DSS office Copy

DEMOGRAPHIC SURVEILLANCE SYSTEM — MATLAB

VOLUME EIGHTEEN

REGISTRATION OF DEMOGRAPHIC EVENTS- 1987

SCIENTIFIC REPORT NO. 70
November 1992

INTERNATIONAL CENTRE FOR DIARRHOEAL DISEASE RESEARCH, BANGLADESH

DEMOGRAPHIC SURVEILLANCE SYSTEM-MATLAB

Volume Eighteen

Registration of Demographic Events - 1987

International Centre for
Diarrhoeal Disease Research, Bangladesh
GPO Box 128, Dhaka-1000
Bangladesh

ACKNOWLEDGEMENTS

From 1984 through 1989 the Demographic Surveillance System of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) was supported by the Canadian International Development Agency (CIDA). It was supported in 1990 by the Government of the Netherlands and CIDA, and in 1991-92 by the Netherlands, UNDP, and UNFPA. The ICDDR,B is supported by countries and agencies which share its concern for the health problems of developing countries. Current donors include: the aid agencies of the Governments of Australia, Bangladesh, Belgium, Canada, Denmark, France, Japan, the Netherlands, Norway, Saudi Arabia, Sweden, Switzerland, the United Kingdom, and the United States; international organizations including the United Nations Development Programme, the United Nations Children's Fund, the United Nations Population Fund, and the World Health Organization; and private foundations including the Ford Foundation and the Sasakawa Foundation.

CONTENTS

	Page
Summary	1
Chapter 1: Introduction	3
Chapter 2: Population Changes	6
Chapter 3: Mortality	14
Chapter 4: Fertility	32
Chapter 5: Marriage and Divorce	41
Chapter 6: Migration	50

LIST OF TABLES:

Table 2.1	:	Vital Statistics of the Matlab MCH-FP and Comparison Areas, 1980-1987 ...	7
Table 2.2	:	Mid-year Population, Events Registered, and Population Changes in 1987 ...	8
Table 2.3	:	Mid-year Population by Age and Sex, 1987 ...	9
Table 2.4	:	Mid-year Population by Area, Age, and Sex, 1987 ...	10
Table 2.5	:	Mid-year Population in MCH-FP Area by Age, Sex, and Block, 1987 ...	11
Table 3.1	:	Deaths by Age and Sex, 1987 ...	15
Table 3.2	:	Deaths by Area, Age, and Sex, 1987 ...	16
Table 3.3	:	Deaths in MCH-FP Area by Age, Sex, and Block, 1987 ...	17
Table 3.4	:	Death Rates by Age and Sex, 1987 ...	19
Table 3.5	:	Death Rates by Area, Age, and Sex, 1987 ...	20
Table 3.6	:	Abridged Life Table, 1987 ...	22
Table 3.7	:	Abridged Life Tables by Sex, 1987 ...	23
Table 3.8	:	Abridged Life Tables by Area, 1987 ...	24

CONTENTS (continued)

		Page
Table 3.9 :	Abridged Life Tables for MCH-FP Area by Sex, 1987 ...	25
Table 3.10 :	Abridged Life Tables for Comparison Area by Sex, 1987 ...	26
Table 3.11 :	Deaths by Age and Month, 1987 ...	27
Table 3.12 :	Male Deaths by Cause and Age, 1987 ...	28
Table 3.13 :	Female Deaths by Cause and Age, 1987 ...	29
Table 3.14 :	Male Deaths by Cause, Age, and Area, 1987 ...	30
Table 3.15 :	Female Deaths by Cause, Age, and Area, 1987 ...	31
Table 4.1 :	Number and Rates of Pregnancy Outcomes by Type and Area, 1987 ...	33
Table 4.2 :	Pregnancy Outcomes by Month, 1987 ...	34
Table 4.3 :	Age-specific Fertility Rates and Indices, 1987 ..	36
Table 4.4 :	Age-specific Fertility Rates and Indices by Area, 1987 ...	37
Table 4.5 :	Age-specific Fertility Rates and Indices for MCH-FP Area by Block, 1987 ...	38
Table 5.1 :	Groom's Age at Marriage by Previous Marital Status, 1987 ...	42
Table 5.2 :	Bride's Age at Marriage by Previous Marital Status, 1987 ...	43
Table 5.3 :	Marriage Rates by Age and Sex, 1987 ...	44
Table 5.4 :	Number of Marriages by Groom's and Bride's Age at Marriage, 1987 ...	45
Table 5.5 :	Number of Divorces by Partners' Age at Divorce, 1987 ...	46
Table 5.6 :	Marriages and Divorces by Month, 1987 ...	47
Table 5.7 :	Number of Divorces by Sex, Age, and Duration of Marriage, 1987 ...	49

CONTENTS (continued)

		Page
Table 6.1 :	In- and Out-migration by Age and Sex, 1987 ...	51
Table 6.2 :	In-migration by Age, Sex, and Area, 1987 ...	52
Table 6.3 :	Out-migration by Age, Sex, and Area, 1987 ...	53
Table 6.4 :	Age and Sex-specific Migration Rates by Direction, 1987 ...	54
Table 6.5 :	Male Out-migration by Cause of Movement and Age, 1987 ...	56
Table 6.6 :	Female Out-migration by Cause of Movement and Age, 1987 ...	57
Table 6.7 :	Male In-migration by Cause of Movement and Age, 1987 ...	58
Table 6.8 :	Female In-migration by Cause of Movement and Age, 1987 ...	59
Table 6.9 :	In- and Out-migration by Sex and Month, 1987 ...	60

LIST OF FIGURES:

Figure 1.1 :	Map of Bangladesh showing the Study Area ...	4
Figure 1.2 :	Matlab Area showing Villages of Demographic Surveillance System, 1987 ...	5
Figure 2.1 :	Age Pyramid of the 1987 Mid-year Population ...	13
Figure 3.1 :	Probability of Survival from Birth to Age (x) by Sex, 1987 ...	21
Figure 4.1 :	Number of Births and Deaths by Month, 1987 ...	35
Figure 4.2 :	Age-specific Fertility Rates by Area, 1987 ...	40
Figure 5.1 :	Marriages and Divorces by Month, 1987 ...	48
Figure 6.1 :	Rate of In- and Out-migration by Sex and Age, 1987 ...	55
Figure 6.2 :	Number of In- and Out-migrants by Sex and Month, 1987 ...	61

CONTENTS (continued)

Page

LIST OF APPENDICES:

Appendix A: Names and Codes of Villages in the DSS Area, 1987 62

Appendix B: Mid-year Population, Births, and Deaths by Village, 1987 63

Appendix C: Life Table Equations 67

Appendix D: Staff of the DSS, 1987 68

SUMMARY

This report presents the vital registration data for events taking place in 1987 in Matlab, Bangladesh. These data were collected by the Demographic Surveillance System of the International Centre for Diarrhoeal Disease Research, Bangladesh. The registration area is divided into a Maternal and Child Health and Family Planning (MCH-FP) intervention area and a Comparison area receiving government services. In both areas the death rate continue to decrease in 1987; in the MCH-FP area the crude death rate was 9.3 while in the Comparison area it was 11.2. The decrease in mortality was primarily due to a decrease in deaths of children 1 to 4 years old between 1986 and 1987.

The crude birth rates were virtually unchanged from the 1986 levels in both areas, remaining at 33.6 in the MCH-FP area and falling from 39.6 to 39.2 in the Comparison area. Nuptiality patterns changed a little during 1987, with a median age at first marriage of 24.2 years for men and 18.3 years for women.

Both in- and out-migration by both males and females increased in 1987. Due to the decrease in mortality and the increase in in-migration, which more than offset the slight decrease in fertility and increase in out-migration, there was 1.5 percent net increase in the population under surveillance in Matlab in 1987.

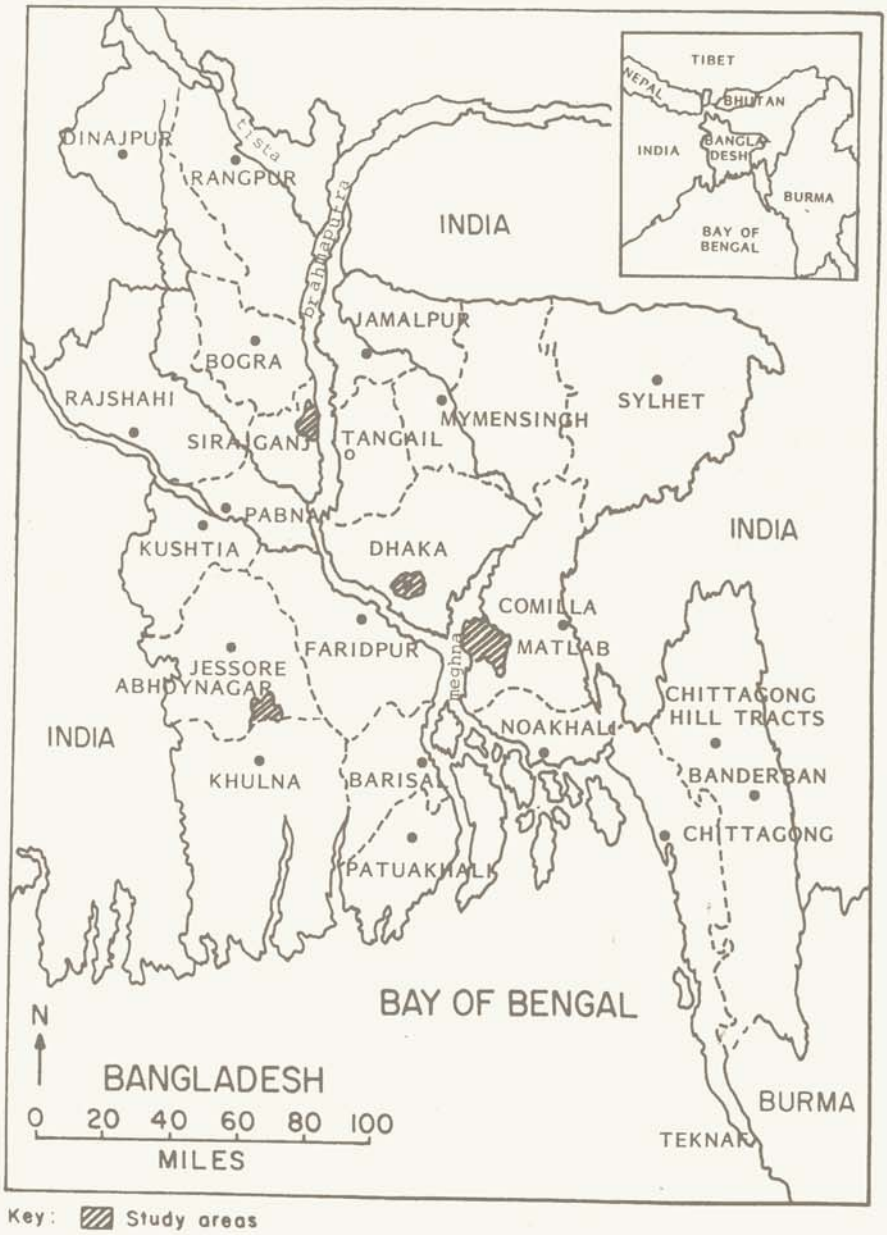
CHAPTER 1

INTRODUCTION

Since 1963 the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), formerly the Cholera Research Laboratory, has been conducting a health related research programme near the town of Matlab, in rural Bangladesh. Matlab is located about 55 kilometers southeast of the country's capital, Dhaka (Figure 1.1). The Demographic Surveillance System (DSS) is one of the components of this field programme. Since 1966 the DSS has maintained the registration of births, deaths, and migrations, in addition to carrying out occasional censuses. In 1975 the system was augmented to include marriages and divorces. Such information is gathered by Health Assistants who visit each household in their assigned areas regularly and fill out the event registration forms. A detailed description of the DSS and its operation appears in CRL Scientific Report No. 9 (March 1978). In October 1977 the surveillance area was reduced from 233 to 149 villages and a Maternal Child Health and Family Planning (MCH-FP) Programme was begun in 70 villages. The remaining 79 villages were treated as a comparison area (Figure 1.2). These changes are described in detail in the ICDDR,B Scientific Report No. 47 (May 1981).

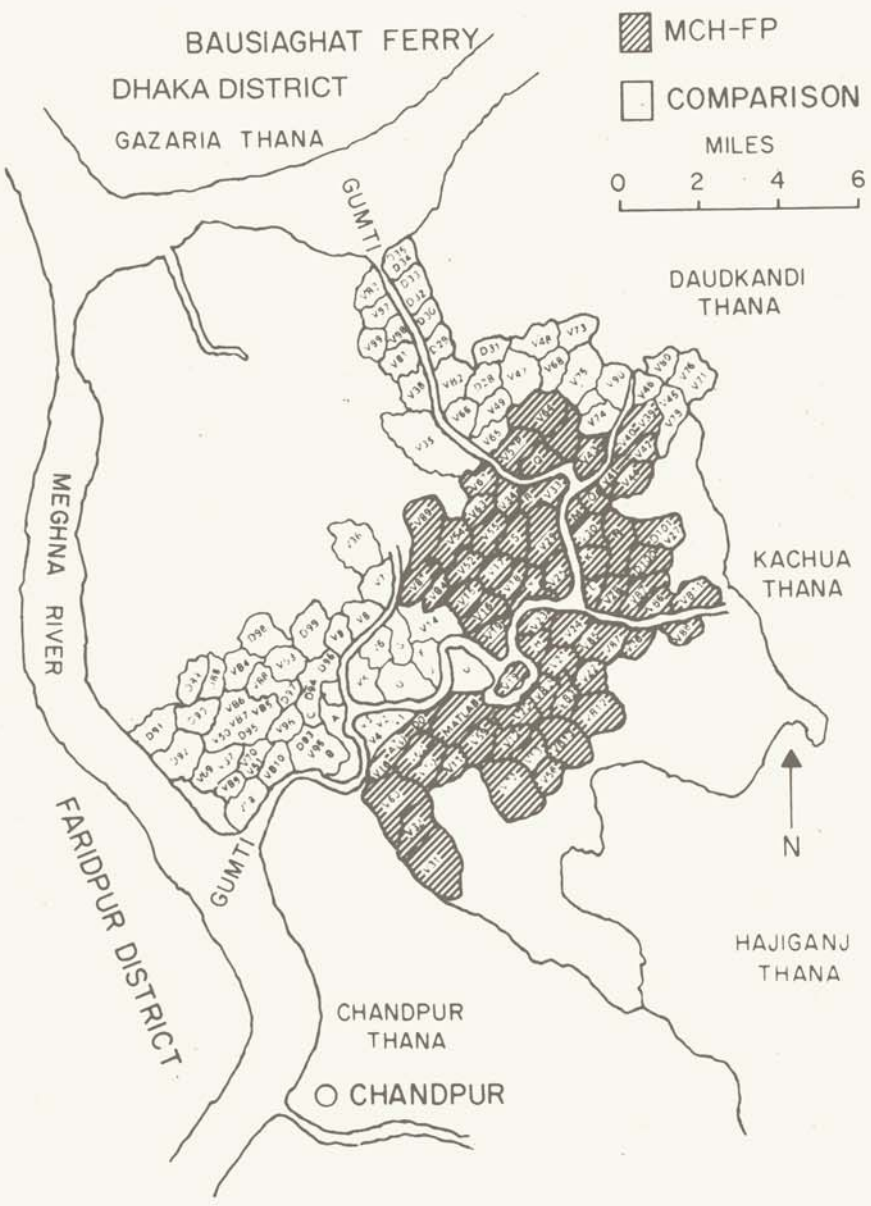
This is the eighteenth volume of a series of scientific reports of the Demographic Surveillance System produced by the ICDDR,B. Presented here are results obtained from the Matlab DSS in 1987, along with brief notes and explanations of the tables.

