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## Provisional Abridged Life Tables for Urban and Rural Areas in Pakistan, Based on PGS 1968 and 1971

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## Introduction

As is the case in many other countries, mortality has been undergoing substantial, though not precisely understood, changes in Pakistan. In the absence of a reliable and adequate system of vital registration in the country. the precise measurement of these changes is well nigh impossible. In Pakistan, an attempt to estimate levels of fertility and mortality on a sample basis was made through the Population Growth Estimation (PGE) project undertaken from 1962 through 1965 [5, 12]. Subsequently, another demographic survey, called the Population Growth Survey (PGS), was initiated and carried out from 1968 through 1971 [13]. In the PGE a dual system of data collection was utilized based on continuous (Longitudinal) registration and a periodic (Cross-Sectional) survey. In the PGS, data were collected through periodic surveys only. Data from the PGS have only recently been made available to researchers. The present set of life tables is based on the mortality statistics collected in 1968 and 1971 field operations of the PGS.

Mortality conditions in Pakistan have shown considerable improvement during the last 25 years [9, 15]. Information for the early years is based mostly on special studies undertaken by Khan [8,9]. The crude death rate, estimated to range between 29 and 32 deaths per 1,000 population in 1951 [15], fell to the range of 12-16 in 1962-65, as derived from the PGE estimates [5], and is estimated to be 11—12 for 1968-71<sup>1</sup> [13]. We may, however, point out that the

The data for 1971 are based on Provisional Tables provided to the PIDE by the

Statistical Division, Government of Pakistan.

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Appendix Table IA

Abridged Life Tables for Pakistan, based on PGS: 1968 and 1971 Average

| Age Group | Probability of dying between age x and age x+1 | Survivors at exact age x | Number of deaths bewteen age x and age x+1 | Years lived between age x and age x+1 | Total years lived Expectation of after exact life.1 | Expectation of life, 1 |
|-----------|--|--------------------------|--|---------------------------------------|---|------------------------|
| (x)       | (nqx)  | (12)                     | (xpm)                                      | (nLx)                                 | (T <sub>k</sub> )                                   | (e°x)                  |
| Males     |  |                          |  |                                       |   |                        |
| 0         | 0.1226500                                      | 1,00,000                 | 12,265                                     | 91,415                                | 52,90,501   | 52.90                  |
| 1 - 4     | 0.0591707                                      | 87,735                   | 5,191                                      | 3,70,039                              | 51,99,086   | 59.26                  |
| 5 - 9     | 0.0153890                                      | 82,544                   | 1,270                                      | 4,09,545                              | 48,29,047   | 58.50                  |
| 10 - 14   | 0.0077179                                      | 81,274                   | 627  | 4,04,803                              | 44,19,502   | 54.38                  |
| 15 - 19   | 0.0084049                                      | 80,647                   | .878                                       | 4,01,540                              | 40,14,699   | 49.78                  |
| 20 — 24   | 0.0091893                                      | 696,67                   | 735  | 3,98,008                              | 36,13,159   | 45.18                  |
| 25 - 29   | 0.0099886                                      | 79,234                   | 791  | 3,94,193                              | 32,15,151   | 40.58                  |
| 30 — 34   | 0.0119114                                      | 78,443                   | 934  | 3,89,880                              | 28,20,958   | 35.96                  |
| 35 — 39   | 0.0143433                                      | 77,509                   | 1,112                                      | 38,4,765                              | 24,31,078   | 31.37                  |
| 40 — 44   | 0.0181835                                      | 76,397                   | 1,389                                      | 3,78,513                              | 20,46,313   | 26.79                  |
| 45 — 49   | 0.0246062                                      | 75,008                   | 1,846                                      | 3,70,425                              | 16,67,800   | 22.23                  |
| 50 — 54   | 0.0361566                                      | 73,162                   | 2,645                                      | 3,59,198                              | 12,97,375   | 17.73                  |
| 55 — 59   | 0.0589185                                      | 70,517                   | 4,155                                      | 3,42,198                              | 9,38,177  | 13.30                  |
| 60 - 64   | 0.1087985                                      | 66,362                   | 7,220                                      | 3,13,760                              | 5,95,979  | 8.98                   |
| + 69      | 1.000000                                       | 59,142                   | 59,142                                     | 2,82,219                              | 2,82,219  | 4.77                   |

<sup>1</sup>Average number of years lived after exact age x.

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| (x)     | (nq <sub>x</sub> ) | (I <sub>x</sub> ) | ( <sup>x</sup> p <sup>u</sup> ) | $(_{n}L_{x})$ | (T,)      | (e°x) |
|---------|--------------------|-------------------|---------------------------------|---------------|-----------|-------|
| Females |                    |                   |                                 |               |           |       |
| 0       | 0.1059500          | 1,00,000          | 10,595                          | 92,544        | 51.80.117 | 51.80 |
| 1 – 4   | 0.0686888          | 89,405            | 6,141                           | 3,44,724      | 50,87,573 | 56.90 |
| 5 - 9   | 0.0158810          | 83,264            | 1,322                           | 4,13,015      | 47,42,849 | 56.96 |
| 10 - 14 | 0.0152118          | 81,942            | 1,246                           | 4,06,595      | 43,29,834 | 52.84 |
| 15 - 19 | 0.0157137          | 969'08            | 1,268                           | 4,00,310      | 39,23,239 | 48.62 |
| 20 - 24 | 0.0164074          | 79,428            | 1,303                           | 3,93,883      | 35,22,929 | 44.35 |
| 25 - 29 | 0.0173717          | 78,125            | 1,357                           | 3,87,233      | 31,29,046 | 40.05 |
| 30 34   | 0.0187444          | 76,768            | 1,439                           | 3,80,243      | 27,41,813 | 35.72 |
| 35 — 39 | 0.0207229          | 75,329            | 1,561                           | 3,72,743      | 23,61,570 | 31.35 |
| 40 — 44 | 0.0236709          | 73,768            | 1,746                           | 3,64,475      | 19,88,827 | 26.96 |
| 45 — 49 | 0.0282247          | 72,022            | 2,033                           | 3,55,028      | 16,24,352 | 22.55 |
| 50 — 54 | 0.0356156          | 686,69            | 2,493                           | 3,43,713      | 12,69,324 | 18.14 |
| 55 — 59 | 0.0484017          | 67,496            | 3,267                           | 3,29,313      | 9,25,611  | 13.71 |
| 1       | 0.0677890          | 64,229            | 4,354                           | 3,10,260      | 5,96,298  | 9.28  |
| + 59    | 1.000000           | 59,875            | 59,875                          | 2,86,038      | 2,86,038  | 4.78  |