

Appendix-1

Mean and Standard Deviation of each Occupation

	Agriculture				Mining			
	% of agricultural workers	Mean Deviation	Square of mean deviation	Standard deviation	% of mining workers	Mean deviation	Square of mean deviation	Standard deviation
1. Asansol	3.75	8.11	65.77	Less than mean	3.41	0.23	0.07	Mean
2. Kharagpur	6.33	5.53	30.58	do	0.25	2.88	8.29	Less than mean
3. Nabadwip	3.60	8.26	68.22	do	1.23	1.90	3.61	do
4. Habra	10.59	1.27	1.61	do	0.80	2.33	5.42	do
5. Raniganj	2.06	9.08	96.04	do	3.93	0.80	0.64	Mean
6. Balurghat	17.62	5.76	33.17	Mean	1.03	2.05	4.20	Less than mean
7. Ondal	7.75	4.11	16.89	Less than mean	10.69	7.56	57.15	Mean
8. Baharampur	8.59	3.27	10.69	do	2.09	1.04	1.03	Less than mean
9. English Bazar	5.17	6.69	44.75	do	2.16	0.97	0.94	do
10. Ranaghat	1.64	10.22	104.44	do	0.85	2.28	5.19	do

Appendix-1 contd.

11. Cooch Behar	3.17	8.69	75.51	Less than mean	2.60	0.53	0.23	Less than mean
12. Kulti	3.55	8.31	69.05	do	8.25	0.12	0.01	Mean
13. Alipur Duar	3.07	8.79	77.26	do	1.48	1.65	2.72	Less than Mean
14. Birnagar	22.72	10.86	117.93	Mean	1.35	1.78	3.16	do
15. Raiganj	5.04	6.82	46.51	Less than mean	0.25	2.98	8.29	do
16. Rajpur	13.30	1.44	2.07	Mean	0.40	2.73	7.45	do
17. Chittaranjan	1.78	10.08	101.60	Less than mean	0.20	2.93	8.58	do
18. Birlapur	4.80	7.06	49.84	do	0.45	2.68	7.18	do
19. Katwa	8.92	2.94	8.64	do	0.79	2.34	5.47	do
20. Dishergarh	4.54	7.32	53.58	do	44.27	41.14	1692.49	SSD
21. Aurangabad	12.68	0.82	0.67	Mean	0.17	2.96	8.76	Less than mean
22. Adra	11.71	0.15	0.02	Less than mean	1.15	1.98	3.92	do
23. Mainaguri	30.42	18.56	344.47	1SD	0.76	2.37	5.61	do
24. Domjur	26.91	15.05	226.50	1SD	0.19	2.94	8.64	do
25. Garhbeta	55.78	43.92	1928.96	3SD	0.87	2.26	5.10	do

Appendix-1 contd.

26. Kolaghat	17.80	5.94	35.28	Mean	2.29	0.85	0.72	Less than mean
27. Niamatpur	7.52	4.34	18.83	Less than mean	5.12	1.99	3.96	Mean
28. Farrekka	0.06	11.80	139.24	do	1.26	1.87	3.49	Less than mean
29. Singur	33.73	21.87	479.29	1SD	0.40	2.73	7.45	do
30. Kanyanagar	21.42	9.56	91.39	Mean	0.25	2.89	8.29	do
	Mean-11.86	Sd = $\sqrt{\frac{4337.9}{30}}$			Mean-3.13	Sd = $\sqrt{\frac{1879.16}{30}}$		
		= $\sqrt{144.59}$				= $\sqrt{62.60}$		
		= 12.02				= 7.91		