Figure 1.1: Map of Bangladesh showing the Study Area



Key: ▨ Study areas

Figure 1.2: Matlab Area showing Villages of Demographic Surveillance System, 1987



CHAPTER 2

POPULATION CHANGES

The mid-year population, as well as the demographic events registered in 1987 in the Maternal Child Health and Family Planning (MCH-FP) and the Comparison areas, are shown in Tables 2.2 through 2.5.

The crude birth rate in 1987 was virtually the same in both areas as it had been in 1986, remaining at 33.6 in the MCH-FP area and falling from 39.6 to 39.2 in the Comparison area. The crude death rates decreased slightly to 9.3 and 11.2 in 1987 compared to 9.9 and 12.2 in 1986 in the MCH-FP and the Comparison areas, respectively. These rates show that Matlab experienced very little change in overall fertility and mortality in 1987.

The numbers of in- and out-migrants registered in 1986 were 6,658 and 8,769 respectively, giving an in-migration rate of 33.6, an out-migration rate of 44.3, and a net migration rate of 10.7 per thousand population leaving the area. The net migration rate in 1987 was lower than that reported in 1986 or 1985.

The net population increase was 15.5 per thousand in 1987, while in 1986 it was 12.2 per thousand. This increase in population growth in 1987 was due to a 15 percent increase in the rate of in-migration, and a 10 percent decrease in the death rate, offset somewhat by a 6 percent increase in the rate of out-migration.

There were 2,851 marriages registered in 1987, yielding a marriage rate of 14.4 per 1,000 population, which was lower than that of either 1985 or 1986. In 1987 there were 481 divorces, giving a ratio of 168.7 divorces per 1,000 marriages, which was higher than the 1986 rate of 148.0.

The population pyramid, presented in Figure 2.1, indicates that the age distribution was almost identical to those seen during the past four years. Age is recorded in total completed years as of the last birthday. For people born within the DSS area after 1966, age figures are exact. In cases where ages are unknown -- which may apply to in-migrants or to persons born before 1966 -- age ascertainment is made as accurately as possible by reference to any past event that may be remembered.

Table 2.1: Vital Statistics of the Matlab MCH-FP and Comparison Areas, 1980-1987

Vital rates (per 1000)	1980	1981	1982	1983	1984	1985	1986	1987
All deaths								
MCH-FP area	11.3	11.9	12.5	11.9	13.4	10.2	9.9	9.3
Comparison area	14.9	14.4	15.9	16.7	17.3	14.2	12.2	11.2
Both areas	13.1	13.1	14.2	14.3	15.3	12.2	11.0	10.2
Neonatal deaths*								
MCH-FP area	59.3	66.4	58.1	56.4	57.9	52.5	45.4	43.8
Comparison area	72.7	69.5	68.1	70.3	71.4	69.4	53.0	54.9
Both areas	66.6	68.1	63.5	64.0	65.3	61.7	49.4	49.7
Post-neonatal deaths*								
MCH-FP area	32.6	36.1	47.5	41.8	56.9	33.8	36.4	34.6
Comparison area	41.3	45.0	50.2	42.2	55.7	49.1	39.7	39.5
Both areas	37.3	41.0	49.0	42.0	56.2	42.1	38.2	37.2
Child deaths (1-4 yrs)								
MCH-FP area	18.6	19.1	18.8	21.9	23.1	16.4	13.4	9.9
Comparison area	25.4	24.8	27.4	35.3	39.2	24.6	20.7	15.0
Both areas	22.1	22.0	23.3	29.1	31.6	20.7	17.2	12.6
Births								
MCH-FP area	37.1	35.3	36.9	34.2	30.7	34.6	33.6	33.6
Comparison area	45.5	43.8	44.7	42.6	37.3	42.6	39.6	39.2
Both areas	41.2	39.5	40.7	38.3	34.0	38.5	36.5	36.4
Total fertility**								
MCH-FP area	5.1	4.8	5.0	4.5	4.0	4.5	4.3	4.2
Comparison area	6.7	6.3	6.3	6.1	5.1	6.0	5.5	5.4
Both areas	5.9	5.5	5.6	5.3	4.5	5.2	4.9	4.8
In-migration	29.7	27.3	24.5	24.6	24.2	23.9	28.3	33.6
Out-migration	36.6	35.0	26.5	35.8	42.7	42.1	41.7	44.3
Growth (%)	2.1	1.9	2.5	1.3	0.0	0.8	1.2	1.5
Natural increase								
MCH-FP area	25.8	23.4	24.3	22.3	17.3	24.4	23.7	24.3
Comparison area	30.6	29.4	28.8	25.8	20.0	28.4	27.4	28.0
Both areas	28.2	26.4	26.5	24.1	18.6	26.3	25.5	26.1

*Per 1000 live births.
**Per woman.

Table 2.2: Mid-year Population, Events Registered, and Population Changes in 1987

	Number			Rate per 1000		
	Total	Males	Females	Total	Males	Females
Total population as of 30 June 1987:	198113	99979	98134	-	-	-
MCH-FP area	100486	50433	50053	-	-	-
Comparison area	97627	49546	48081	-	-	-
Events registered (Jan - Dec 1987)						
Births						
MCH-FP area	3380	1738	1642	33.6	-	-
Comparison areas	3826	1895	1931	39.2	-	-
Both areas	7206	3633	3573	36.4	-	-
Deaths						
-Infant*						
MCH-FP area	265	156	109	78.4	89.7	66.4
Comparison area	361	173	188	94.3	91.3	97.3
Both areas	626	329	297	86.8	90.5	83.1
-All deaths						
MCH-FP area	934	520	414	9.3	10.3	8.3
Comparison area	1095	503	592	11.2	10.2	12.3
Both areas	2029	1023	1006	10.2	10.2	10.3
In-Migration	6658	3038	3620	33.6	30.4	36.9
Out-migration	8769	4153	4616	44.3	41.5	47.0
Marriage	2851	-	-	14.4	-	-
Divorce**	481	-	-	168.7	-	-
Population change (Jan - Dec 1987)						
Net-Migration	-2111	-1115	-996	-10.7	-11.1	-10.1
Natural increase						
MCH-FP area	2446	1218	1228	24.3	24.2	24.5
Comparison area	2731	1392	1339	28.0	28.1	27.8
Both areas	5177	2610	2567	26.1	26.1	26.2
Net increase	3066	1495	1571	15.5	15.0	16.0

*Rate per 1000 live births.
**Ratio per 1000 marriages.

Table 2.3: Mid-year Population by Age and Sex, 1987

Age (years)	Number			Percent		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	198113	99979	98134	100	100	100
Under 1	6645	3319	3326	3.4	3.3	3.4
1-4	23882	12326	11556	12.1	12.3	11.8
1	6675	3401	3274	3.4	3.4	3.3
2	5693	2863	2830	2.9	2.9	2.9
3	5700	2973	2727	2.9	3.0	2.8
4	5814	3089	2725	2.9	3.1	2.8
5-9	26747	14088	12659	13.5	14.1	12.9
10-14	24879	13073	11806	12.6	13.1	12.0
15-19	22076	11267	10809	11.1	11.3	11.0
20-24	19612	9226	10386	9.9	9.2	10.6
25-29	15547	7951	7596	7.8	8.0	7.7
30-34	10527	5228	5299	5.3	5.2	5.4
35-39	8254	3913	4341	4.2	3.9	4.4
40-44	8384	3601	4783	4.2	3.6	4.9
45-49	7625	3528	4097	3.8	3.5	4.2
50-54	7221	3597	3624	3.6	3.6	3.7
55-59	5550	2842	2708	2.8	2.8	2.8
60-64	4213	2250	1963	2.1	2.3	2.0
65-69	2989	1566	1423	1.5	1.6	1.5
70-74	1963	1071	892	1.0	1.1	0.9
75-79	1137	624	513	0.6	0.6	0.5
80-84	559	313	246	0.3	0.3	0.3
85+	303	196	107	0.2	0.2	0.1

Table 2.4: Mid-year Population by Area, Age, and Sex, 1987

Age (years)	MCH-FP area			Comparison area		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	100486	50433	50053	97627	49546	48081
Under 1	3154	1590	1564	3491	1729	1762
1-4	11343	5809	5534	12539	6517	6022
1	3195	1633	1562	3480	1768	1712
2	2641	1319	1322	3052	1544	1508
3	2710	1368	1342	2990	1605	1385
4	2797	1489	1308	3017	1600	1417
5-9	12982	6813	6169	13765	7275	6490
10-14	12977	6794	6183	11902	6279	5623
15-19	11538	5794	5744	10538	5473	5065
20-24	10222	4703	5519	9390	4523	4867
25-29	7955	4019	3936	7592	3932	3660
30-34	5434	2717	2717	5093	2511	2582
35-39	4253	2002	2251	4001	1911	2090
40-44	4387	1881	2506	3997	1720	2277
45-49	3952	1823	2129	3673	1705	1968
50-54	3629	1850	1779	3592	1747	1845
55-59	2866	1494	1372	2684	1348	1336
60-64	2203	1170	1033	2010	1080	930
65-69	1453	774	679	1536	792	744
70-74	1058	586	472	905	485	420
75-79	588	320	268	549	304	245
80-84	321	183	138	238	130	108
85+	171	111	60	132	85	47

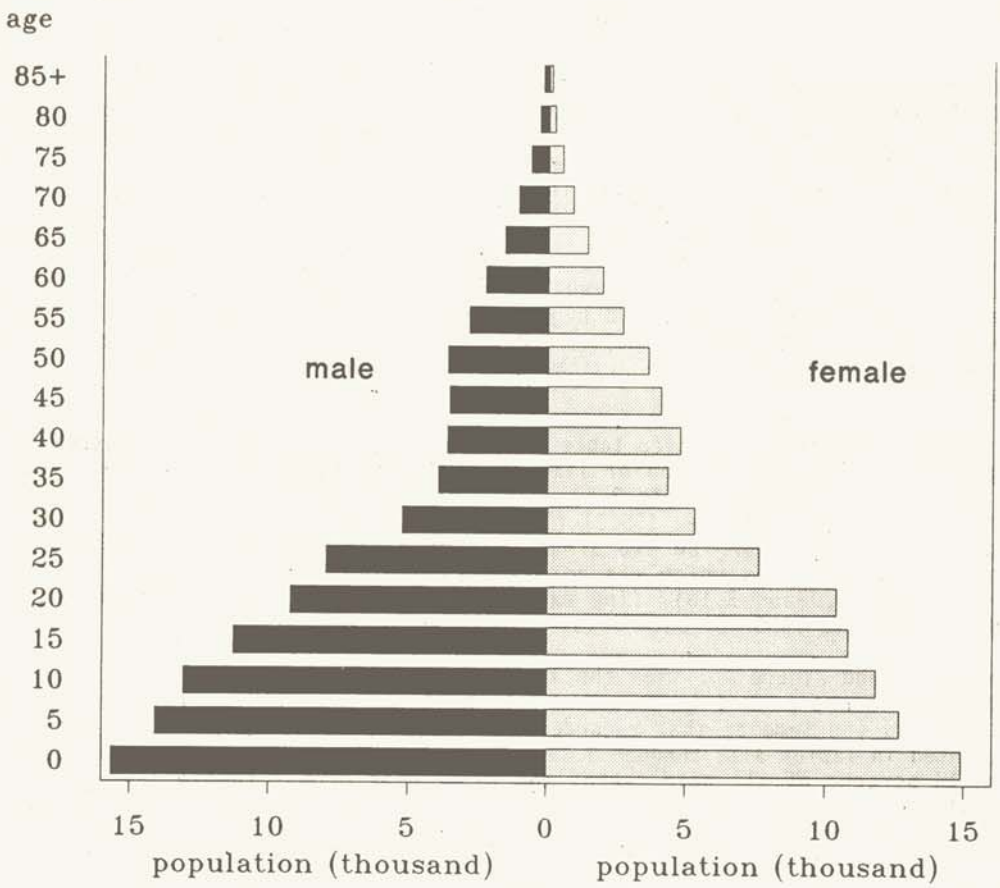
Table 2.5: Mid-year Population in MCH-FP Area by Age, Sex, and Block, 1987

Age (years)	Block A			Block B		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	26627	13390	13237	25644	12690	12954
Under 1	841	417	424	873	431	442
1-4	3057	1565	1492	3025	1558	1467
1	901	449	452	845	434	411
2	722	362	360	683	344	339
3	680	343	337	764	391	373
4	754	411	343	733	389	344
5-9	3422	1816	1606	3405	1765	1640
10-14	3474	1811	1663	3299	1708	1591
15-19	3047	1535	1512	2898	1458	1440
20-24	2861	1316	1545	2514	1099	1415
25-29	2107	1059	1048	1947	974	973
30-34	1458	720	738	1311	615	696
35-39	1120	527	593	1103	503	600
40-44	1208	514	694	1072	438	634
45-49	983	499	484	969	423	546
50-54	885	473	412	934	452	482
55-59	697	364	333	751	389	362
60-64	527	282	245	616	334	282
65-69	348	180	168	355	206	149
70-74	276	140	136	271	164	107
75-79	170	85	85	154	85	69
80-84	93	52	41	90	46	44
85+	53	35	18	57	42	15

Table 2.5 (cont.): Mid-year Population in MCH-FP Area by Age, Sex, and Block, 1987

Age (years)	Block C			Block D		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	26700	13567	13133	21515	10786	10729
Under 1	823	426	397	617	316	301
1-4	2916	1506	1410	2345	1180	1165
1	790	403	387	659	347	312
2	705	369	336	531	244	287
3	713	360	353	553	274	279
4	708	374	334	602	315	287
5-9	3491	1814	1677	2664	1418	1246
10-14	3473	1820	1653	2731	1455	1276
15-19	3182	1609	1573	2411	1192	1219
20-24	2637	1264	1373	2210	1024	1186
25-29	2136	1099	1037	1765	887	878
30-34	1468	733	735	1197	649	548
35-39	1158	568	590	872	404	468
40-44	1189	539	650	918	390	528
45-49	1075	500	575	925	401	524
50-54	983	528	455	827	397	430
55-59	725	392	333	693	349	344
60-64	528	287	241	532	267	265
65-69	421	210	211	329	178	151
70-74	243	130	113	268	152	116
75-79	133	71	62	131	79	52
80-84	82	51	31	56	34	22
85+	37	20	17	24	14	10

Figure 2.1: Age Pyramid of the 1987 Mid-year Population



CHAPTER 3

MORTALITY

The age and sex specific deaths for 1987 are shown in Table 3.1. Of the 2,029 registered deaths, 32.3 percent occurred in children under age 5. This was much less than in 1985 and 1986, when deaths under 5 comprised 52.5 percent and 47.4 percent of all deaths respectively. The 1987 infant mortality rate of 86.9 was slightly lower than the 1986 rate of 87.6. In 1987 the male infant mortality rate was 90.6 and the female infant mortality rate was 83.1 (Table 3.4). A more pronounced difference was seen in childhood mortality; death rates for males and females 1 to 4 years old fell 32 and 24 percent, respectively, between 1986 and 1987. Female death rates in the Comparison area in this age group remained high, however. In 1987, the overall death rates for males and females were 10.2 and 10.3 respectively. In most age groups death rates were higher in the Comparison area than in the MCH-FP area (Table 3.5).

Table 3.6 shows the basic life table parameters; the lx values are plotted in Figure 3.1. The expectation of life at birth was 60.3 years for males and 59.2 years for females (Table 3.6). It was higher in the MCH-FP area 61.3) than in the Comparison area (58.3) (Table 3.8). The difference in the expectation of life between the two areas was more pronounced for females (6.8 years) than for males which was actually slightly higher in the Comparison area (Tables 3.9 and 3.10). The expectation of life at birth increased in 1987 compared to 1986 for both sexes in both areas.

