased respectively as 96.65 % (in 1991), 90.37 % (in 2001) and 87.69 % (in 2011) (Table 3.6). However, the percentage of marginal workers is significantly increased from 3.35 % to 12.31 % during 1991 – 2011 (Table 3.6). With the high rate of decadal population growth, the number of population is tremendously increased which

leads to unemployment within the limited sources of life-supporting occupations. The young generations are not interested in the traditional agricultural activities, rather they want to secure themselves through permanent jobs and business sectors. In this context, the number of non-workers is gradually increased along with a little bit increased in marginal workers, but the main workers are comparatively decreased (Fig. 3.17). As per the available data on occupational structures of Contai municipality area, a majority of the people are involved in the other services which are indicating as gradual increase in number with the decreasing of cultivators and agricultural labourers (Fig. 3.18). In the Contai area, Cashewnut processing is one of the significant occupation and a large number of people involved in these activities. However, the field survey and observation shows that during the last decade this industry is affected by the less production of Cashewnut. And other small-scale industries are also deteriorated in the Contai region which create a harsh impact on the occupational structure among the people.

3.3.3. Occupational structures in Haldia

The most diversified occupational structure is found in the Haldia urban centre due to its variety of economic activities related to the port, industries, and urban activities along with the agricultural activities. Every kind of economic activities have been observed in the Digha (except tourism) and Contai urban centres are also found in Haldia urban area. Under the main workers activities, the major activities are related with the agricultural and allied activities, service and supply of electricity, gas and water, construction, wholesale, retail trade and repair work, hotel and restaurants, transport, storage and communications, financial intermediation, real estate, business activities and other services (Table 3.5). In Haldia urban areas the percentage of total workers to the total population is slightly decreased from 30.91 % to 30.48 % during 2001 – 2011, whereas, it is increased in the other two urban areas of Digha and Contai. As per the field observation during survey periods, it observed that a large number of people arrived in this urban area in the hope of work in a different sector. But, all of them are not able to get work permanently or even as marginal workers. The percentage of main workers is slightly increased from 78.27 % (in 2001) to 82.97 % (in 2011), whereas, the marginal workers is decreased from 21.73 % to 17.03 % (Table 3.6). The ward-wise status of different working and non-working population reveals that the number of the main workers is increased up to 4.70 % in 2011 in compared with the main workers of 2001 (Fig. 3.19). A large number of the people involved in the port-industry based activities, transport sector and real estate business. Moreover, like the other two urban centres, in Haldia also the number of population under different main working activities are significantly transforming into other activities (Fig. 3.20).