Mean and Standard Deviation for each Occupation

	Household industry				Other than household industry			
	% of work-ers	Mean Devi-ation	Square of mean devia-tion	Standard deviation	% of work-ers	Mean devi-ation	Square of mean devia-tion	Standard deviation
1. Asansol	3.64	2.38	5.66	Less than mean	35.91	15.89	252.49	Mean
2. Kharagpur	1.05	4.97	24.70	do	13.68	6.34	40.14	Less than mean
3. Nabadwip	14.49	8.47	71.74	Mean	23.05	3.03	9.18	Mean
44. Habra	2.75	3.27	10.69	Less than mean	19.92	0.10	0.01	Less than mean
5. Raniganj	1.53	4.44	19.71	do	37.10	17.03	291.73	Mean
6. Balurghat	0.81	5.21	27.14	do	7.83	12.19	148.60	Less than mean
7. Ondal	0.40	5.62	31.58	do	5.83	14.19	201.36	do
8. Baharampur	5.31	0.71	0.50	do	9.12	10.90	118.81	do
9. English Bazar	4.20	1.82	3.31	do	9.47	10.55	111.30	do
10. Ranaghat	3.21	2.81	7.90	do	18.41	1.61	2.59	do

11. Cooch Behar	4.64	1.38	1.90	Less than mean	10.68	9.34	87.24	Less than mean
12. Kulti	2.97	3.05	9.30	do	45.15	25.13	631.52	1SD
13. Alipur Duar	4.07	1.95	3.80	do	9.14	10.61	112.57	Less than mean
14. Birnagar	15.83	9.81	96.24	Mean	17.43	2.59	6.71	do
15. Raiganj	4.41	1.61	2.59	Less than mean	12.93	7.09	50.27	do
16. Rajpur	3.04	2.93	8.88	do	14.85	5.17	26.73	do
17. Chittaranjan	0.70	5.32	28.30	do	82.11	62.09	3855.17	3SD
18. Birlapur	0.91	5.11	26.11	do	83.99	63.97	4092.16	3SD
19. Katwa	6.08	0.06	0.00	Mean	12.30	7.63	58.22	Less than mean
20. Dishergarh	2.38	3.64	13.25	Less than mean	6.27	13.75	189.06	do
21. Aurangabad	59.43	35.41	2852.63	SSD	8.56	11.46	131.33	do
22. Adra	1.21	4.81	23.14	Less than mean	11.12	8.90	79.21	do
23. Mainaguri	4.90	1.12	1.25	do	8.12	11.90	141.61	do
24. Domjur	12.37	6.35	40.32	Mean	24.44	4.42	19.54	Mean
25. Garhbeta	2.68	3.34	11.16	Less than mean	4.51	15.51	240.56	Less than mean

Mean and Standard Deviation of each Occupation

	Construction				Trade & Commerce			
	% of work-ers	Mean Devi-ation	Square of mean devia-tion	Standard deviation	% of work-ers	Mean devi-ation	Square of mean devia-tion	Standard deviation
1. Asansol	1.74	2.75	7.56	Less than mean	13.10	0.34	0.12	Less than mean
2. Kharagpur	0.87	3.62	13.10	do	9.47	8.97	80.46	do
3. Nabadwip	1.85	2.64	6.97	do	27.00	8.56	73.27	1SD
4. Habra	2.23	2.26	5.11	do	27.09	8.65	74.82	1SD
5. Raniganj	1.23	3.26	10.63	do	20.65	2.21	4.88	Mean
6. Balurghat	1.14	3.35	11.22	do	25.56	7.12	50.69	do
7. Ondal	1.80	2.69	7.24	do	12.82	5.62	31.58	Less than mean
8. Baharampur	3.54	0.95	0.90	do	24.40	5.96	35.52	Mean
9. English Bazar	5.73	1.24	1.54	Mean	24.89	6.45	41.60	Mean
10. Ranaghat	1.58	2.91	8.47	Less than mean	29.21	10.77	115.99	1SD

11. Cooch Behar	3.36	1.13	1.28	Less than mean	23.30	4.86	23.62	Mean
12. Kulti	4.29	0.20	0.04	do	18.39	0.05	0.00	Less than mean
13. Alipur Duar	3.56	0.93	0.86	do	24.98	6.54	42.77	Mean
14. Birnagar	1.21	3.28	10.76	do	15.02	3.42	11.70	Less than mean
15. Raiganj	2.90	1.59	2.53	do	30.81	12.37	153.02	1SD
16. Rajpur	3.40	1.09	1.19	do	12.46	5.98	35.76	Less than mean
17. Chittaranjan	0.22	4.27	18.23	do	3.50	14.94	223.30	do
18. Birlapur	0.12	4.37	19.10	do	3.38	15.06	226.80	do
19. Katwa	2.39	2.10	4.41	do	31.89	13.45	180.90	1SD
20. Dishergarh	3.67	0.82	0.67	do	9.33	9.11	82.93	Less than mean
21. Aurangabad	1.90	2.59	6.71	do	10.39	8.05	64.80	do
22. Adra	0.43	4.06	16.48	do	8.77	9.07	93.51	do
23. Mainaguri	1.83	2.66	7.08	do	19.11	0.67	0.45	Mean
24. Domjur	1.69	2.80	7.84	do	17.35	1.09	1.19	Less than mean
25. Garhbeta	0.56	3.93	15.44	do	13.64	4.80	23.04	do