Table 3.11 and Figure 4.1 show the seasonal variation of deaths by age. The number of deaths peaked in December for the total population; this seasonal pattern was the same as that recorded for the year 1986. Deaths by cause are presented in Tables 3.12 through 3.13. Diarrhoea or dysentery were associated with 13 percent of all male deaths and 19 percent of all female deaths. In children of age 1-4 years, 43 percent of deaths among boys and 55 percent of deaths among girls were associated with diarrhoea or dysentery. The cause of death classification scheme changed significantly in 1987, although the reporting system was similar to that used previously. The new cause of death classifications will be discussed in a future scientific report.

Table 3.1: Deaths by Age and Sex, 1987

Age	Both sexes	Males	Females
All ages	2029	1023	1006
Under 1 year	626	329	297
Under 1 month	358	196	162
1-5 months	189	92	97
6-11 months	79	41	38
1-4 years	300	107	193
1	156	55	101
2	78	22	56
3	41	16	25
4	25	14	11
5-9	61	29	32
10-14	27	17	10
15-19	28	10	18
20-24	36	13	23
25-29	30	10	20
30-34	25	7	18
35-39	28	9	19
40-44	28	12	16
45-49	56	29	27
50-54	75	46	29
55-59	90	60	30
60-64	104	61	43
65-69	146	81	65
70-74	111	57	54
75-79	106	54	52
80-84	80	48	32
85+	72	44	28

Table 3.2: Deaths by Area, Age, and Sex, 1987

Age	MCH-FP area			Comparison area		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	934	520	414	1095	503	592
Under 1 year	265	156	109	361	173	188
Under 1 month	148	92	56	210	104	106
1-5 months	86	44	42	103	48	55
6-11 months	31	20	11	48	21	27
1-4 years	112	50	62	188	57	131
1	57	24	33	99	31	68
2	27	10	17	51	12	39
3	19	10	9	22	6	16
4	9	6	3	16	8	8
5-9	20	11	9	41	18	23
10-14	16	11	5	11	6	5
15-19	17	6	11	11	4	7
20-24	21	8	13	15	5	10
25-29	13	5	8	17	5	12
30-34	12	4	8	13	3	10
35-39	10	7	3	18	2	16
40-44	18	9	9	10	3	7
45-49	23	14	9	33	15	18
50-54	35	23	12	40	23	17
55-59	40	29	11	50	31	19
60-64	47	30	17	57	31	26
65-69	78	45	33	68	36	32
70-74	71	37	34	40	20	20
75-79	57	29	28	49	25	24
80-84	39	23	16	41	25	16
85+	40	23	17	32	21	11

Table 3.3: Deaths in MCH-FP Area by Age, Sex, and Block, 1987

Age	Block A			Block B		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	248	135	113	252	135	117
Under 1 year	61	38	23	91	50	41
Under 1 month	36	24	12	54	32	22
1-5 months	18	10	8	27	12	15
6-11 months	7	4	3	10	6	4
1-4 years	32	15	17	37	14	23
1	16	6	10	18	7	11
2	8	5	3	10	3	7
3	6	2	4	6	3	3
4	2	2	0	3	1	2
5-9	5	4	1	2	1	1
10-14	5	5	0	4	2	2
15-19	7	3	4	4	1	3
20-24	7	1	6	4	2	2
25-29	4	1	3	1	0	1
30-34	5	2	3	2	0	2
35-39	4	2	2	3	3	0
40-44	8	5	3	3	1	2
45-49	2	1	1	5	4	1
50-54	10	6	4	8	6	2
55-59	8	6	2	8	7	1
60-64	11	7	4	15	8	7
65-69	21	12	9	15	8	7
70-74	18	9	9	23	13	10
75-79	17	6	11	9	5	4
80-84	9	4	5	8	4	4
85+	14	8	6	10	6	4

Table 3.3 (cont.): Deaths in MCH-FP Area by Age, Sex, and Block, 1987

Age	Block C			Block D		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	234	133	101	200	117	83
Under 1 year	56	32	24	57	36	21
Under 1 month	29	18	11	29	18	11
1-5 months	22	11	11	19	11	8
6-11 months	5	3	2	9	7	2
1-4 years	24	13	11	19	8	11
1	12	6	6	11	5	6
2	5	1	4	4	1	3
3	3	3	0	4	2	2
4	4	3	1	0	0	0
5-9	8	3	5	5	3	2
10-14	1	1	0	6	3	3
15-19	3	0	3	3	2	1
20-24	6	3	3	4	2	2
25-29	4	2	2	4	2	2
30-34	3	2	1	2	0	2
35-39	1	0	1	2	2	0
40-44	5	2	3	2	1	1
45-49	7	4	3	9	5	4
50-54	8	6	2	9	5	4
55-59	16	10	6	8	6	2
60-64	15	11	4	6	4	2
65-69	22	12	10	20	13	7
70-74	17	7	10	13	8	5
75-79	16	10	6	15	8	7
80-84	12	10	2	10	5	5
85+	10	5	5	6	4	2

Table 3.4: Death Rates by Age and Sex, 1987
(per 1000 population)

Age	Both sexes	Males	Females
All ages	10.2	10.2	10.3
Under 1 year	86.9	90.6	83.1
Under 1 month*	49.7	53.9	45.3
1-5 months*	26.2	25.3	27.1
6-11 months*	11.0	11.3	10.6
1-4 years	12.6	8.7	16.7
1	23.4	16.2	30.8
2	13.7	7.7	19.8
3	7.2	5.4	9.2
4	4.3	4.5	4.0
5-9	2.3	2.1	2.5
10-14	1.1	1.3	0.8
15-19	1.3	0.9	1.7
20-24	1.8	1.4	2.2
25-29	1.9	1.3	2.6
30-34	2.4	1.3	3.4
35-39	3.4	2.3	4.4
40-44	3.3	3.3	3.3
45-49	7.3	8.2	6.6
50-54	10.4	12.8	8.0
55-59	16.2	21.1	11.1
60-64	24.7	27.1	21.9
65-69	48.8	51.7	45.7
70-74	56.5	53.2	60.5
75-79	93.2	86.5	101.4
80-84	143.1	153.4	130.1
85+	237.6	224.5	261.7

*Rate per 1000 live births.

Table 3.5: Death Rates by Area, Age, and Sex, 1987
(per 1000 population)

Age	MCH-FP area			Comparison area		
	Both sexes	Males	Females	Both sexes	Males	Females
All ages	9.3	10.3	8.3	11.2	10.2	12.3
Under 1 year*	78.4	89.7	66.5	94.3	91.3	97.3
Under 1 month*	43.8	52.9	34.1	54.9	54.9	54.8
1-5 months*	25.5	25.3	25.6	26.9	25.3	28.5
6-11 months*	9.2	11.5	6.7	12.5	11.1	14.0
1-4 years	9.9	8.6	11.2	15.0	8.7	21.8
1	17.8	14.7	21.1	28.4	17.5	39.7
2	10.2	7.6	12.9	16.7	7.8	25.9
3	7.0	7.3	6.7	7.4	3.7	11.6
4	3.2	4.0	2.3	5.3	5.0	5.6
5-9	1.5	1.6	1.5	3.0	2.5	3.5
10-14	1.2	1.6	0.8	0.9	1.0	0.9
15-19	1.5	1.0	1.9	1.0	0.7	1.4
20-24	2.1	1.7	2.4	1.6	1.1	2.1
25-29	1.6	1.2	2.0	2.2	1.3	3.3
30-34	2.2	1.5	2.9	2.6	1.2	3.9
35-39	2.4	3.5	1.3	4.5	1.0	7.7
40-44	4.1	4.8	3.6	2.5	1.7	3.1
45-49	5.8	7.7	4.2	9.0	8.8	9.1
50-54	9.6	12.4	6.7	11.1	13.2	9.2
55-59	14.0	19.4	8.0	18.6	23.0	14.2
60-64	21.3	25.6	16.5	28.4	28.7	28.0
65-69	53.7	58.1	48.6	44.3	45.5	43.0
70-74	67.1	63.1	72.0	44.2	41.2	47.6
75-79	96.9	90.6	104.5	89.3	82.2	98.0
80-84	121.5	125.7	115.9	172.3	192.3	148.1
85+	233.9	207.2	283.3	242.4	247.1	234.0

*Rate per 1000 live births.

Figure 3.1: Probability of Survival from Birth to Age (x) by Sex, 1987

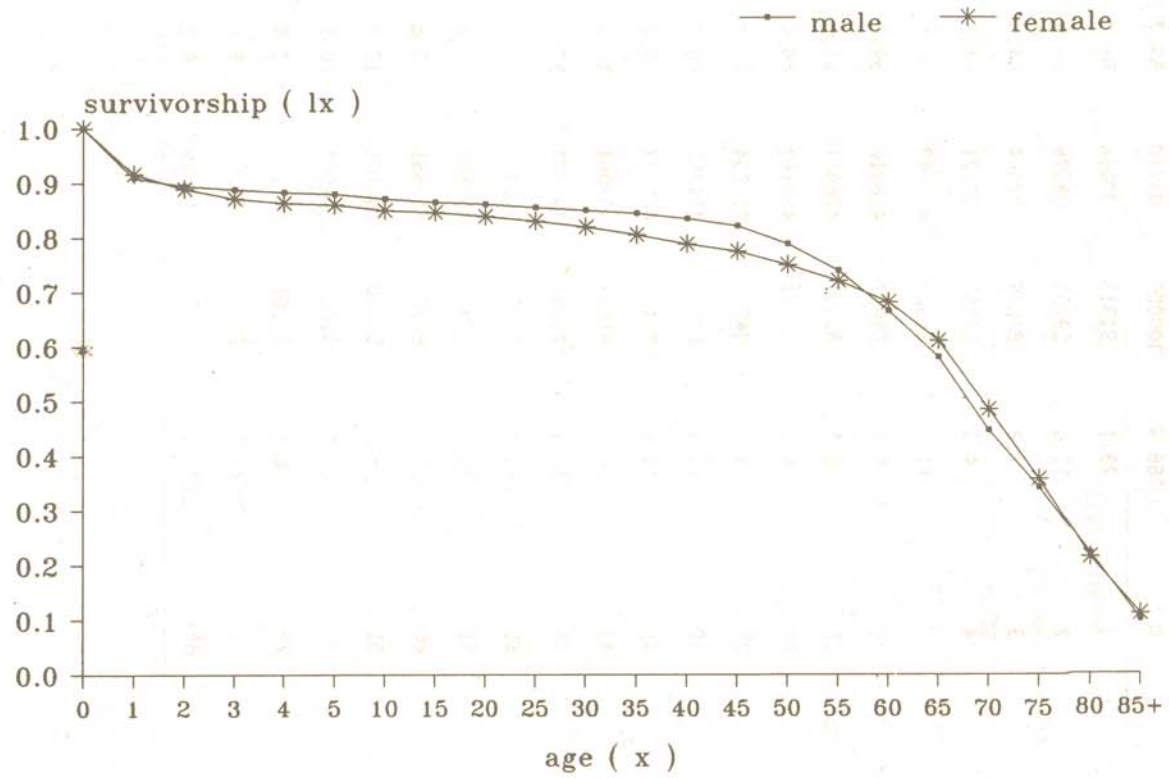


Table 3.6: Abridged Life Table, 1987

Age (years)	1000_nq_x	l_x	L_x	e^0
0	86.9	100000	93710	59.7
1	23.1	91313	90068	64.4
2	13.6	89203	88596	64.9
3	7.2	87989	87674	64.8
4	4.3	87358	87171	64.2
5	11.3	86984	432642	63.5
10	5.4	85997	428912	59.2
15	6.3	85531	426411	54.5
20	9.1	84991	423162	49.9
25	9.6	84214	419204	45.3
30	11.8	83405	414752	40.7
35	16.8	82420	408897	36.2
40	16.6	81033	402064	31.7
45	36.1	79690	391783	27.2
50	50.7	76813	375013	23.1
55	78.1	72918	351282	19.2
60	116.7	67221	317651	15.6
65	218.6	59380	265701	12.4
70	248.7	46401	204082	10.1
75	378.1	34861	141400	7.6
80	521.5	21679	78998	5.7
85+	1000.0	10373	43655	4.2

Table 3.7: Abridged Life Tables by Sex, 1987

Age (years)	Males				Females			
	1000_nq_x	$n^l x$	$n^L x$	e^0	1000_nq_x	$n^l x$	$n^L x$	e^0
0	90.6	100000	93444	60.3	83.1	100000	93982	59.2
1	16.0	90944	90083	65.3	30.4	91688	90044	63.5
2	7.7	89485	89143	65.3	19.6	88902	88031	64.5
3	5.4	88800	88562	64.8	9.1	87160	86762	64.8
4	4.5	88323	88124	64.2	4.0	86364	86190	64.3
5	10.2	87924	437543	63.5	12.6	86016	427587	63.6
10	6.5	87023	433816	59.1	4.2	84935	423849	59.4
15	4.4	86459	431414	54.5	8.3	84576	421264	54.6
20	7.0	86076	428988	49.7	11.0	83875	417242	50.1
25	6.3	85472	426124	45.0	13.1	82951	412249	45.6
30	6.7	84936	423373	40.3	16.9	81865	406141	41.1
35	11.4	84369	419618	35.6	21.7	80486	398398	36.8
40	16.5	83404	413835	30.9	16.6	78742	390692	32.6
45	40.3	82025	402452	26.4	32.5	77435	381355	28.1
50	62.1	78717	382201	22.4	39.3	74922	367785	23.9
55	100.6	73829	351724	18.7	54.0	71979	350856	19.8
60	127.4	66403	312062	15.5	104.2	68092	323807	15.8
65	230.0	57943	257605	12.4	205.8	60999	274893	12.3
70	235.8	44619	197704	10.3	263.9	48442	211169	9.8
75	356.2	34097	140336	7.7	403.9	35658	142093	7.4
80	546.9	21952	78287	5.6	487.3	21255	79625	5.7
85+	1000.0	9946	44307	4.5	1000.0	10898	41644	3.8

Table 3.8: Abridged Life Tables by Area, 1987

Age (years)	MCH-FP area				Comparison area			
	1000_nq_x	n^1x	nL_x	e^0	1000_nq_x	n^1x	nL_x	e^0
0	78.4	100000	94322	61.3	94.3	100000	93171	58.3
1	17.7	92157	91196	65.5	28.1	90567	89068	63.3
2	10.2	90528	90067	65.7	16.6	88026	87297	64.1
3	7.0	89607	89294	65.4	7.3	86567	86250	64.2
4	3.2	88981	88838	64.8	5.3	85933	85705	63.7
5	7.7	88695	441905	64.0	14.8	85478	424472	63.0
10	6.1	88014	438823	59.5	4.6	84214	420175	58.9
15	7.3	87473	435885	54.8	5.2	83826	418122	54.2
20	10.2	86831	432107	50.2	8.0	83389	415415	49.5
25	8.1	85943	428102	45.7	11.1	82725	411502	44.8
30	11.0	85243	424057	41.1	12.7	81804	406625	40.3
35	11.7	84307	419261	36.5	22.3	80766	399674	35.8
40	20.3	83321	412694	31.9	12.4	78968	392574	31.5
45	28.7	81628	402716	27.5	44.0	77986	381965	26.9
50	47.2	79284	387737	23.2	54.3	74554	363362	23.0
55	67.6	75545	365821	19.3	89.3	70508	337808	19.2
60	101.6	70439	335404	15.5	132.9	64215	300924	15.8
65	237.6	63283	280118	11.9	200.1	55681	251723	12.8
70	288.3	48246	207265	9.8	199.8	44537	201376	10.4
75	390.0	34337	138150	7.7	365.2	35636	145805	7.3
80	463.6	20945	79915	6.1	590.6	22623	77561	5.1
85+	1000.0	11236	48032	4.3	1000.0	9262	38204	4.1