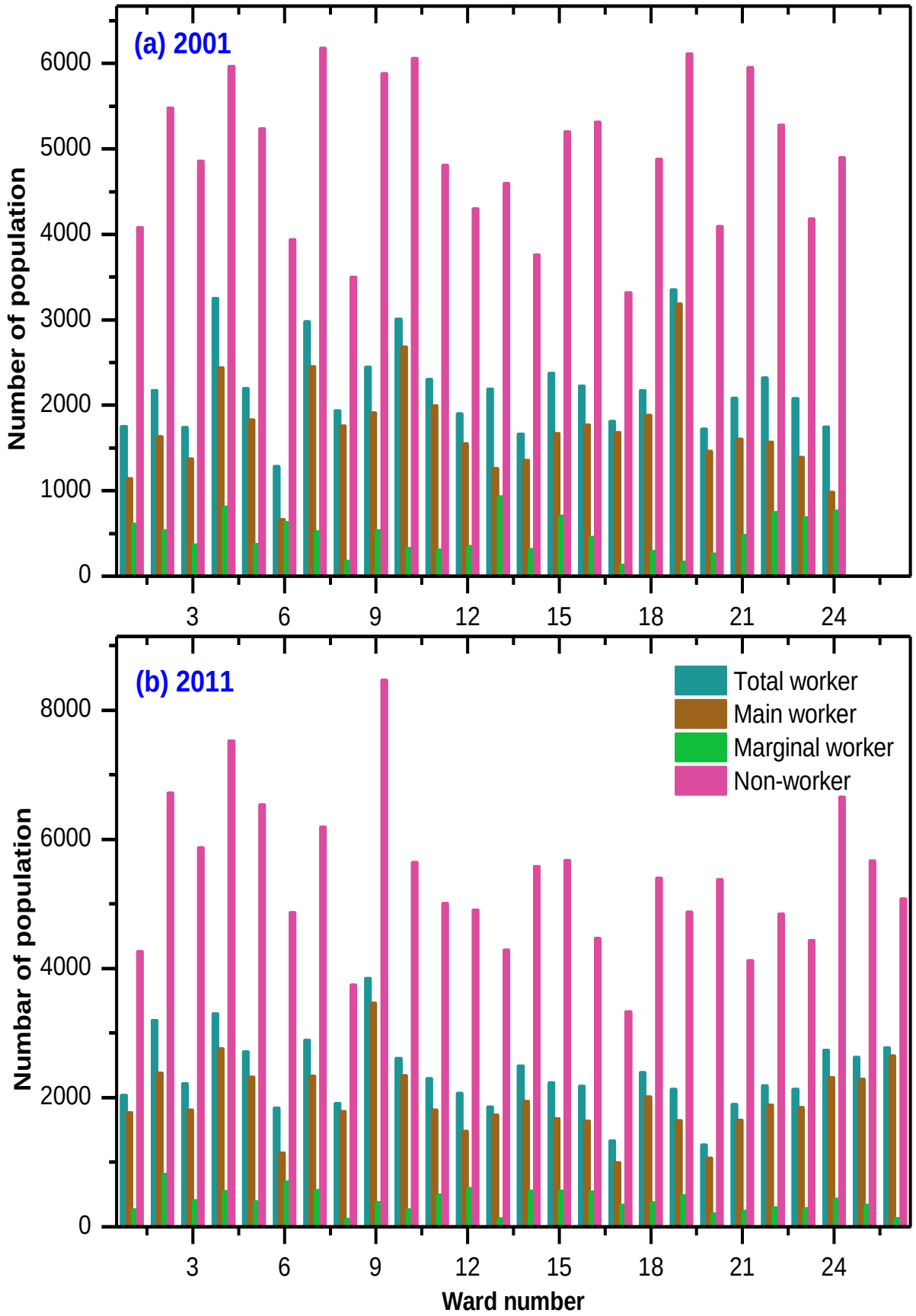

Fig. 3.19: Comparison of the involved population under different working groups at Haldia during (a) 2001, and (b) 2011.

