

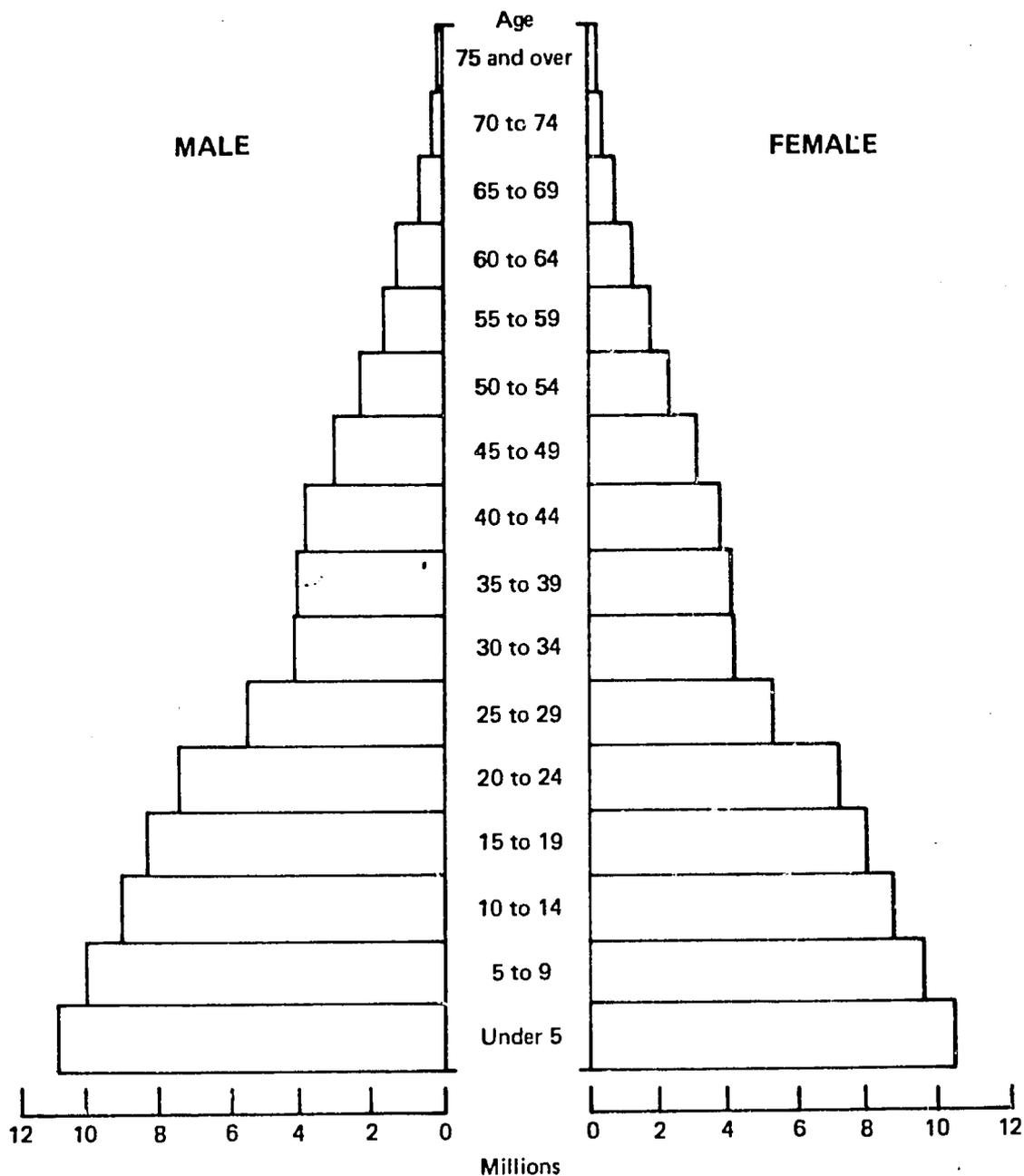
INDONESIA



U.S. Department of Commerce
BUREAU OF THE CENSUS

ISP-DP-18
Issued May 1979

Population of Indonesia, by age and sex: July 1, 1978



Projection based on Indonesia's 1971 census of population, as adjusted by the U.S. Bureau of the Census, table 2, this report.



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Country Demographic Profiles is a series of reports which brings together a variety of demographic data for selected countries of the world, and usually includes data for both a recent census year and the current period. The reports are prepared in the Population Division, Bureau of the Census, under the general direction of Samuel Baum, Assistant Chief for International Demographic Statistics and under the supervision of Eduardo E. Arriaga, Chief, International Data Evaluation Branch.