Table 3.9: Abridged Life Tables for MCH-FP Area by Sex, 1987

Age (years)	Males				Females			
	1000_nq_x	$_nl_x$	$_nL_x$	e^0	1000_nq_x	$_nl_x$	$_nL_x$	e^0
0	89.7	100000	93505	60.0	66.5	100000	95188	62.8
1	14.6	91029	90246	64.9	20.9	93354	92202	66.2
2	7.6	89701	89362	64.8	12.8	91402	90818	66.6
3	7.3	89024	88699	64.3	6.7	90234	89932	66.5
4	4.0	88375	88197	63.8	2.3	89631	89528	65.9
5	8.0	88020	438467	63.0	7.3	89425	445628	65.1
10	8.1	87312	434936	58.5	4.0	88775	443051	60.5
15	5.2	86608	432007	54.0	9.5	88417	440141	55.8
20	8.5	86160	429118	49.2	11.7	87574	435503	51.3
25	6.2	85430	425930	44.6	10.1	86548	430722	46.9
30	7.3	84900	423066	39.9	14.6	85673	425472	42.3
35	17.3	84278	418012	35.2	6.6	84420	420807	37.9
40	23.7	82816	409549	30.7	17.8	83859	415846	33.1
45	37.7	80856	397211	26.4	20.9	82366	407844	28.7
50	60.4	77806	378087	22.3	33.2	80642	397005	24.2
55	92.8	73105	349629	18.6	39.4	77964	382703	20.0
60	120.9	66319	312707	15.2	79.2	74895	360611	15.7
65	254.8	58301	255506	12.0	217.6	68961	308741	11.8
70	273.7	43446	188295	10.2	306.1	53956	229279	9.4
75	369.7	31557	128725	8.1	413.5	37440	148188	7.4
80	475.3	19891	75217	6.3	447.7	21958	84784	5.8
85+	1000.0	10437	50372	4.8	1000.0	12128	42803	3.5

Tables 3.10: Abridged Life Tables for Comparison Area by Sex, 1987

Age (years)	Males				Females			
	1000_nq_x	n^1x	nLx	e^0	1000_nq_x	n^1x	nLx	e^0
0	91.3	100000	93387	60.7	97.3	100000	92959	56.0
1	17.4	90866	89934	65.8	39.0	90274	88199	61.0
2	7.7	89286	88941	65.9	25.5	86758	85650	62.4
3	3.7	88595	88430	65.4	11.5	84542	84057	63.1
4	5.0	88264	88044	64.7	5.6	83571	83336	62.8
5	12.3	87824	436629	64.0	17.6	83101	412130	62.1
10	4.8	86744	432767	59.7	4.4	81640	407366	58.2
15	3.6	86330	430926	55.0	6.9	81278	405099	53.5
20	5.5	86015	428984	50.2	10.2	80718	401687	48.8
25	6.3	85541	426456	45.5	16.3	79893	396462	44.3
30	6.0	84999	423828	40.7	19.2	78593	389479	40.0
35	5.2	84493	421446	36.0	37.6	77084	378702	35.7
40	8.7	84051	418574	31.1	15.3	74185	368312	32.0
45	43.1	83321	408272	26.4	44.8	73053	357671	27.4
50	63.9	79730	386785	22.5	45.1	69782	341601	23.6
55	109.1	74637	354053	18.8	68.8	66634	322477	19.6
60	134.4	66495	311367	15.8	131.1	62048	291035	15.8
65	204.9	57558	259516	12.8	195.0	53911	244415	12.8
70	187.7	45762	208296	10.5	213.7	43399	194728	10.3
75	341.7	37172	154445	7.3	393.3	34126	136998	7.4
80	632.7	24471	80510	4.8	534.1	20706	74655	5.6
85+	1000.0	8988	36381	4.0	1000.0	9646	41215	4.3

Table 3.11: Deaths by Age and Month, 1987

Month	Age at death				
	All age	Under 1 month	1-11 months	1-4 years	5 years and over
January	205	36	29	25	115
February	124	25	20	9	70
March	153	19	28	17	89
April	159	22	41	16	80
May	159	19	24	33	83
June	125	18	17	17	73
July	155	28	18	34	75
August	159	23	16	30	90
September	179	40	16	39	84
October	201	48	19	34	100
November	202	44	11	24	123
December	208	36	29	22	121
Total	2029	358	268	300	1103

Table 3.12: Male Deaths by Cause and Age, 1987

Cause	All ages	Age at death (years)																		
		<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
DIARRHOEAL																				
Diarrhoea	71	31	27	2	0	0	1	0	0	0	0	0	2	0	2	2	0	3	1	0
Dysentery	59	11	19	3	1	0	2	0	0	0	0	0	1	1	6	3	4	4	2	2
INFECTIOUS																				
Tuberculosis	13	0	0	1	0	0	1	0	0	0	0	3	1	4	1	1	0	1	0	0
Tetanus (non-neonatal)	5	4	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Other infectious	32	8	7	5	5	0	2	0	0	0	1	0	2	1	0	0	0	0	1	0
MALIGNANT NEOPLASMS	12	0	0	0	1	0	0	0	0	1	1	0	3	0	2	3	1	0	0	0
NUTRITIONAL	22	14	3	0	0	0	0	0	0	0	2	0	2	1	0	0	0	0	0	0
CARDIO-VASCULAR	21	0	0	0	0	0	0	0	1	0	0	1	4	3	3	2	3	3	0	1
RESPIRATORY																				
ARI, pneum, influenza	70	52	12	0	0	0	1	0	0	1	0	0	0	1	1	0	0	1	0	1
COPD*	44	1	1	0	0	1	0	1	0	0	0	5	4	8	7	9	3	2	1	1
GASTRO-INTESTINAL	41	1	0	1	2	2	0	1	1	2	2	7	3	6	2	4	5	0	1	1
DIRECT OBSTETRIC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEONATAL																				
Tetanus (neonatal)	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other neonatal	157	157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACCIDENTS, INJURIES																				
Suicide	5	0	0	0	0	0	1	2	0	0	1	0	0	1	0	0	0	0	0	0
Homicide	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Drowning	43	1	28	7	1	1	2	0	0	1	0	0	1	0	0	0	0	0	0	1
Other accidents etc.	20	4	0	2	2	2	1	1	1	0	0	1	1	2	1	0	1	0	1	0
OTHER AND UNSPECIFIED																				
Senility	211	0	0	0	0	0	0	0	0	0	0	0	0	4	15	45	34	36	39	38
Other causes n.e.c.	58	8	2	2	2	2	0	1	3	0	2	1	8	7	5	6	5	2	2	0
Unknown	114	12	8	6	3	2	2	4	0	4	2	11	14	21	16	6	1	2	0	0
TOTAL	1023	328	107	29	17	10	13	10	7	9	12	29	46	60	61	81	57	54	48	45

*Chronic obstructive pulmonary disease.

Table 3.13: Female Deaths by Cause and Age, 1987

Cause	All ages	Age at death (years)																		
		<1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85+
DIARRHOEAL																				
Diarrhoea	113	20	75	5	1	0	1	1	0	0	2	0	0	1	2	2	0	1	2	0
Dysentery	79	11	31	1	2	0	1	0	0	0	1	2	2	4	7	7	6	2	0	2
INFECTIOUS																				
Tuberculosis	4	0	0	0	0	0	1	0	0	0	0	0	2	1	0	0	0	0	0	0
Tetanus (non-neonatal)	6	3	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Other infectious	33	10	13	8	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
MALIGNANT NEOPLASMS	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0
NUTRITIONAL	28	17	6	0	0	0	0	0	1	0	0	1	0	1	0	1	1	0	0	0
CARDIO-VASCULAR	22	0	0	0	0	0	0	0	1	1	1	2	5	5	3	1	3	0	0	0
RESPIRATORY																				
ARI, pneum, influenza	70	49	16	1	0	1	0	0	0	0	0	0	0	1	2	0	0	0	0	0
COPD*	32	2	6	0	0	1	0	1	2	2	0	5	1	1	4	4	1	1	0	1
GASTRO-INTESTINAL	28	1	0	2	0	0	2	2	2	3	0	3	7	3	2	1	0	0	0	0
DIRECT OBSTETRIC	18	0	0	0	0	4	2	3	1	5	3	0	0	0	0	0	0	0	0	0
NEONATAL																				
Tetanus (neonatal)	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other neonatal	132	132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ACCIDENTS, INJURIES																				
Suicide	6	0	0	0	0	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0
Homicide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drowning	34	2	27	3	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0
Other accidents etc.	15	8	2	0	0	0	1	1	1	0	0	0	1	0	0	1	0	0	0	0
OTHER AND UNSPECIFIED																				
Senility	189	0	0	0	0	0	0	0	0	0	0	0	0	5	11	40	39	44	27	23
Other causes n.e.c.	80	4	7	3	4	6	8	4	4	5	3	4	6	3	6	5	2	2	3	1
Unknown	98	21	9	9	3	4	2	6	5	3	6	8	5	5	6	3	1	2	0	0
TOTAL	1006	297	193	32	10	18	23	20	18	19	16	27	29	30	43	65	54	53	32	27

*Chronic obstructive pulmonary disease.

Table 3.14: Male Deaths by Cause, Age, and Area, 1987

Cause	All ages		Age at death (years)													
			<1		1-4		5-14		15-44		45-64		65-84		85+	
	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C
DIARRHOEAL																
Diarrhoea	35	36	15	16	11	16	1	1	1	0	2	2	5	1	0	0
Dysentery	21	38	5	6	7	12	0	4	0	2	3	5	6	7	0	2
INFECTIOUS																
Tuberculosis	8	5	0	0	0	0	0	1	1	0	5	4	2	0	0	0
Tetanus (non-neonatal)	1	4	0	4	0	0	0	0	1	0	0	0	0	0	0	0
Other infectious	20	12	5	3	3	4	8	2	1	2	3	0	0	1	0	0
MALIGNANT NEOPLASMS	4	8	0	0	0	0	0	1	2	0	1	4	1	3	0	0
NUTRITIONAL	12	10	8	6	1	2	0	2	0	1	2	0	0	0	0	0
CARDIO-VASCULAR	10	11	0	0	0	0	0	0	0	1	6	5	4	4	0	1
RESPIRATORY																
ARI, pneum, influenza	35	35	25	27	6	6	0	0	2	0	1	1	1	0	0	1
COPD*	14	30	0	1	1	0	0	0	0	2	5	19	7	8	1	0
GASTRO-INTESTINAL	23	18	1	0	0	0	1	2	4	4	10	8	7	3	0	1
DIRECT OBSTETRIC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEONATAL																
Tetanus (neonatal)	4	20	4	20	0	0	0	0	0	0	0	0	0	0	0	0
Other neonatal	83	74	83	74	0	0	0	0	0	0	0	0	0	0	0	0
ACCIDENTS, INJURIES																
Suicide	2	3	0	0	0	0	0	0	2	2	0	1	0	0	0	0
Homicide	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Drowning	26	17	1	0	17	11	5	3	2	2	1	0	0	0	0	1
Other accidents etc.	11	9	2	2	0	0	2	2	4	1	1	4	2	0	0	0
OTHER AND UNSPECIFIED																
Senility	117	94	0	0	0	0	0	0	0	0	10	9	85	69	22	16
Other causes n.e.c	30	28	4	4	0	2	1	3	6	2	8	13	11	4	0	0
Unknown	64	50	3	9	4	4	4	5	11	3	39	23	3	6	0	0
TOTAL	520	503	156	172	50	57	22	24	39	22	96	100	134	106	23	22

*Chronic obstructive pulmonary disease.

*Chronic obstructive pulmonary disease.

Table 3.15: Female Deaths by Cause, Age, and Area, 1987

Cause	All ages		Age at death (years)													
			<1		1-4		5-14		15-44		45-64		65-84		85+	
	M	C	M	C	M	C	M	C	M	C	M	C	M	C	M	C
DIARRHOEAL																
Diarrhoea	34	79	8	12	21	54	1	5	1	3	0	3	3	2	0	0
Dysentery	33	46	3	8	10	21	3	0	0	2	7	8	10	5	0	2
INFECTIOUS																
Tuberculosis	2	2	0	0	0	0	0	0	0	1	2	1	0	0	0	0
Tetanus (non-neonatal)	0	6	0	3	0	1	0	0	0	2	0	0	0	0	0	0
Other infectious	8	25	4	6	3	10	0	8	1	0	0	0	0	1	0	0
MALIGNANT NEOPLASMS	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0
NUTRITIONAL	13	15	9	8	2	4	0	0	0	1	1	1	1	1	0	0
CARDIO-VASCULAR	9	13	0	0	0	0	0	0	1	2	5	10	3	1	0	0
RESPIRATORY																
ARI, pneum, influenza	18	52	14	35	3	13	0	1	1	0	0	3	0	0	0	0
COPD*	10	22	1	1	2	4	0	0	1	5	3	8	3	3	0	1
GASTRO-INTESTINAL	14	14	0	1	0	0	0	2	3	6	10	5	1	0	0	0
DIRECT OBSTETRIC	7	11	0	0	0	0	0	0	7	11	0	0	0	0	0	0
NEONATAL																
Tetanus (neonatal)	0	17	0	17	0	0	0	0	0	0	0	0	0	0	0	0
Other neonatal	53	79	53	79	0	0	0	0	0	0	0	0	0	0	0	0
ACCIDENTS, INJURIES																
Suicide	5	1	0	0	0	0	0	0	5	1	0	0	0	0	0	0
Homicide	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drowning	19	15	2	0	14	13	2	1	0	1	0	0	1	0	0	0
Other accidents etc.	7	8	4	4	1	1	0	0	1	2	0	1	1	0	0	0
OTHER AND UNSPECIFIED																
Senility	100	89	0	0	0	0	0	0	0	0	5	11	80	70	15	8
Other causes n.e.c.	35	45	0	4	3	4	3	4	16	14	5	14	7	5	1	0
Unknown	46	52	11	10	3	6	5	7	15	11	10	14	2	4	0	0
TOTAL	414	592	109	188	62	131	14	28	52	62	49	80	112	92	16	11

*Chronic obstructive pulmonary disease.

CHAPTER 4

FERTILITY

There were 8,058 reported pregnancies in 1987 in the Matlab DSS area, of which 7,137 resulted in live births and 921 resulted in miscarriages or stillbirths, yielding a ratio of 121 foetal losses per 1,000 live births (Table 4.1). Stillbirths are defined as foetal losses of seven months gestation or more; if the gestation period is less than seven months, the loss is designated as a miscarriage, either induced or spontaneous. The number of pregnancies in 1987 was more than the number reported for 1986 by 154, but less than in 1985 by 125. The reported number of foetal losses in 1987, however, about 7 percent above the numbers reported in 1985 and 1986.

Seasonality of births, shown in Table 4.2 and Figure 4.1, had the same pattern in 1987 as in previous years, with a larger number of births in October, November, and December. Table 4.3 presents the 1987 age-specific fertility rates. Fertility reached its peak at ages 20-24 in the MCH-FP area and at ages 25-29 in the Comparison area. The general fertility rate was 152 per thousand women aged 15-49. Almost all fertility rates were lower in 1987 than in 1986 in both areas. These fertility indices were significantly lower in the MCH-FP area than in the Comparison area (Table 4.4).