26. Kolaghat	5.17	0.63	4.46	Mean	21.48	3.04	9.24	Mean
27. Niamatpur	3.05	1.44	2.07	Less than mean	23.39	5.45	29.70	Mean
28. Farrakka	69.10	64.61	4174.45	SSD	5.47	12.97	163.22	Less than mean
29. Singur	2.90	1.69	2.36	Less than mean	14.21	4.23	17.89	do
30. Kanyanagar	1.47	3.02	9.12	do	16.66	8.22	67.57	1SD
	Mean-4.49	SD =	$\sqrt{\frac{4374.32}{30}}$		Mean-19.44	SD =	$\sqrt{\frac{1965.30}{30}}$	
	=	=	$\sqrt{145.81}$		=	=	$\sqrt{65.51}$	
	=	=	12.07		=	=	8.09	

Mean and Standard Deviation of each Occupation

	Transport & Communication				Other Services			
	% of work-ers	Mean Devi-ation	Square of mean devia-tion	Standard deviation	% of work-ers	Mean Devi-ation	Square of mean devia-tion	Standard deviation
1. Asansol	17.07	2.52	6.35	Mean	16.38	5.10	26.01	Less than mean
2. Kharagpur	51.24	36.69	1346.16	2SD	17.11	4.37	19.10	do
3. Nabadwip	8.61	5.94	35.28	Less than mean	20.17	1.31	1.72	do
4. Habra	8.05	6.50	42.25	do	28.57	7.09	50.27	Mean
5. Raniganj	11.97	2.68	7.18	do	21.58	0.10	0.01	Less than mean
6. Balurghat	8.92	5.63	31.70	do	37.04	15.56	242.11	1SD
7. Ondal	50.58	36.03	1298.16	2SD	10.13	11.35	128.82	Less than mean
8. Baharampur	7.25	7.30	53.29	Less than mean	39.70	18.22	331.97	1SD
9. English Bazar	11.20	3.35	11.20	do	37.18	15.70	246.49	1SD
10. Ranaghat	16.63	2.08	4.33	Mean	28.47	6.99	48.86	Mean

11. Cooch Behar	14.17	0.38	0.14	Less than mean	38.08	16.60	275.56	1SD
12. Kulti	12.32	1.23	4.97	do	10.08	11.40	129.96	Less than mean
13. Alipur Duar	33.23	18.68	348.94	1SD	20.20	1.28	1.64	do
14. Birnagar	1.28	13.27	176.09	Less than mean	5.07	16.41	269.29	do
15. Raiganj	13.23	1.32	1.74	do	30.43	8.95	80.10	Mean
16. Rajpur	8.42	6.13	37.50	do	44.13	22.65	513.02	2SD
17. Chittaranjan	1.78	12.77	163.07	do	9.71	11.77	138.53	Less than mean
18. Birlapur	1.28	13.27	176.09	do	5.07	16.41	269.29	do
19. Katwa	9.56	4.99	24.90	do	27.98	6.50	42.25	Mean
20. Dishergarh	12.18	2.37	5.62	do	17.36	4.12	16.97	Less than mean
21. Aurangabad	1.14	13.41	179.83	do	5.73	15.75	248.06	do
22. Adra	48.31	33.76	1130.74	2SD	17.30	4.18	17.47	do
23. Mainaguri	13.18	1.37	1.88	Less than mean	21.67	0.19	0.04	Mean
24. Domjur	5.24	9.31	86.68	do	11.81	9.67	93.51	Less than mean
25. Garhbeta	5.20	9.35	87.42	do	16.76	4.72	22.28)	do