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Users of this report are invited to send their comments to the Chief, Population Division, Bureau of the Census, Washington, D.C. 20233.

INDONESIA

by
 Sylvia D. Quick
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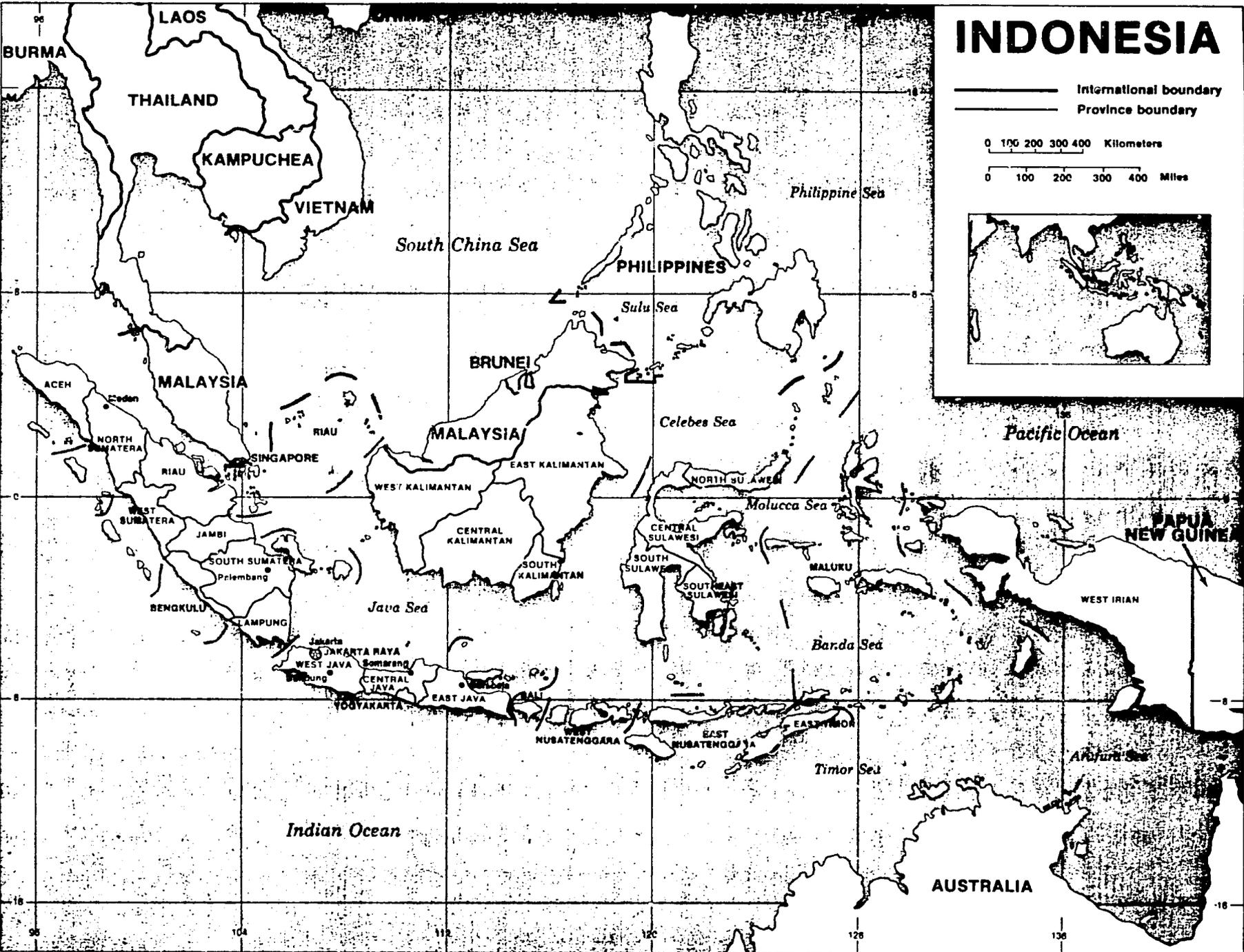
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Indonesia

HIGHLIGHTS

With more than 145 million persons as of July 1978, Indonesia has the fifth largest population among the countries of the world, and by far the largest in Southeast Asia. A nation of more than 13,000 islands (only 6,200 are inhabited), it stretches for 3,200 miles along the equator between the Malay Peninsula and Australia. Java, the principal island where the capital Jakarta is located, is among the most densely populated areas in the world with a density of almost 1,900 people per square mile.