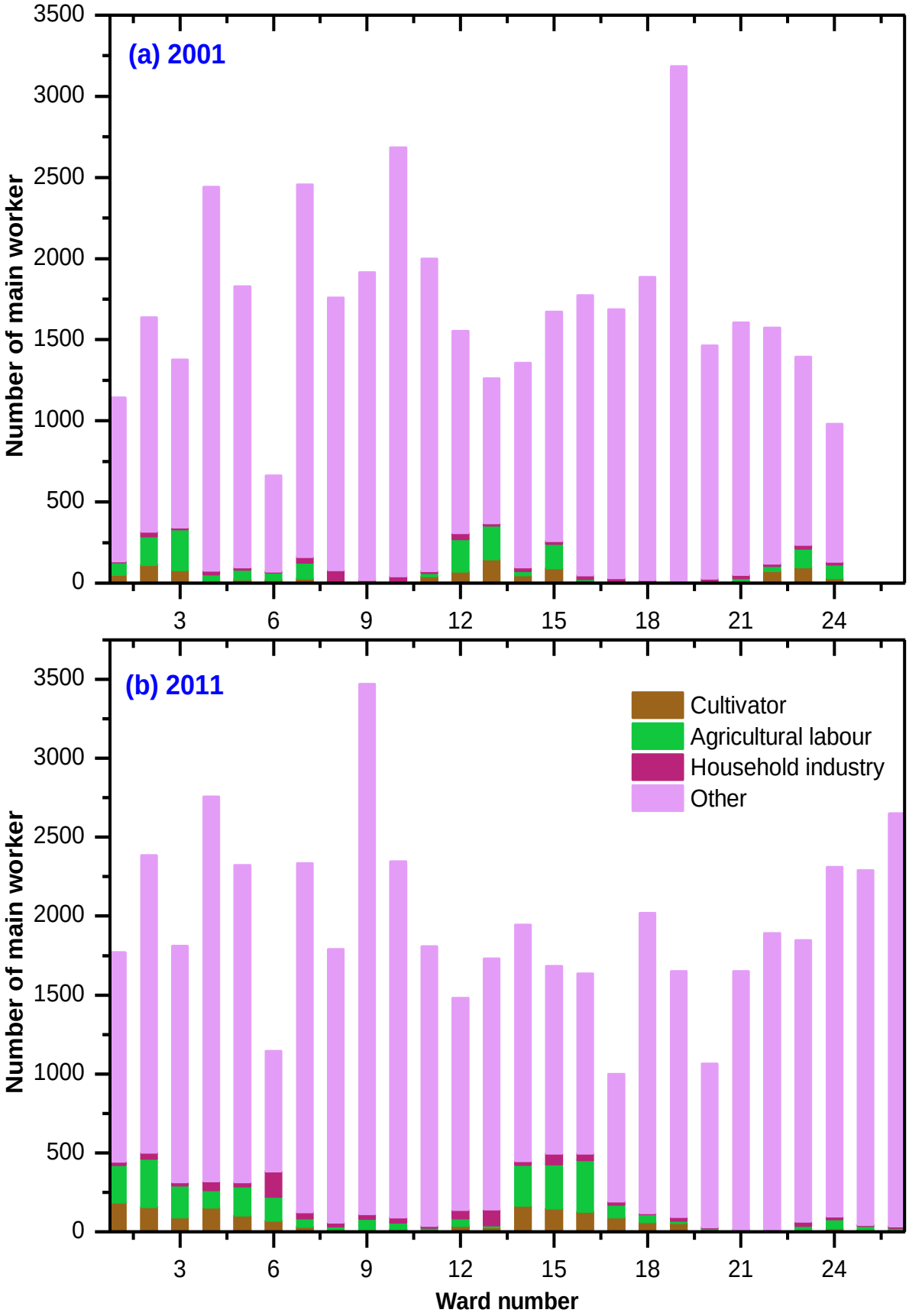

Fig. 3.20: Different types of main workers at Haldia urban centre during (a) 2001, and (b) 2011.

Table 3.6: Census year-wise distribution of working population at three different urban centres.

Sites	Census year	Total worker	Main worker		Marginal worker		Non-worker
			Number	%	Number	%	
Digha	1991	8345	7595	91.01	750	8.99	20308
	2001	12113	8683	71.68	3430	28.32	26119
	2011	15071	10780	71.53	4291	28.47	29332
Contai	1991	14296	13817	96.65	479	3.35	39188
	2001	23341	21094	90.37	2247	9.63	54172
	2011	30215	26496	87.69	3719	12.31	62011
Haldia	2001	52754	41291	78.27	11463	21.73	117919
	2011	61216	50792	82.97	10424	17.03	139611