26. Kolaghat	20.75	6.20	39.44	Mean	16.75	4.73	22.24	Less than mean
27. Niamatpur	29.21	14.66	214.92	1SD	12.94	9.64	74.65	do
28. Farrakka	1.54	13.01	169.26	Less than mean	6.97	14.61	213.45	do
29. Singur	3.14	11.41	130.19	do	16.98	15.50	240.25	1SD
30. Kanyanagar	6.13	8.42	70.90	do	17.84	4.64	21.53	Less than mean
	Mean-14.55	sd =	$\sqrt{\frac{5909.43}{30}}$		Mean-21.49	sd =	$\sqrt{\frac{3516.29}{30}}$	
	=	=	$\sqrt{193.65}$		=	=	$\sqrt{117.21}$	
	=	=	13.91		=	=	10.82	

Table-103 (Appendix-2)

Population Growth Rate in the Constituents of Urban Agglomerations between 1961-1971 and 1971-1981

Name of urban agglomerations/ constituents	Growth rate in percentage	
	1961-1971	1971-1981
1. Cooch Behar Urban Agglomeration		
i) Cooch Behar (M)	28.06	15.73
a) Kharimala-Khagrabari (OG)	41.33	78.33
ii) Guriahati (NM)	23.86	42.25
2. Alipur Duar Urban Agglomeration		
i) Alipur Duar (M)	26.76	23.61
a) Sobhaganj (OG)	83.71	38.56
ii) Alipur Duar Railway Junction (NM)	93.02	.07
a) Chechakhata (OG)	99.82	54.08
3. Balurghat Urban Agglomeration		
i) Balurghat (M)	148.48	55.93
a) Chak Bhrigu (OG)	21.15	113.71
b) Baidyanathpur (OG)	113.77	32.64
4. Raiganj Urban Agglomeration		
i) Raiganj (M)	33.76	39.71
ii) Kasba (NM)	112.27	22.58

Table-103 (Appendix-2) conti.

5. English Bazar Urban Agglomeration

i) English Bazar (M)	33.62	28.32
ii) Old Malda (M)	36.97	28.22
iii) Sherpur Makimpur (OG)	289.51	120.77
iv) Jhalghelia (NM)	382.13	-23.61

6. Baharempur Urban Agglomeration

i) Baharempur (M)	16.51	27.94
a) Budharpura (OG)	71.37	34.07
ii) Kasimbazar (NM)	26.84	17.62

7. Nabadwip Urban Agglomeration

i) Nabadwip (M)	29.29	15.32
a) Char Maijdia (OG)	12.12	5.43
b) Char Brahmennagar (OG)	7.65	40.00
c) Maheshganj (OG)	113.45	- .06
ii) Gadigachha (NM)	40.76	32.29

8. Asansol Urban Agglomeration

i) Burnpur (NM)	37.58	6.34
a) Nabaghanadi (OG)	48.30	17.80
ii) Outer Burnpur	28.56	55.55
iii) Asansol (M)	50.83	17.57
a) Kalipaheri (OG)	-12.54	19.93
iv) Bhanowara (NM)	- 8.67	19.39
a) Charanpur (OG)	-34.56	8.93
v) Pariharpur (NM)	-30.22	-17.53

Table-103 (Appendix-2) contd.

vi) Sripur (NM)	- 3.11	3.45
vii) Ninga (NM)	-31.97	56.01
viii) Jamuri (NM)	-44.05	28.22
a) Kaithi (OG)	-11.45	13.69
b) Demodarpur (OG)	42.24	11.50
9. Raniganj Urban Agglomeration		
i) Bagra (NM)	61.16	27.98
a) Satgram (OG)	-21.71	24.70
ii) Jemari (NM)	- 1.70	49.19
iii) Nimcha (NM)	29.53	-49.23
iv) Siarsol (NM)	32.61	17.75
v) Ankula (NM)	431.89	-15.33
a) Murgathaul (OG)	46.05	191.21
vi) Raghunath Chak (NM)	33.31	17.89
vii) Ballavpur (NM)	32.48	27.53
viii) Raniganj (M)	33.13	21.44
a) Sahebganj (OG)	26.40	20.35
10. Kulti Urban Agglomeration		
i) Kulti (NM)	-13.66	39.30
ii) Lalbazar (NM)	11.85	- 0.36
iii) Ramnagar (NM)	24.27	-12.79
iv) Baraker (NM)	3.17	19.50
v) Petana (NM)	51.19	40.23

Table-103 (Appendix-2) contd.