Table 4.1: Number and Rates of Pregnancy Outcomes by Type and Area, 1987

Type of pregnancy outcome	Both areas		MCH-FP area		Comparison area	
	No.	Rate	No.	Rate	No.	Rate
Total pregnancies*	8058	170.3	3728	150.3	4330	192.4
Live birth pregnancies**	7137	885.7	3347	898.1	3790	875.1
Fetal wastage pregnancies	921	114.3	379	101.9	542	124.9
Early (miscarriages)	643	79.8	251	67.6	392	90.3
Late (still-births)	278	34.5	128	34.3	150	34.6
Multiple birth pregnancies	87		39		48	
Live birth pregnancies	77		36		41	
Three live births	1		1		0	
Two live births	67		31		36	
One live birth	9		4		5	
Still-birth pregnancies	3		1		2	
Miscarriage pregnancies	7		2		5	

*Rate per 1000 women of age 15-49 years.
**Ratio per 1000 total pregnancies.

Table 4.2: Pregnancy Outcomes by Month, 1987

Months	Pregnancy Outcome					No. of live born children			
		Miscarriage							
	All	Induced	Spon.	Still-birth	Live birth*	Both sexes	Males	Females	Ratio
All months	8058	194	449	278	7137	7206	3633	3573	1.0167
January	681	12	27	28	614	.615	301	314	0.9585
February	515	14	27	17	457	460	223	237	0.9409
March	596	14	34	17	531	532	271	261	1.0383
April	591	21	55	23	492	495	272	223	1.2197
May	642	14	52	13	563	570	305	265	1.1509
June	528	30	42	10	446	451	225	226	0.9955
July	498	17	44	13	424	433	208	225	0.9244
August	515	13	35	17	450	456	215	241	0.8921
September	681	12	37	37	595	605	289	316	0.9145
October	968	15	46	33	874	888	446	442	1.0090
November	1009	23	21	36	929	934	490	444	1.1036
December	834	9	29	34	762	767	388	379	1.0237

*For any multiple pregnancy, the outcome is recorded as live birth if at least one of the issue is live born.

Figure 4.1: Number of Births and Deaths by Month, 1987

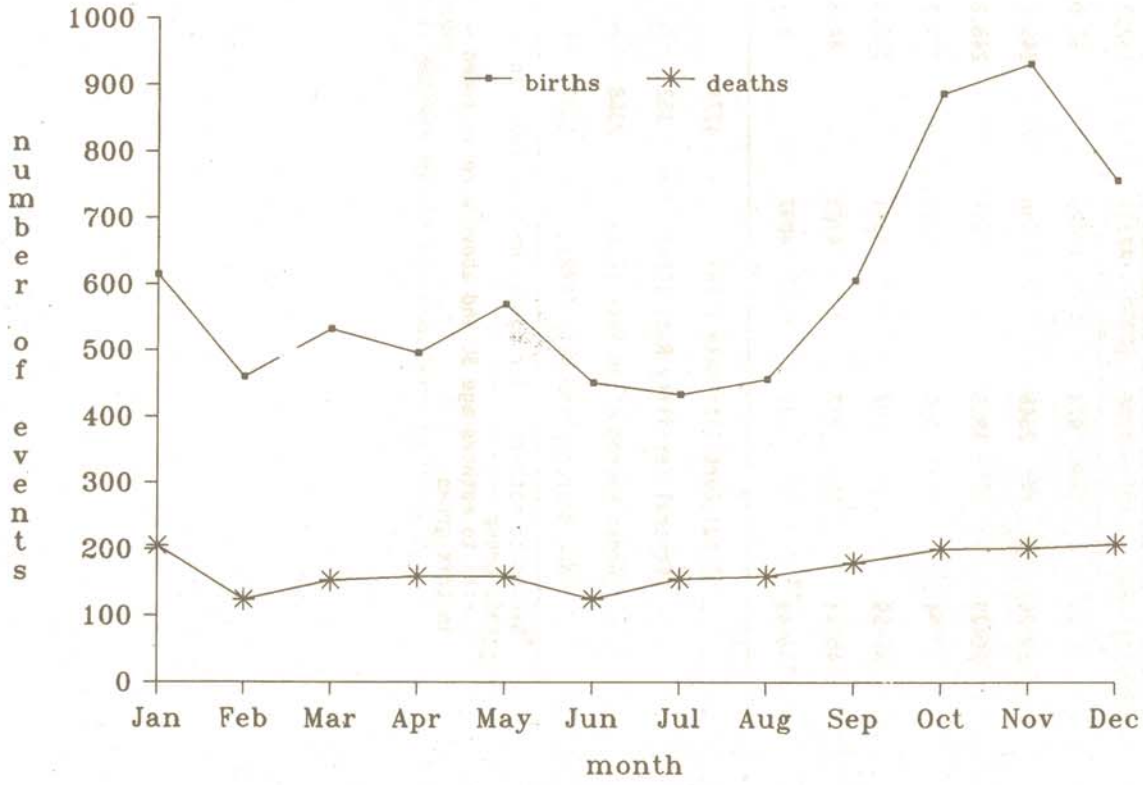


Table 4.3: Age-specific Fertility Rates and Indices, 1987

Age (years)	Number of live births	Number of women	ASFR (per 1000)
All ages	7206	47311	152.3
15-19*	973	10809	90.0
20-24	2546	10386	245.1
25-29	1885	7596	248.2
30-34	950	5299	179.3
35-39	607	4341	139.8
40-44	212	4783	44.3
45-49**	33	4097	8.1

Total Fertility Rate (TFR)	=	4774
General Fertility Rate (GFR)	=	152
Gross Reproduction Rate (GRR)	=	2368
Net Reproduction Rate (NRR)	=	1887

*Births to mothers under age 15 were included in this group.
**Births to mothers age 50 and above were included in this group.

Table 4.4: Age-specific Fertility Rates and Indices by Area, 1987

Age (years)	MCH-FP area		Comparison area	
	# of live births	ASFR (per 1000)	# of live births	ASFR (per 1000)
All ages	3380	136.3	3826	170.0
15-19*	492	85.7	481	95.0
20-24	1236	224.0	1310	269.2
25-29	864	219.5	1021	279.0
30-34	427	157.2	523	202.6
35-39	263	116.8	344	164.6
40-44	85	33.9	127	55.8
45-49**	13	6.1	20	10.2
TFR	= 4216		TFR = 5381	
GFR	= 136		GFR = 170	
GRR	= 2045		GRR = 2719	
NRR	= 1758		NRR = 2135	

*Births to mothers under age 15 were included in this group.

**Births to mothers age 50 and above were included in this group.

Table 4.5: Age-specific Fertility Rates and Indices for MCH-FP Area by Block, 1987

Age (years)	Block A		Block B	
	# of live births	ASFR (per 1000)	# of live births	ASFR (per 1000)
All ages	929	140.5	947	150.2
15-19*	121	80.0	149	103.5
20-24	362	234.3	334	236.0
25-29	231	220.4	218	224.0
30-34	125	169.4	117	168.1
35-39	66	111.3	89	148.3
40-44	23	33.1	33	52.1
45-49**	1	2.1	7	12.8
TFR	= 4253		TFR	= 4724
GFR	= 140		GFR	= 150
GRR	= 2042		GRR	= 2365

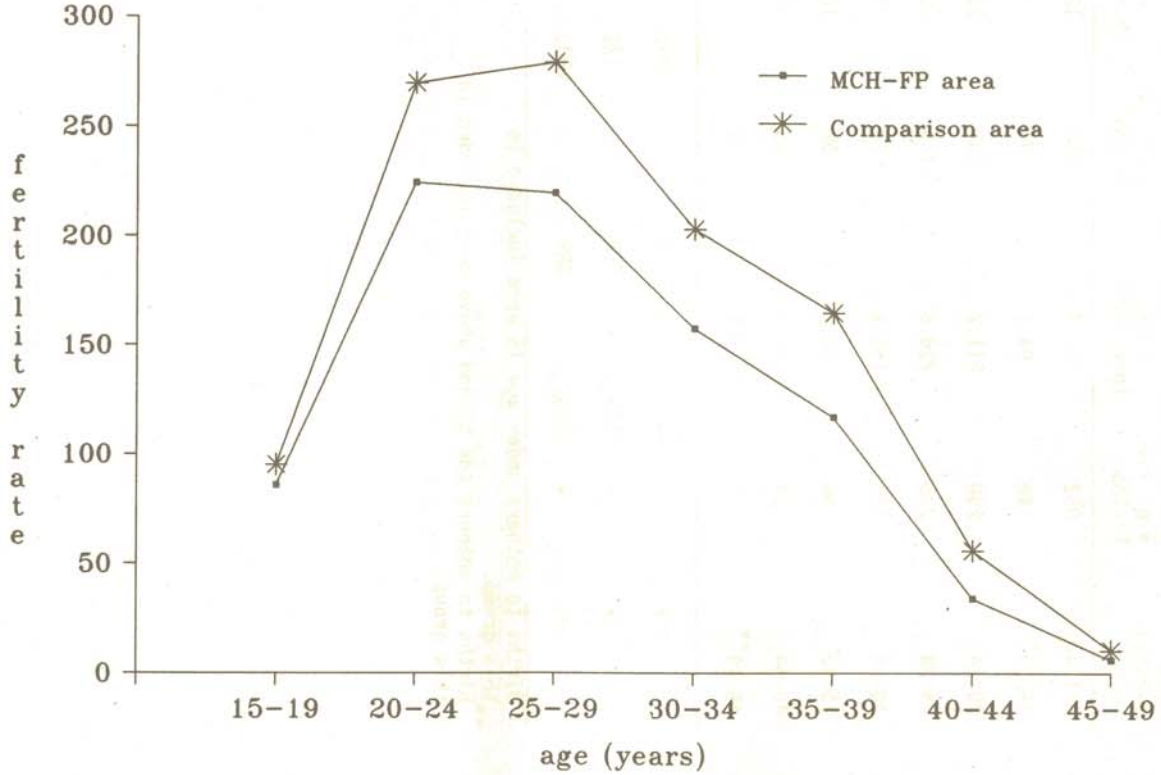
*Births to mothers under age 15 were included in this group.
**Births to mothers age 50 and above were included in this group.

Table 4.5 (cont.): Age-specific Fertility Rates and Indices for MCH-FP Area by Block, 1987

Age (years)	Block C		Block D	
	# of live births	ASFR (per 1000)	# of live births	ASFR (per 1000)
All ages	852	130.4	652	121.8
15-19*	148	94.1	74	60.7
20-24	290	211.2	250	210.8
25-29	235	226.6	180	205.0
30-34	113	153.7	72	131.4
35-39	50	84.7	58	123.9
40-44	14	21.5	15	28.4
45-49**	2	3.5	3	5.7
TFR	= 3977		TFR	= 3830
GFR	= 130		GFR	= 122
GRR	= 1835		GRR	= 1933

*Births to mothers under age 15 were included in this group.
**Births to mothers age 50 and above were included in this group.

Figure 4.2: Age-specific Fertility Rates by Area, 1987



CHAPTER 5

MARRIAGE AND DIVORCE

In 1987, 2,851 marriages were registered, in which 2,245 men and 2,394 women were married for the first time (Tables 5.1 and 5.2). Of all the registered first marriages where age was known, 48 percent of the men were married at the age of 20-24 years and 66 percent of the women were married at the age of 15-19 years. The median age at first marriage for men was 24.2 years and for women was 18.3 years. Median age at first marriage remained about the same in 1987 for both men and women. (A change in data collection methods for Matlab residents marrying outside of the area resulted in an increased number of unknown ages.)

The distribution of marriages and divorces by month (Table 5.6 and Figure 5.1) shows a little less seasonal variation than in 1986, with troughs in April-May and November. The number of marriages ranged from 136 in May to 371 in March, and the number of divorces ranged from 25 in November to 62 in January.

Table 5.1: Groom's Age at Marriage by Previous Marital Status, 1987

Age (years)	All grooms		Previous marital status							
			Single		Married		Widowed		Divorced	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent	No.	Percent
All ages	2851	100.0	2245	100.0	118	100.0	116	100.0	372	100.0
10-14	3	0.1	2	0.1	0	0.0	0	0.0	1	0.3
15-19	127	4.5	114	5.1	1	0.8	0	0.0	12	3.2
20-24	645	22.6	571	25.4	9	7.6	5	4.3	60	16.1
25-29	500	17.5	395	17.6	16	13.6	10	8.6	79	21.2
30-34	147	5.2	86	3.8	18	15.3	11	9.5	32	8.6
35-39	39	1.4	15	0.7	4	3.4	6	5.2	14	3.8
40-44	29	1.0	2	0.1	9	7.6	9	7.8	9	2.4
45-49	11	0.4	0	0.0	4	3.4	3	2.6	4	1.1
50-54	9	0.3	0	0.0	1	0.8	3	2.6	5	1.3
55-59	2	0.1	0	0.0	0	0.0	2	1.7	0	0.0
60-64	2	0.1	0	0.0	0	0.0	1	0.9	1	0.3
65+	7	0.2	0	0.0	1	0.8	5	4.3	1	0.3
Age known	1521	53.3	1185	52.8	63	53.4	55	47.4	218	58.6
Unknown	1330	46.7	1060	47.2	55	46.6	61	52.6	154	41.4
Median age*	24.9		24.2		31.9		35.6		27.2	
Mean age*	26.1		24.6		33.2		39.6		28.8	
Standard dev.*	6.6		3.9		8.9		14.3		7.9	

*Mean, median, and standard deviation were calculated from ungrouped data of "known" age category.

Table 5.2: Bride's Age at Marriage by Previous Marital Status, 1987

Age (years)	All brides		Previous marital status					
			Single		Widowed		Divorced	
	No.	Percent	No.	Percent	No.	Percent	No.	Percent
All ages	2851	100.0	2394	100.0	39	100.0	418	100.0
10-14	106	3.7	106	4.4	0	0.0	0	0.0
15-19	1282	45.0	1180	49.3	3	7.7	99	23.7
20-24	595	20.9	435	18.2	6	15.4	154	36.8
25-29	102	3.6	33	1.4	11	28.2	58	13.9
30-34	25	0.9	3	0.1	6	15.4	16	3.8
35-39	43	1.5	30	1.3	5	12.8	8	1.9
40-44	0	0.0	0	0.0	0	0.0	0	0.0
45-49	2	0.1	1	0.0	1	2.6	0	0.0
50+	3	0.1	2	0.1	0	0.0	1	0.2
Age known	2158	75.7	1790	74.8	32	82.1	336	80.4
Unknown	693	24.3	604	25.2	7	17.9	82	19.6
Median age*	18.7		18.3		27.6		22.1	
Mean age*	19.7		18.9		28.6		22.8	
Stardard dev.*	4.4		3.9		6.7		4.6	

*Mean, median, and standard deviation were calculated from ungrouped data of "known" age category.

Table 5.3: Marriage Rates by Age and Sex, 1987

Age (years)	Males		Females	
	Number	Rate*	Number	Rate*
10-14	3	0.2	106	9.0
15-19	127	11.3	1282	118.6
20-24	645	69.9	595	57.3
25-29	500	62.9	102	13.4
30-24	147	28.1	25	4.7
35-39	39	10.0	43	9.9
40-44	29	8.1	2	0.4
45-49	11	3.1	3	0.2**
50-54	9	2.2	0	-
55-59	2	0.4	0	-
60-64	2	2.7	0	-
65+	7	0.3	0	-
Unknown	1330	-	693	-

*Rates per 1000 population irrespective of previous marital status.