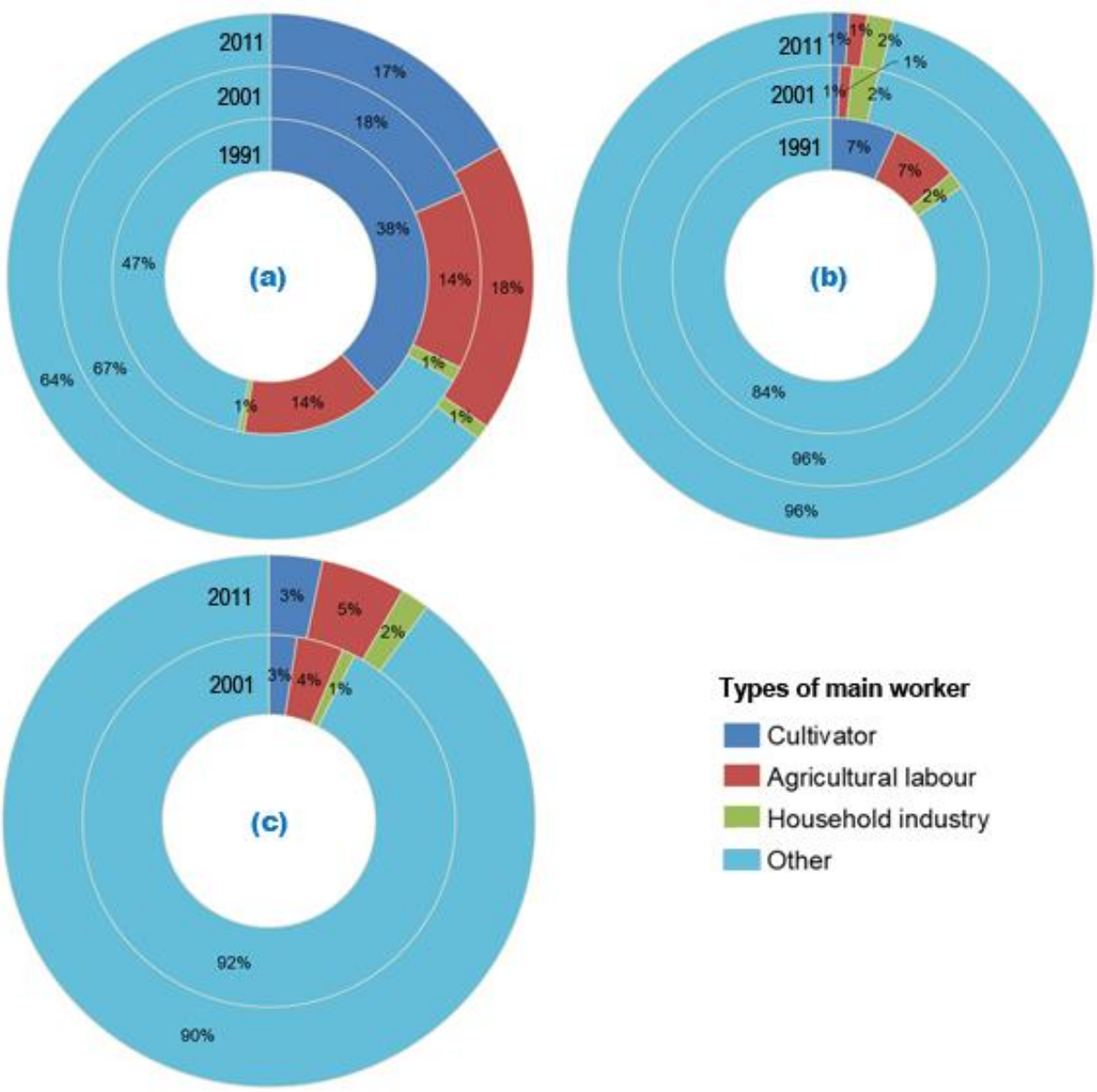

Fig. 3.21: Total number of population involved in different main working activities in the urban centres of (a) Digha, (b) Contai, and (c) Haldia.

The comparison of the population involved in different main working activities in spatio-temporal variation reveals that the percentage of the cultivator is tremendously decreased in Digha and Contai urban centres during 1991 – 2011 (Fig. 3.21a, b). However, agricultural labour is slightly increased in Digha and Haldia (Fig. 3.21a, c), which is significantly decreased in Contai (Fig.3.21b). The population in the household industry sector is only increased in Haldia and decreased in the other two areas. Moreover, during 1991 – 2011, the involvement of people in other activities are tremendously increased in Digha from 47% to 64 % (Fig. 3.21a), which is also increased in Contai from 84 % to 96 % during 1991 – 2001, but remain same (96 %) in 2011 (Fig. 3.21b), however, it slightly decreased in Haldia from 92 % (2001) to 90 % (2011) (Fig. 3.21c). Such kind of deviations in occupational activities clearly indicate the expansion of tourism industries in Digha-Mandarmani coastal belt. The local people of Digha urban fringe areas are getting involved in such occupational opportunities at present. However, this sector is not sufficient to fulfil the job opportunity to a large number of people in the recent trend of immense population growth. Therefore, other peoples are compelled to work as agricultural labour. In the Contai municipality area, the people are involved in more profitable economic activities like marketing and business, transport, service sector and other jobs instead of agriculture and allied activities. However, in Haldia, in spite of the industrial area, a lot of people are still involved in agricultural and household activities. The population in other services (mainly related with the port and industries) have been decreased due to navigation problem in Haldia port and shut down of subsidiary industries regarding the declining of the port, pollution and profit issues.

3.4. Major findings

The following major findings are obtained from this chapter.

1. The maximum population growth is highlighted in the Haldia urban centre which is correlated with the growth of urbanization at that area.
2. The higher level of population density is observed at Contai (ward no. 19 and 20) among the three urban areas. At Digha, the census town of Khadalgobra (well known as Old Digha) has the maximum population density, whereas, at Haldia, the high population density is observed in the surrounding areas of port and market (ward no. 9, 25 and 26).
3. Demographically, the female literacy rate is increased at a significant level in all three sites.
4. Over 75 % of people are involved in tourism and transportation-related activities in Digha and Contai urban centre of the beach fringed coasts at present.