11. Chittaranjan Urban Agglomeration

i) Chittaranjan (NM)	40.68	24.53
ii) Hindusthan Cables (NM)	..	40.33
a) Benagarya (OG)	104.62	44.77

- Sources :
- i) District Census Handbooks, Cooch Behar, Jalpaiguri, West Dinajpur, Malda, Murshidabad, Nadia, Burdwan, 1961.
 - ii) District Census Handbooks of Cooch Behar, Jalpaiguri, West Dinajpur, Malda, Murshidabad, Nadia, Burdwan, 1971.
 - iii) Census of India, 1981, West Bengal, Series-23, Paper 1 of 1982.

Table-110 (Appendix-3)

Urban agglomerations in the states and Union Territories of India under different size classes
in 1971 and 1981

India states/Union Territories (1)	Class-I 1971 1981		Class-II 1971 1981		Class-III 1971 1981		Class-IV 1971 1981		Class-V 1971 1981		Class-VI 1971 1981	
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
India	87	111	57	68	86	45	56	38	51	7	2	1
1. Andhra Pradesh	4	4	..	..	..	..	..	..	..	..	..	..
2. Bihar	5	8	..	6	10	2	1	..	..	..	..	..
3. Gujarat	6	11	12	13	12	4	2	2	..	..	..	..
4. Haryana	..	4	..	..	..	..	..	..	..	..	..	..
5. Himachal Pradesh	..	..	..	..	..	..	..	..	1	..	..	1
6. Karnataka	5	7	..	..	..	..	..	..	..	..	..	..
7. Kerala	..	7	..	2	..	..	..	..	..	..	..	..
8. Madhya Pradesh	11	8	20	12	28	11	33	15	39	3	1	..
9. Maharashtra	10	11	1	1	4	1	1	1	..	..	..	..
10. Manipur	..	..	..	..	..	..	..	..	..	..	..	..
11. Meghalaya	1	1	..	..	..	..	..	..	..	..	..	..

Table-110 (Appendix-3) contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
12.	Nagaland	..	..	..	..	..
13.	Orissa	3	3	1	2	3
14.	Punjab	3	3	6	1	9
15.	Rajasthan	3	2	2	3	6
16.	Sikkim	..	..	..	..	..
17.	Tamilnadu	12	14	12	13	4
18.	Tripura	1	..	..	..	..
19.	Utter Pradesh	15	17	2	4	4
20.	West Bengal	2	9	7	10	4
21.	Assam	1	N.A.	1	N.A.	2
22.	Jammu & Kashmir	2	N.A.	..	N.A.	..
23	<u>Union Territories</u>					
1.	A & N Island	..	..	..	..	..
2.	Arunachal Pradesh	..	..	..	..	..
3.	Chandigarh	1	1	..	..	..
4.	D & N Haveli	..	..	..	..	..
5.	Delhi	1	1	..	..	..

Table-110 (Appendix-3) contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)
6. Goa, Daman & Diu	..	..	1	..	..	..
7. Lakshadweep	..	..	..	..	..	..
8. Mizoram	..	..	..	..	..	..
9. Pondicherry	1	..	..	..	..	..

Sources : 1) Census of India, 1971, India, Series-1, Part II-A(1)

11) Census of India, 1931, Series-1 India, Paper 2 of 1931, Provisional Population

Totals.