**Women age 45 and above were included in this group.

Table 5.4: Number of Marriages by Groom's and Bride's Age at Marriage, 1987

Groom's age (years)	All	Bride's age (years)									
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Unk
All ages	2851	106	1282	595	102	25	43	0	2	3	693
Under 15	3	0	2	1	0	0	0	0	0	0	0
15-19	127	7	44	11	1	0	5	0	0	0	59
20-24	645	24	247	73	4	3	13	0	0	0	281
25-29	500	12	155	78	18	1	9	0	0	1	226
30-34	147	3	30	22	6	1	5	0	0	0	80
35-39	39	2	4	8	3	1	2	0	0	1	18
40-44	29	0	1	6	4	2	1	0	0	1	14
45-49	11	0	2	2	4	0	0	0	0	0	3
50-54	9	0	1	1	1	1	2	0	0	0	3
55-59	2	0	0	0	0	0	0	0	0	0	2
60-64	2	0	1	0	0	0	0	0	0	0	1
65+	7	0	0	1	0	0	2	0	1	0	3
Unknown	1330	58	795	392	61	16	4	0	1	0	3

Table 5.5: Number of Divorces by Partners' Age at Divorce, 1987

Male's age (years)	All	Female's age (years)									
		<15	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50+	Unk
All ages	482	8	159	176	48	16	7	1	3	0	64
Under 15	1	0	1	0	0	0	0	0	0	0	0
15-19	18	0	12	2	1	0	0	0	0	0	3
20-24	86	3	39	24	1	0	0	0	0	0	19
25-29	94	0	26	40	6	2	1	0	0	0	19
30-34	37	0	5	17	4	1	0	0	0	0	10
35-39	19	0	3	4	7	1	1	0	0	0	3
40-44	10	0	1	0	2	2	0	0	0	0	5
45-49	8	0	0	1	2	2	0	0	0	0	3
50-54	5	0	1	0	1	0	3	0	0	0	0
55-59	0	0	0	0	0	0	0	0	0	0	0
60-64	0	0	0	0	0	0	0	0	0	0	0
65+	4	0	0	0	0	0	0	1	3	0	0
Unknown	200	5	71	88	24	8	2	0	0	0	2

Table 5.6: Marriages and Divorces by Month, 1987

Month	Marriage		Divorce	
	Number	Percent	Number	Percent
January	209	7.3	62	12.9
February	309	10.8	41	8.5
March	371	13.0	37	7.7
April	169	5.9	36	7.5
May	136	4.8	33	6.8
June	295	10.3	52	10.8
July	235	8.2	30	6.2
August	330	11.6	60	12.4
September	170	6.0	33	6.9
October	214	7.5	30	6.2
November	177	6.2	25	5.2
December	236	8.3	43	8.9
All months	2851	100.0	482	100.0

Figure 5.1: Marriages and Divorces by Month, 1987

Table 5.7: Number of Divorces by Sex, Age, and Duration of Marriage, 1987

Age at divorce	All durations		Duration of marriage (months)													
			Under 6		6-11		12-23		24-35		36-47		48-59		60+	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
All ages	482	482	73	73	75	75	128	128	81	81	41	41	24	24	60	60
Under 20	19	167	3	31	6	40	6	58	1	24	3	11	0	1	0	2
20-24	86	176	19	19	17	21	27	42	16	43	4	19	2	18	1	14
25-29	94	48	16	1	13	4	19	9	16	2	9	6	7	3	14	23
30-34	37	16	4	2	2	1	8	1	6	3	4	0	4	0	9	9
35-39	19	7	2	1	0	0	3	0	1	1	3	1	1	0	9	4
40-49	18	1	5	0	2	0	3	1	2	0	1	0	0	0	5	0
50+	9	3	0	0	0	0	1	0	0	0	0	0	1	0	7	3
Unknown	200	64	24	19	35	9	61	17	39	8	17	4	9	2	15	5

CHAPTER 6

MIGRATION

An "out-migrant" is defined as a person originally listed on a DSS census as a resident, or a person who became a resident after the census by birth or in-migration, who subsequently moved out of the surveillance (DSS) area permanently. Likewise, an "in-migrant" is an individual not recorded in the census who has permanently moved into the surveillance area. Those who stay in the area continuously for at least 6 months in a year or come home at least once a month to stay overnight are treated as permanent residents.

There were 6,658 in-migrants and 8,769 out-migrants during 1987, yielding a net emigration rate of 10.7 per 1,000 population. The rate of out-migration increased in 1987, as did the rate of in-migration. The age-specific in- and out-migration rates are presented in Table 6.4 and Figure 6.1. The highest male in-and out-migration rates of 55.1 and 80.4, were seen in the age groups 30-34 and 20-24 respectively. For females, the highest in- and out-migration rates were 83.8 and 103.2, both in the 15-19 age group.

The distribution of in- and out-migration by month shows a marked seasonal variation (Table 6.9 and Figure 6.2). The number migrating in ranged from 292 in December to 1,738 in January; the number migrating out ranged from 386 in December to 1,175 in August.

While the main cause of migration for adult males and females were economic (for a better living) and due to marriage, as shown in Tables 6.5 through 6.8, and summarized in Table 6.10, dependent migration continued to gain importance in 1987.

Table 6.1: In- and Out-migration by Age and Sex, 1987

Age (years)	In-migration			Out-migration		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	6658	3038	3620	8769	4153	4616
Under 5	1149	569	580	1235	630	605
0	327	162	165	325	155	170
1	242	113	129	282	139	143
2	185	93	92	230	118	112
3	196	105	91	205	114	91
4	199	96	103	193	104	89
5-9	662	326	336	836	441	395
10-14	538	285	253	798	383	415
15-19	1170	264	906	1685	569	1116
20-24	1005	299	706	1718	742	976
25-29	779	421	358	991	561	430
30-34	417	288	129	453	266	187
35-39	267	189	78	276	170	106
40-44	186	110	76	187	107	80
45-49	124	75	49	143	71	72
50-54	106	70	36	123	61	62
55-59	80	56	24	108	51	57
60-64	64	40	24	71	36	35
65+	111	46	65	145	65	80

Table 6.2: In-migration by Age, Sex, and Area, 1987

Age (years)	MCH-FP area			Comparison area		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	2823	1234	1589	3835	1804	2031
Under 5	504	241	263	645	328	317
0	154	72	82	173	90	83
1	111	50	61	131	63	68
2	80	33	47	105	60	45
3	75	40	35	121	65	56
4	84	46	38	115	50	65
5-9	238	115	123	424	211	213
10-14	195	101	94	343	184	159
15-19	545	100	445	625	164	461
20-24	482	121	361	523	178	345
25-29	357	206	151	422	215	207
30-34	180	132	48	237	156	81
35-39	108	82	26	159	107	52
40-44	56	38	18	130	72	58
45-49	32	21	11	92	54	38
50-54	40	29	11	66	41	25
55-59	34	28	6	46	28	18
60-64	16	9	7	48	31	17
65+	36	11	25	75	35	40

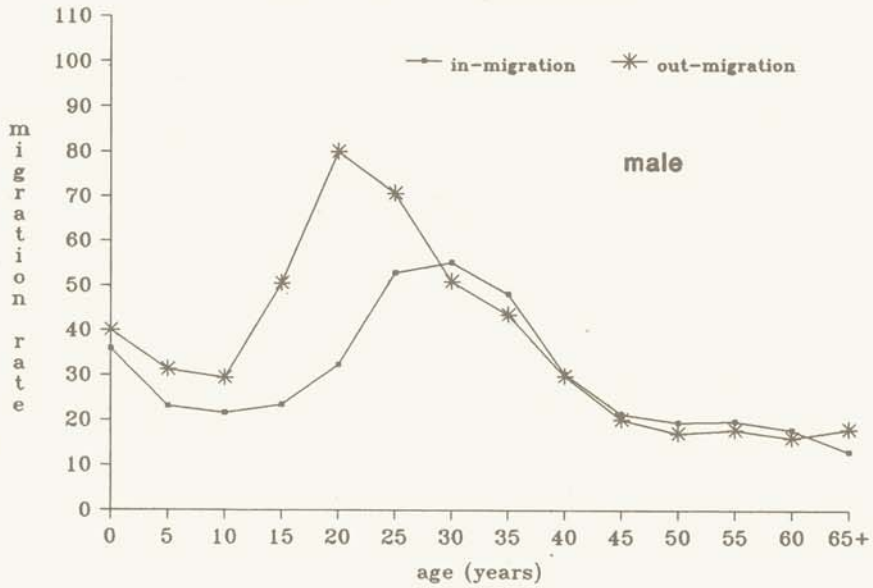
Table 6.3: Out-migration by Age, Sex, and Area, 1987

Age (years)	MCH-FP area			Comparison area		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages	3773	1752	2021	4996	2401	2595
Under 5	499	250	249	736	380	356
0	134	69	65	191	86	105
1	109	49	60	173	90	83
2	88	43	45	142	75	67
3	88	43	45	117	71	46
4	80	46	34	113	58	55
5-9	316	162	154	520	279	241
10-14	310	155	155	488	228	260
15-19	782	232	550	903	337	566
20-24	839	360	479	879	382	497
25-29	447	246	201	544	315	229
30-34	179	116	63	274	150	124
35-39	115	75	40	161	95	66
40-44	67	37	30	120	70	50
45-49	56	35	21	87	36	51
50-54	52	30	22	71	31	40
55-59	38	19	19	70	32	38
60-64	25	11	14	46	25	21
65+	48	24	24	97	41	56

Table 6.4: Age and Sex-specific Migration Rates by Direction, 1987 (per 1000 population)

Age (years)	Both sexes		Males		Females	
	In	Out	In	Out	In	Out
All ages	33.6	44.3	30.4	41.5	36.9	47.0
Under 5	37.6	40.5	36.4	40.3	39.0	40.7
0	49.2	48.9	48.8	46.7	49.6	51.1
1	36.3	42.2	33.2	40.9	39.4	43.7
2	32.5	40.4	32.5	41.2	32.5	39.6
3	34.4	36.0	35.3	38.3	33.4	33.4
4	34.2	33.2	31.1	33.7	37.8	32.7
5-9	24.8	31.3	23.1	31.3	26.5	31.2
10-14	21.6	32.1	21.8	29.3	21.4	35.2
15-19	53.0	76.3	23.4	50.5	83.8	103.2
20-24	51.2	87.6	32.4	80.4	68.0	94.0
25-29	50.1	63.7	52.9	70.6	47.1	56.6
30-34	39.6	43.0	55.1	50.9	24.3	35.3
35-39	32.3	33.4	48.3	43.4	18.0	24.4
40-44	22.2	22.3	30.5	29.7	15.9	16.7
45-49	16.3	18.8	21.3	20.1	12.0	17.6
50-54	14.7	17.0	19.5	17.0	9.9	17.1
55-59	14.4	19.5	19.7	17.9	8.9	21.0
60-64	15.2	16.9	17.8	16.0	12.2	17.8
65+	16.0	20.9	12.2	17.2	20.4	25.1

Figure 6.1: Rate of In- and Out-migration by Sex and Age, 1987



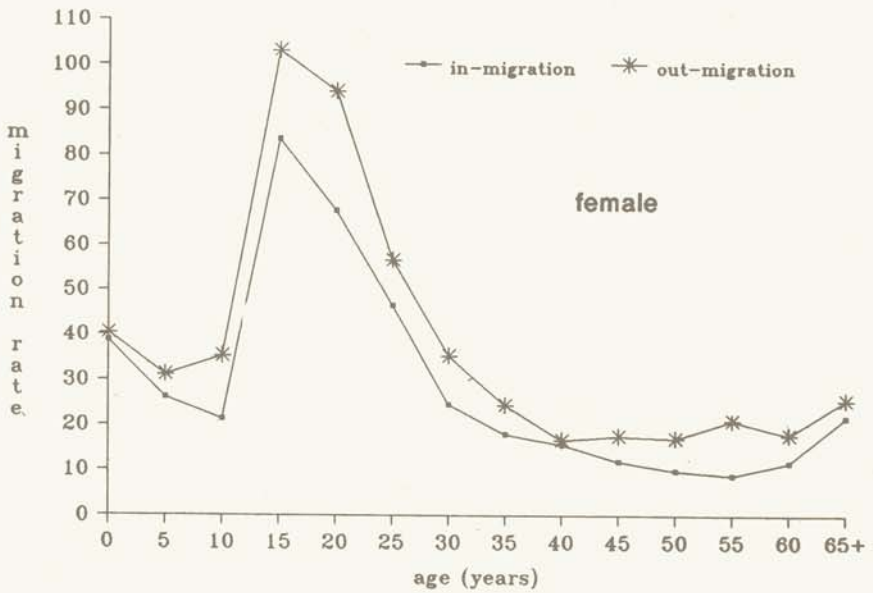


Table 6.5: Male Out-migration by Cause of Movement and Age, 1987

Cause of movement	All ages	Age (years)													
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
All migrants	4153	630	441	383	569	742	561	266	170	107	71	61	51	36	65
1. Dependent movement	1392	542	354	188	116	73	42	27	21	3	2	2	4	4	14
- move with	1271	528	338	171	99	60	32	20	13	1	2	0	0	2	5
- move with (R)	18	5	6	0	3	1	2	0	1	0	0	0	0	0	0
- to join	100	9	10	16	12	12	8	7	7	2	0	2	4	2	9
- to join (R) parent/spouse/relative	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0
2. Independent	2206	4	15	128	388	609	465	210	122	87	58	49	29	12	30
2.1. Work/economic	2038	0	15	128	381	593	439	185	104	77	45	31	17	7	16
- income (desperate)	801	0	3	47	181	224	157	59	47	35	19	14	7	1	7
- income (desperate)(R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- income	951	0	0	27	132	251	257	123	55	39	26	17	9	6	9
- income (R)	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
- follow job	8	0	0	0	1	2	0	2	1	2	0	0	0	0	0
- follow job (R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- work finished (R)	8	0	0	0	2	2	2	0	0	1	0	0	1	0	0
- study	269	0	12	54	65	113	23	1	1	0	0	0	0	0	0
2.2. Assoc. with marriage	3	0	0	0	1	0	0	0	0	0	0	0	1	0	1
- marriage	2	0	0	0	1	0	0	0	0	0	0	0	0	0	1
- separatior	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0
- divorce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- widowhood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.3. Social/family/living	165	4	0	0	6	16	26	25	18	10	13	18	11	5	13
- social/family	53	4	0	0	3	5	9	10	4	4	1	8	1	1	3
- social/family (R)	16	0	0	0	2	3	1	1	2	1	2	1	0	0	3
- accommodations	95	0	0	0	1	8	16	14	12	5	10	9	10	3	7
- accommodations (R)	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
3.0. River erosion	461	75	70	56	51	44	43	26	21	12	10	7	13	16	17
4.0. New inclusion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.0. Other	94	9	2	11	14	16	11	3	6	5	1	3	5	4	4
- other	53	9	0	5	4	12	6	3	4	3	0	2	2	1	2
- other (R)	41	0	2	6	10	4	5	0	2	2	1	1	3	3	2
- unknown/not stated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(R) = Return migration.

Table 6.6. Female Out-migration by Cause of Movement and Age, 1987

Cause of movement	All ages	Age (years)													
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
All migrants	4616	605	395	415	1116	976	430	187	106	80	72	62	57	35	80
1. Dependent movement	2708	509	318	246	427	516	276	120	68	45	35	36	31	23	58
- move with	1736	500	296	199	138	211	149	88	47	27	20	18	17	13	13
- move with (R)	23	5	3	5	0	3	1	0	1	2	1	0	1	1	0
- to join	946	4	19	42	289	301	125	32	20	15	14	18	13	9	45
- to join (R)	3	0	0	0	0	1	1	0	0	1	0	0	0	0	0
parent/spouse/relative															
2. Independent	1405	2	21	118	623	405	115	44	22	14	14	11	6	4	6
2.1. Work/economic	433	0	16	83	136	91	6	20	11	8	7	2	1	1	1
- income (desperate)	280	0	7	54	81	59	40	16	9	5	5	1	1	1	1
- income (desperate)(R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- income	63	0	0	3	22	13	13	4	2	3	2	1	0	0	0
- income (R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- follow job	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0
- follow job (R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- work finished (R)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- study	88	0	8	26	33	19	2	0	0	0	0	0	0	0	0
2.2. Assoc. with marriage	828	0	1	29	445	280	48	16	6	2	1	0	0	0	0
- marriage	673	0	0	25	378	223	34	11	1	0	1	0	0	0	0
- separation	95	0	0	2	45	38	5	3	2	0	0	0	0	0	0
- divorce	49	0	0	1	20	15	7	2	3	1	0	0	0	0	0
- widowhood	11	0	1	1	2	4	2	0	0	1	0	0	0	0	0
2.3. Social/family/living	144	2	4	6	42	34	11	8	5	4	6	9	5	3	5
- social/family	107	2	3	2	33	29	10	6	2	2	4	2	5	3	4
- social/family (R)	5	0	1	1	2	1	0	0	0	0	0	0	0	0	0
- accommodations	31	0	0	2	7	4	1	2	3	2	2	7	0	0	1
- accommodations (R)	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
3.0. River erosion	453	77	56	46	52	53	37	20	15	20	22	13	20	7	15
4.0. New inclusion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5.0. Other	50	17	0	5	14	2	2	3	1	1	1	2	0	1	1
- other	35	17	0	1	6	2	1	2	1	1	1	1	0	1	1
- other (R)	15	0	0	4	8	0	1	1	0	0	0	1	0	0	0
- unknown/not stated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

(R) = Return migration.

Table 6.7: Male In-migration by Cause of Movement and Age, 1987

Cause of movement	All ages	Age (years)													
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
All migrants	3038	569	326	285	264	299	421	288	189	110	75	70	56	40	46
1. Dependent movement	1150	487	233	150	80	57	62	38	22	6	5	2	2	2	4
- move with	459	268	85	46	14	9	15	14	4	0	1	0	0	1	2
- move with (R)	507	195	133	91	45	22	10	4	5	1	0	0	0	0	1
- to join	109	20	8	8	8	12	20	14	11	2	2	1	1	1	1
- to join (R) parent/spouse/relative	75	4	7	5	13	14	17	6	2	3	2	1	1	0	0
2. Independent	895	3	13	40	91	124	209	153	97	49	29	32	29	12	14
2.1. Work/economic	600	0	12	35	67	86	146	90	63	32	12	22	19	10	6
- income (desperate)	97	0	0	6	7	13	23	16	16	8	2	1	2	3	0
- income (desperate)(R)	111	0	0	5	14	18	29	13	9	8	3	6	3	2	1
- income	110	0	0	1	5	10	35	24	13	4	2	7	6	2	1
- income (R)	63	0	0	0	5	11	23	8	9	3	1	2	0	0	1
- follow job	9	0	0	0	0	1	3	2	2	1	0	0	0	0	0
- follow job (R)	3	0	0	0	0	1	1	1	0	0	0	0	0	0	0
- work finished (R)	111	0	0	1	1	10	28	25	14	8	4	6	8	3	3
- study	96	0	12	22	35	22	4	1	0	0	0	0	0	0	0
2.2. Assoc. with marriage	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
- marriage	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0
- separation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- divorce	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
- widowhood	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.3. Social/family/living	294	3	1	5	24	38	63	62	34	17	17	10	10	2	8
- social/family	40	1	0	1	4	2	8	14	3	2	2	1	1	0	1
- social/family (R)	180	1	1	3	15	31	42	33	18	10	11	7	4	2	2
- accommodations	42	0	0	0	3	1	7	11	8	2	1	1	4	0	4
- accommodations (R)	32	1	0	1	2	4	6	4	5	3	3	1	1	0	1
3.0. River erosion	202	30	32	28	25	15	15	10	14	6	5	6	3	4	9
4.0. New inclusion	327	41	44	49	43	37	19	16	16	11	11	11	9	11	9
5.0. Other	464	8	4	18	25	66	116	71	40	38	25	19	13	11	10
- other	24	8	2	0	0	1	3	2	2	1	2	0	1	2	0
- other (R)	439	0	2	18	25	65	113	69	38	37	23	19	12	8	10
- unknown/not stated	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0

(R) = Return migration.

Table 6.8: Female In-migration by Cause of Movement and Age, 1987

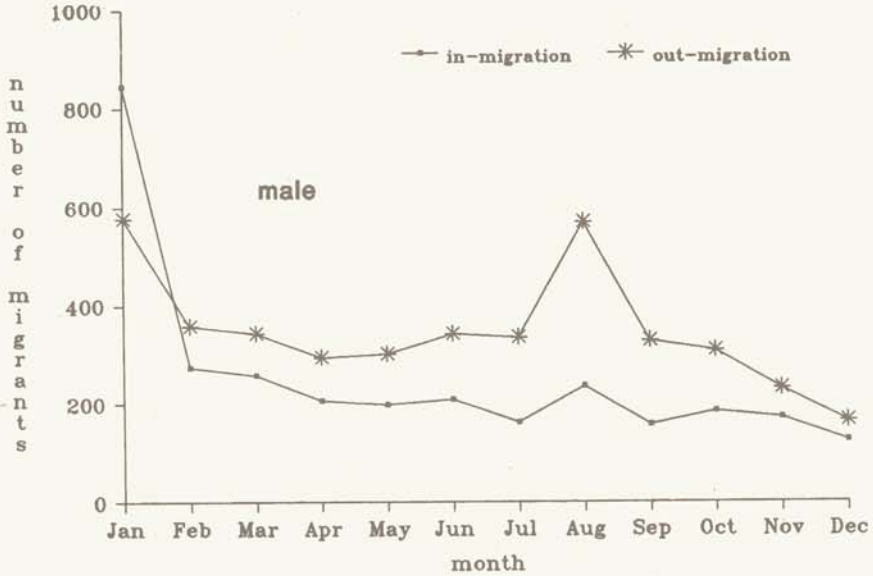
Cause of movement	All ages	Age (years)													
		<5	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65+
All migrants	3619	580	336	253	905	706	358	129	78	76	49	36	24	24	65
1. Dependent movement	1954	466	238	151	337	359	192	70	34	31	20	12	9	12	23
- move with	593	263	82	44	42	60	51	21	8	6	4	2	4	3	3
- move with (R)	722	186	135	73	64	99	67	38	20	20	9	4	3	2	2
- to join	480	16	10	17	195	153	49	6	4	5	4	5	1	2	13
- to join (R) parent/spouse/relative	159	1	11	17	36	47	25	5	2	0	3	1	1	5	5
2. Independent	1036	2	14	41	510	278	118	24	8	7	7	5	5	3	14
2.1. Work/economic	106	0	12	26	26	16	14	2	2	1	2	0	3	0	2
- income (desperate)	34	0	2	5	11	4	5	1	0	0	2	0	2	0	2
- income (desperate)(R)	5	0	0	0	2	0	1	0	1	1	0	0	0	0	0
- income	10	0	0	0	1	5	4	0	0	0	0	0	0	0	0
- income (R)	5	0	1	1	0	1	1	0	0	0	0	0	1	0	0
- follow job	3	0	0	0	0	0	2	1	0	0	0	0	0	0	0
- follow job (R)	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
- work finished (R)	2	0	0	0	0	1	0	0	1	0	0	0	0	0	0
- study	46	0	9	20	12	4	1	0	0	0	0	0	0	0	0
2.2. Assoc. with marriage	732	0	0	9	457	203	50	9	1	1	1	1	0	0	0
- marriage	530	0	0	7	393	112	11	4	1	0	1	1	0	0	0
- separation	135	0	0	2	44	61	23	4	0	1	0	0	0	0	0
- divorce	59	0	0	0	19	28	11	1	0	0	0	0	0	0	0
- widowhood	8	0	0	0	1	2	5	0	0	0	0	0	0	0	0
2.3. Social/family/living	198	2	2	6	27	59	54	13	5	5	4	4	2	3	12
- social/family	117	2	1	1	20	45	28	9	2	3	0	1	0	0	5
- social/family (R)	38	0	1	4	6	2	10	2	0	1	2	1	2	2	5
- accommodations	20	0	0	0	1	7	6	1	2	0	2	1	0	0	0
- accommodations (R)	23	0	0	1	0	5	10	1	1	1	0	1	0	1	2
3.0. River erosion	186	45	30	18	13	15	16	12	10	7	5	5	3	3	4
4.0. New inclusion	329	56	51	34	33	29	22	18	13	23	13	12	5	4	16
5.0. Other	114	11	3	9	12	25	10	5	13	8	4	2	2	2	8
- other	21	11	1	0	3	4	0	1	0	0	1	0	0	0	0
- other (R)	93	0	2	9	9	21	10	4	13	8	3	2	2	2	8
- unknown/not stated	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

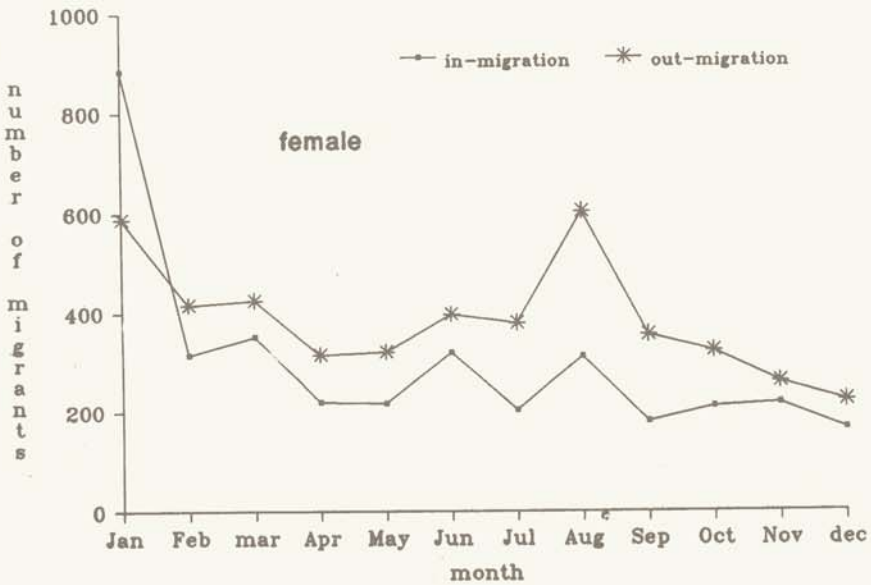
(R) = Return migration.

Table 6.9: In- and Out-migration by Sex and Month, 1987

Age (years)	In-migration			Out-migration		
	Both sexes	Male	Female	Both sexes	Male	Female
January	1738	850	888	1168	578	590
February	598	278	320	776	359	417
March	612	259	353	769	343	426
April	426	206	220	611	295	316
May	416	198	218	624	301	323
June	535	210	325	740	343	397
July	367	162	205	714	335	379
August	552	235	317	1175	569	606
September	339	157	182	683	327	356
October	402	188	214	632	308	324
November	381	169	212	491	231	260
December	292	126	166	386	164	222
All months	6658	3038	3620	8769	4153	4616

Figure 6.2: Number of In- and Out-migrants by Sex and Month, 1987





Appendix A

Names and Codes of Villages in the DSS Area, 1987

Block	MCH-FP area				Comparison area			
	Village code	Village name	Village code	Village name	Village code	Village name	Village code	Village name
A	D	Charmukundi	V59	Doshpara	A	Uddamdi	V78	Soladana
	W	Kaladi	V60	Suvankardi	B	Charmasua	V79	Pitambordi
	V10	Dhakirgaon	V61	Munsabdi	C	Sarderkandi	V80	Daribond
	V11	Nabakalash	V62	Shilmondi	F	Sepoykandi	V90	Narinda
	V31	Dighaldi	V72	Upadi	G	Thatalia	V95	Baluchar
	V32	Mobarakdi			J	Char Harigope	V96	Rampur
B	H	Lamchari	V26	Narayanpur	U	Baispur	V97	Dhanagoda
	V12	Bhangerpar	V56	Palipara	V01	Kadamtali	V98	Santoshpur
	V13	Baburpara	V82	Dhanarpar	V02	Nilokhi	V99	Baluakandi
	V19	Lakshmipur	V83	Padmapal	V03	Char Nilokhi	VB1	Taltoli
	V20	Dagorpur	V85	Bhanurpara	V04	Char Pathalia	VB2	Sree Rayerchar
	V21	Khadergaon	V87	Hurmaisha	V05	Gazipur	VB3	Rayerkandi
	V22	Beloti	VB12	Nagda	V06	Fatepur	VB4	Ramdaspur
	V23	Baluchar	VB13	Naogaon	V07	Nayakandi	VB5	Thakurpara
	V24	Machuakhal			V08	Goalbhar	VB6	Sarkerpara
C	K	Shahpur	V40	Masunda	V09	Naburkandi	VB7	Mirpur
	L	Tatkhana	V41	Paton	V14	Enayetnagar	VB8	Farazikandi
	M	Char Nayergaon	V42	Adhara (South)	V35	Durgapur	VB9	Ramanathgonj
	N	Aswinpur	V43	Kanachak	V36	Ludhua	VB10	South Rampur
	O	Nayergaon	V44	Panchdona	V37	Charputia	D28	Bazarkhola
	P	Titerkandi	V64	Kawadi	V38	Galimkha	D29	Kirtonkhola
	Q	Char Shibpur	V86	Adhara	V45	Bakchar	D30	Banuakandi
	V27	Panchghoria	V88	Datikara	V46	Silinda	D31	Harina Bazarkhola
	V28	Khidirpur	VB11	Mehroni	V47	Tulatali	D32	Khalisha
	V30	Harion	D100	Barogaon	V48	Gangkandi	D33	Nayanagar
	V39	Gobindapur	D101	Naojan	V49	Harina Bhabanipara	D34	Saidkharkandi
D	R	Nandalalpur	V52	Nayakandi			D35	Molla Kandi
	S	Tatua	V54	Balakandi	V50	Bakharpur	D88	Sankibhanga
	T	Amuakanda	V55	Induria	V51	Induriakandi	D89	Sankibangha
	V15	Bhati Rasulpur	V57	Baluchar	V53	Chhoto Haldia		Namapara
	V16	Binandapur	V63	Islamabad	V58	Mohishmari	D90	Zahirabaj
	V17	Hatighata		(East)	V65	Nayachar	D91	North Joypur
	V18	Torkey	V67	Majlishpur	V66	Thatalia	D92	West Joypur
	V25	Char Pathalia	V81	Sonaterkandi	V68	Sobahan	D93	Maizkandi
	V29	Shibpur(South)	V84	Shanbajkandi	V69	Naobangha	D94	Hazipur
	V33	Shibpur(North)	V89	Islamabad	V70	South Joypur	D95	Tapaderpara
	V34	Satparia		(Middle)	V71	Khamarpara	D96	Rampur
					V73	Sadardia	D97	Nayakandi
					V74	Ketundia	D98	Bara Haldia
					V75	Mukundia	D99	Mandertoli
					V76	Chosoi		

*Division by block applies only to the MCH-FP area.