Table-113 (Appendix-4)

Proportion of Urban Agglomerations' Population to total Urban Population and their class-wise distribution in States and Union Territories of India, 1971 and 1981

Name of States/ Union Territories	% of agglomera- tions' popul- ation to to- tal ur- ban popul- ation	Class-wise distribution of agglomera- tions' population (in percentage)					
		I	II	III	IV	V	VI
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
India 1971	48.91	84.75	7.38	5.59	1.49	0.77	.02
1981	46.61	90.31	6.64	2.18	.78	0.08	.01
1. Andhra Pradesh							
1971	32.05	100.00	..	..	..	..	..
1981	31.59	100.00	..	..	..	..	..
2. Assam							
1971	25.74	58.66	20.69	20.65	..	..	..
1981	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
3. Bihar							
1971	41.39	74.79	8.60	15.86	0.75	..	..
1981	44.55	86.94	10.61	2.45	..	..	..
4. Gujarat							
1971	60.92	71.44	18.83	9.06	0.67	..	..
1981	62.44	83.86	13.35	2.20	0.59	..	..
5. Haryana							
1971						..	..
1981	18.41	100.00	..	..	..	..	..

Table-113 (Appendix-4) contd.

6. Himachal Pradesh							
1971	2.12	..	..	..	..	100.00	..
1981	1.23	..	..	..	..	..	100.00
7. Karnataka							
1971	32.34	100.00	..	..	..	..	..
1981	40.94	100.00	..	..	..	..	..
8. Kerala							
1971	..	..	..	..	..	..	..
1981	50.09	93.38	6.62	..	..	..	..
9. Madhya Pradesh							
1971	79.06	56.99	11.69	17.17	8.30	5.77	.08
1981	39.90	65.46	19.80	9.18	4.92	0.64	..
10. Maharashtra							
1971	25.82	94.39	1.64	3.55	0.42	..	..
1981	28.80	98.22	0.83	0.71	0.24	..	..
11. Manipur							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
12. Meghalaya							
1971	83.42	100.00	..	..	..	..	..
1981	72.26	100.00	..	..	..	..	..

Table-113 (Appendix-4) contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
13. Nagaland							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
14. Orissa							
1971	31.26	83.79	..	9.21	7.00	..	..
1981	31.02	84.08	5.50	8.73	1.69	..	..
15. Punjab							
1971	59.63	52.68	20.22	16.72	6.31	4.08	..
1981	17.41	53.98	9.40	21.30	11.77	3.55	..
16. Rajasthan							
1971	32.88	74.30	8.24	13.48	3.98	..	..
1981	23.91	75.26	10.40	12.49	1.85	..	..
17. Sikkim							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
18. Tamil Nadu							
1971	61.50	87.22	10.58	1.67	0.35	0.12	0.06
1981	64.24	88.31	10.16	1.04	0.44	0.05	..
19. Tripura							
1971	61.75	100.00	..	..	..	..	..
1981	..	..	..	..	..	..	..

Table-113 (Appendix-4) contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
20. Uttar Pradesh							
1971	49.42	95.45	2.31	1.93	0.31	..	..
1981	43.20	95.20	3.44	1.15	0.21	..	..
21. West Bengal							
1971	72.29	91.74	6.51	1.75	..	..	..
1981	79.81	90.84	6.19	2.12	0.85	..	..
22. Jammu & Kashmir							
1971	68.45	100.00	..	..	..	..	..
1981	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<u>Union Territories</u>							
1. Andaman & Nicobar Island							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
2. Arunachal Pradesh							
1971	....	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
3. Chandigarh							
1971	100.00	100.00	..	..	..	..	..
1981	100.00	100.00	..	..	..	..	..

Table-113 (Appendix-4) contd.

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
4. Dadra & Nagar Haveli							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
5. Delhi							
1971	100.00	100.00	..	..	..	..	..
1981	99.32	100.00	..	..	..	..	..
6. Goa, Daman & Diu							
1971	47.56	..	54.94	45.06	..	..	..
1981	40.33	100.00	..	..	..	..	..
7. Lakshadweep							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
8. Mizoram							
1971	..	..	..	..	..	..	..
1981	..	..	..	..	..	..	..
9. Pondicherry							
1971	77.32	100.00	..	..	..	..	..
1981	79.59	100.00	..	..	..	..	..

Sources : (i) Census of India, 1971, India, Series-1 Part II-A(1)

(ii) Census of India, 1981, India, Series-1 Paper 2 of 1981, Provisional population Totals.