Appendix B

Mid-year Population, Births, and Deaths by Village, 1987

Village* code	Popula-tion	Live births	Deaths	Birth rate	Death rate
D	1524	61	11	40.0	7.2
W	2667	57	20	21.4	7.5
V10	1474	48	14	32.6	9.5
V11	1432	63	14	44.0	9.8
V31	8392	306	74	36.5	8.8
V32	2437	87	38	35.7	15.6
V59	875	34	10	38.9	11.4
V60	893	27	14	30.2	15.7
V61	673	21	8	31.2	11.9
V62	764	18	4	23.6	5.2
V72	5496	207	41	37.7	7.5
Block A	26627	929	248	34.9	9.3
H	1196	53	23	44.3	19.2
V12	499	22	5	44.1	10.0
V13	732	24	10	32.8	13.7
V19	3057	99	28	32.4	9.2
V20	1055	51	9	48.3	8.5
V21	442	12	6	27.1	13.6
V22	585	14	4	23.9	6.8
V23	559	15	10	26.8	17.9
V24	2542	102	19	40.1	7.5
V26	2501	93	27	37.2	10.8
V56	1380	56	11	40.6	8.0
V82	1328	47	13	35.4	9.8
V83	502	19	5	37.8	10.0
V85	408	17	1	41.7	2.5
V87	560	21	3	37.5	5.4
VB12	3889	144	41	37.0	10.5
VB13	4409	158	37	35.8	8.4
Block B	25644	947	252	36.9	9.8

(continued)

Appendix B (cont.)

Village* code	Population	Live births	Deaths	Birth rate	Death rate
K	904	32	10	35.4	11.1
L	442	16	5	36.2	11.3
M	146	6	0	41.1	0.0
N	1956	62	11	31.7	5.6
O	1271	45	10	35.4	7.9
P	1869	58	21	31.0	11.2
Q	349	14	4	40.1	11.5
V27	871	32	13	36.7	14.9
V28	1323	47	15	35.5	11.3
V30	545	23	5	42.2	9.2
V39	344	7	1	20.3	2.9
V40	684	17	11	24.9	16.1
V41	1373	58	8	42.2	5.8
V42	674	17	5	25.2	7.4
V43	848	30	11	35.4	13.0
V44	598	20	1	33.4	1.7
V64	4409	123	32	27.9	7.3
V86	780	19	1	24.4	1.3
V88	464	12	5	25.9	10.8
VB11	2423	80	27	33.0	11.1
D100	3205	90	27	28.1	8.4
D101	1222	43	11	35.2	9.0
Block C	26700	852	234	31.9	8.8
R	1353	41	16	30.3	11.8
S	999	29	13	29.0	13.0
T	1475	62	15	42.0	10.2
V15	535	12	3	22.4	5.6
V16	720	25	10	34.7	13.9
V17	1061	23	11	21.7	10.4
V18	3438	109	26	31.7	7.6
V25	1254	28	7	22.3	5.6
V29	533	14	4	26.3	7.5
V33	584	11	7	18.8	12.0
V34	778	23	7	29.6	9.0
V52	244	6	2	24.6	8.2
V54	566	18	6	31.8	10.6
V55	510	10	4	19.6	7.8
V57	1062	30	9	28.2	8.5
V63	1997	65	14	32.5	7.0
V67	546	18	3	33.0	5.5
V81	566	20	6	35.3	10.6
V84	1997	78	22	39.1	11.0
V89	1297	30	15	23.1	11.6
Block D	21515	652	200	30.3	9.3
MCH-FP Area	100486	3380	934	33.6	9.3

(continued)

Appendix B (cont.)

Village* code	Popula-tion	Live births	Deaths	Birth rate	Death rate
A	2509	105	27	41.8	10.8
B	1878	75	23	39.9	12.2
C	3306	139	39	42.0	11.8
F	1241	39	12	31.4	9.7
G	2302	92	27	40.0	11.7
J	425	18	4	42.4	9.4
U	7681	319	82	41.5	10.7
V01	712	23	7	32.3	9.8
V02	500	16	6	32.0	12.0
V03	676	29	6	42.9	8.9
V04	246	6	7	24.4	28.5
V05	3183	118	29	37.1	9.1
V06	2308	84	34	36.4	14.7
V07	395	23	2	58.2	5.1
V08	1185	38	11	32.1	9.3
V09	1094	53	11	48.4	10.1
V14	909	26	8	28.6	8.8
V35	3476	134	36	38.6	10.4
V36	4705	161	60	34.2	12.8
V37	347	1	0	2.9	0.0
V38	1531	58	12	37.9	7.8
V45	1032	37	6	35.9	5.8
V46	353	18	5	51.0	14.2
V47	1746	62	18	35.5	10.3
V48	589	29	9	49.2	15.3
V49	1267	54	18	42.6	14.2
V50	718	20	6	27.9	8.4
V51	1511	87	20	57.6	13.2
V53	3058	107	30	35.0	9.8
V58	1171	7	1	6.0	0.9
V65	702	37	12	52.7	17.1
V66	849	41	11	48.3	13.0
V68	828	34	13	41.1	15.7
V69	707	0	0	0.0	0.0
V70	490	1	1	2.0	2.0
V71	422	15	7	35.5	16.6
V73	778	32	6	41.1	7.7
V74	1259	63	20	50.0	15.9
V75	404	14	8	34.7	19.8
V76	1511	74	17	49.0	11.3
V78	249	4	2	16.1	8.0
V79	325	5	4	15.4	12.3
V80	1041	49	14	47.1	13.4
V90	1126	48	11	42.6	9.8
V95	971	51	13	52.5	13.4
V96	567	20	3	35.3	5.3
V97	416	15	3	36.1	7.2
V98	203	8	3	39.4	14.8
V99	662	25	10	37.8	15.1

(continued)

Appendix B (cont.)

Village* code	Population	Live births	Deaths	Birth rate	Death rate
VB1	1046	40	23	38.2	22.0
VB2	908	41	10	45.2	11.0
VB3	2774	99	35	35.7	12.6
VB4	2626	111	27	42.3	10.3
VB5	765	36	12	47.1	15.7
VB6	351	21	7	59.8	19.9
VB7	193	8	2	41.5	10.4
VB8	1062	53	20	49.9	18.8
VB9	43	0	0	0.0	0.0
VB10	1641	100	28	60.9	17.1
D28	1141	43	15	37.7	13.1
D29	153	4	1	26.1	6.5
D30	736	37	13	50.3	17.7
D31	1090	43	10	39.4	9.2
D32	644	25	7	38.8	10.9
D33	954	40	6	41.9	6.3
D34	1374	52	16	37.8	11.6
D35	679	17	5	25.0	7.4
D88	1894	70	21	37.0	11.1
D89	690	41	18	59.4	26.1
D90	2775	75	21	27.0	7.6
D91	405	0	0	0.0	0.0
D92	239	0	0	0.0	0.0
D93	825	44	7	53.3	8.5
D94	1044	53	10	50.8	9.6
D95	363	23	5	63.4	13.8
D96	266	14	2	52.6	7.5
D97	687	29	6	42.2	8.7
D98	2731	118	31	43.2	11.4
D99	1964	76	23	38.7	11.7
Comparison Area	97627	3826	1095	39.2	11.2

*See village name in Appendix A.

Appendix C

Life Table Equations

1. $$ {}_nq_x = \frac{{}_nm_x}{{}^1/_n + {}_nm_x\,[\,{}^1/_2 + {}^n/_{12}\,({}_nm_x - \ln C)\,]} $$

2. $$ \ell_0 = 100{,}000 $$

$$ \ell_x = (1 - {}_nq_{x-n})\,\ell_{x-n} $$

3. $$ L_0 = 0.276\ell_0 + 0.724\ell_1 $$

$$ L_1 = 0.410\ell_1 + 0.590\ell_2 $$

$$ L_i = \tfrac{1}{2}\,(\ell_i + \ell_{i+1}),\ i = 2, 3, 4 $$

$$ {}_nL_x = \frac{{}_nd_x}{{}_nm_x} \text{ for } 5 \le x \le 80 $$

$$ {}_\infty L_{85} = \frac{\ell_{85}}{{}_\infty m_{85}} \text{ for the last age group } 85+ $$

4. $$ \mathring{e}_x = \frac{T_x}{\ell_x} \text{ where } T_x = \sum_{y=x}^{\infty} L_y $$

Note: Greville's method, as suggested in Shryock, H.S., Seigel, J.S., and Associates, The Methods and Materials of Demography (revised), U.S. Dept. of Commerce, Bureau of the Census, 1975, Vol. II p.414 and pp. 444-5.

(ln C assumed to be 0.095; separation factors in Equation 3 correspond to an infant mortality rate of 100.)

Appendix D

Staff of the DSS, 1987

Matlab Field Station

Supervisory Staff:

Mr. A.M. Sarder, Manager
Mr. A.K.M. Nurul Islam, SFRO
Mr. Liaquat Ali Mondal, FRO
Mr. Md. Ismail, FRO
Mr. Md. Khalilur Rahman I, Asst. Supvr.

Senior Health Assistants:

Mr. Md. A. Mannan Bakaul
Mr. Aftekharuzzaman
Mr. M. A. Satter Miah
Mr. Md. Serajul Hoque
Mr. K. J. M. Mannan Pathan
Mr. A. Rashid Miah
Mr. A. Latif Patwary
Mr. AFM Aminul Islam Khan

Paramedic:

Mr. Md. Monirul Alam Bhuiya

Clerk:

Mr. A.K.M. Mozibul Hoque

Health Assistants:

Mr. Md. Nasir Ahmed
Mr. Md. Shahidur Rahman
Mr. Alfazuddin Ahmed Chowdhury
Mr. Sadiquzzaman
Mr. Shah Mostafa Kamal
Mr. Md. Mozammel Hoque
Mr. Sk. A. Jabber
Mr. A. Malek Patwary
Mr. Md. Idrish Ali Miah I
Mr. Md. Abul Kashem
Mr. Md. Idrish Ali Miah II
Mr. Md. Zahirul Hoque
Mr. Md. Nurul Hoque
Mr. Md. Golam Hossain
Mr. Paresh Ch. Chakraborty
Mr. Shah Alam Sikder
Mr. Md. Monirul Hoque
Mr. Jabed Ali
Mr. Monoranjan Das

Recorders:

Ms. Shahana Ahmed, HA
Ms. Monowara Begum, HA

Dhaka-based Staff

Dr. Bogdan Wojtyniak
Mr. M.A. Kashem Shaikh
Ms. Lutfun Nahar
Mr. Abbas Bhuiya
Mr. Mridul K. Chowdhury
Mr. Abdur Razzque
Mr. Md. Ibrahim Mollah
Mr. Md. Golam Mostafa
Mr. Sentu B. Gomes
Mr. Md. Kapil Ahmed
Mr. Sk. Jaynal Abedin
Ms. Habiba Rahman
Mr. Birendra N. Adhikary
Ms. Nasrin Aktar
Mr. Mahmudul Haque
Mr. Nizam Uddin Khan
Mr. M.A. Jalil Sarker
Mr. ABM Delwar Hossain
Mr. James Roy
Mr. Arifur Rahim

Dr. Michael A. Strong is the DSS Project Director since September, 1988

Specialized Bibliography Series No. 14

ANNOTATED BIBLIOGRAPHY OF ICDDR,B STUDIES IN MATLAB, BANGLADESH

(Papers and publications on diarrhoeal diseases,
health services, population, nutrition,
maternal and child health)

The **Specialized Bibliography Series** is a part of the larger effort to facilitate the exchange of information and to establish an information network in the field of diarrhoeal disease-related subjects -- an effort being carried out by the Diarrhoeal Diseases Information Services Centre (DISC) of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B). The present issue, the fourteenth of the series, includes citations of 567 papers and publications (364 abstracted) on ICDDR,B studies done in Matlab, Bangladesh. The **Annotated Bibliography of ICDDR,B Studies in Matlab, Bangladesh** was compiled from existing information available at the DISC of ICDDR,B. This bibliography is expected to serve the interests of the diarrhoeal disease researchers and practitioners, demographers, nutritionists, and other interested groups, as well as to contribute towards generating greater interest and awareness on research done in Matlab, Bangladesh and the results obtained from these studies. Most of the published papers and publications, cited in this bibliography, are available from the DISC of ICDDR,B to interested persons/organisations for consultation and dissemination.

Price

a	SAARC countries, except Bangladesh (Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka) and Myanmar (Burma)	...	US$ 20.-
b	Bangladesh	...	Tk 175.-
c	Other countries	...	US$ 30.-

* Price includes air mail postage cost.

---

* Correspondence and remittances should be sent to:

Head, Diarrhoeal Diseases Information Services Centre,
International Centre for Diarrhoeal Disease Research, Bangladesh,
G P O Box 128,
Dhaka 1000,
Bangladesh.

Tel: 600171 - 600178 (PABX)
Telex: 675612 ICDD BJ
Cable: CHOLERA DHAKA.
Facsimile: (880 - 2) - 883116

Data Archive Series No. 1

MEHERAN GROWTH AND DEVELOPMENT STUDY
DATA SET DESCRIPTION AND TECHNICAL DOCUMENTATION

The data set description and technical documentation, as well as the data set itself, are now available for the **Meheran Growth and Development Study.** This is the first volume of the Centre's new Data Archive Series, and marks the beginning of a project which will identify significant studies which have been carried out in the past and make the data sets available to researchers.

Between 1974 and 1977, Dr. M.U. Khan conducted an intensive field study in the village of Meheran in what is now Matlab upazila. The purpose of this project was to collect anthropometric, dietary, morbidity, and dental information on 470 children monthly during the first year of life and quarterly thereafter until age 4. The documentation describes the study, data set, and variables; provides a codebook with frequencies; and provides abstracts of major publications. The data set itself has three record types, giving: family socio-economic characteristics and information about the birth anthropometric, and feeding data at each interview and tooth eruption data.

Price

Documentation	-	US$ 5.00
Data set (with documentation)	-	US$ 200.00

All payments should be made in the form of cheque or bank draft, drawn on any bank in Bangladesh, USA, or UK, in favour of the **International Centre for Diarrhoeal Disease Research, Bangladesh.** Please send for a Data Request Form prior to ordering the data set. Address all correspondence to: Associate Director, PSED, ICDDR,B, GPO Box 128, Dhaka 1000, Bangladesh.

AN APPEAL

ICDDR,B
Endowment Fund

Each year, ICDDR,B treats over 70,000 patients attending its two hospitals, one in urban Dhaka,the other in rural Matlab. Though they are planted in Bangladeshi soil, they grow because of the dedication of thousands of concerned people throughout the world. The patients are mostly children with diarrhoea and associated illnesses and the services are offered free to the poorer section of the community.

Since these services are entirely dependent on financial support from a number of donors, now we at the ICDDR,B are establishing an entirely new endeavour: an ENDOWMENT FUND. We feel that, given securely implanted roots, the future of the hospitals can confidently depend upon the harvest of fruit from perpetually bearing vines.

To generate enough income to cover most of the patient costs of the hospitals, the fund will need about five million US dollars. That's a lot of money, but look at it this way:

JUST $150 IN THE FUND WILL COVER THE COST OF TREATMENT FOR ONE CHILD EVERY YEAR FOREVER !

We hope you will come forward with your contribution so that we can keep this effort growing forever or until the world is free of life-threatening diarrhoea. IT IS NOT AN IMPOSSIBLE GOAL.

Dr. Dilip Mahalanabis
Chairman, Hospital Endowment Fund Committee
GPO Box 128 - Dhaka, 1000, Bangladesh
Telephone: 600-171 through 600-178
Fax: (880-2)-883116

Adam Ansari

My contribution to the Hospital Endowment Fund is enclosed. Amount _____

Name _____

Address _____

Make out cheque and mail with this page to:

In the USA: The International Child Health Foundation, PO Box 1205, American City Building, Columbia, MD 21044.

Elsewhere: ICDDR,B Hospital Endowment Fund, GPO Box 128, Dhaka 1000, Bangladesh

Thank you. Signature

donations are tax deductible