For the past 20 to 25 years the growth rate of Indonesia has been fairly constant (around 2.0-2.2 percent) as a result of similar trends in both the crude birth and crude death rates. An exception occurred in the mid-sixties when the crude death rate probably rose several points as a result of the attempted coup in 1965 (September 30th Affair). During the 1961-71 intercensal period, fertility seems to have been fairly constant, while mortality was fluctuating at a rather high level. Since 1971, recent declines in fertility would appear to be largely due to the increasing success of the national family planning program. In 1976 and 1977, there were about 2 million new acceptors of contraception each year in the national program. On the islands of Java and Bali, over 25 percent of married women, ages 15 to 49 years, used some method of contraception in 1976. Mortality was high at the end of the 1960's. An estimated 1971 life table shows that life expectancy at birth was less than 43 years for both sexes. Under such conditions, 22 percent of the births during a year would die before reaching their 5th birthday. Nevertheless, mortality conditions seem to have improved since 1971.

As a consequence of past high fertility, Indonesia's population still has a young age composition: about 52 percent of the total population is under age 20, and those children under age 10 are more numerous than adults 35 years of age and over.

Illiteracy remains high in Indonesia. In 1976, more than one-third of the population, ages 15 years and over, were unable to read and write. Nevertheless, educational attainment is improving. Younger generations have a higher proportion of literates than older generations as well as a higher proportion of those completing primary education. Older generations present a higher proportion of educated males than females. However, this sex differential is rather small among young cohorts. For example, according to the 1976 Intercensal Population Survey, the male and female

population aged 35 years and over had a literacy rate of 62 and 30 percent, respectively; percents for males and females aged 15 to 24 years were 89 and 80, respectively.

Indonesia is still a predominantly rural, agricultural country. In 1976, at least 4 out of 5 persons were living in rural areas and more than three-fifths of the population were engaged in agricultural activities. Similar to other countries of the region, Indonesian females have a moderately high rate of labor force participation. Among the females 10 years of age and over, 37 percent of them were economically active in 1976. The maximum participation rate is observed at ages 40 to 49 years where 52 percent of the females are part of the labor force.

INTRODUCTION

This profile of the population of Indonesia contains tables of selected demographic information, including size of population, and estimates of fertility and mortality. Specifically, annual estimates of total population are shown beginning in 1950. An adjusted distribution of the population by age and sex is given for the last two census years, as well as for 1978. Projections of the number of women of childbearing age are shown for each year to 1985.

Fertility measures shown in the profile include crude birth rates, age-specific fertility rates, and gross and net reproduction rates. Mortality is shown in terms of crude death rates, life expectancy at birth, infant mortality rates, and selected life table values by age and sex.

Also presented is summary information on family planning, urban population, marital status, and some data from which past migration can be inferred. Other related items are included such as number and size of households; educational attainment; school enrollment; labor force by industry, occupation, and status; and some other selected indicators.

SOURCES AND QUALITY OF DATA

Data for the Indonesia profile were obtained primarily from the October 31, 1961 (1-percent sample tabulation) and September 24, 1971 (complete count and 3.8-percent sample enumeration) population censuses, the 1973 Fertility-Mortality Survey, and the 1976 Intercensal Population Survey. In addition, data from the December 15, 1970 population censuses of East Timor (formerly Portuguese Timor) were used. East Timor was annexed as Indonesia's 27th province in July 1976.

The quality of the census distributions by age and sex would be described as "quite unreliable" based on a United Nations Age-Sex Accuracy Index of 76 for 1961 and 53 for 1971. Limitations of this index, include the failure to take account of the expected decline in the sex ratio with increasing age, of real fluctuations due to migration, war, and epidemic, and of normal fluctuations in births and deaths. The U.N. age-sex accuracy index is primarily a measure of net age misreporting and for the most part, does not measure net coverage error. However, by applying selected analytical techniques to the age-sex data, the census distributions for Indonesia excluding East Timor were adjusted for possible age misreporting and net coverage error (see census evaluation discussion in the Technical Notes in the appendix). The estimated net (percent) coverage error for the total population and the population under age 10, by sex, in 1961 and 1971 are shown below:

Year and sex	All ages	0 to 4 years	5 to 9 years
1961			
Both sexes	-5.9	-6.8	-0.2
Male	-6.0	-8.6	-0.9
Female	-5.8	-4.9	+0.4
1971			
Both sexes	-4.9	-5.1	+5.7
Male	-5.5	-6.4	+6.3
Female	-4.3	-5.0	+5.0

Minus sign (-) denotes underenumeration; plus size (+) denotes overenumeration.

The 1960 and 1970 census populations for East Timor were adjusted for the same percent underenumeration estimated for the rest of Indonesia in 1961 and 1971, respectively. These adjusted figures were projected to October 31, 1961 and September 24, 1971, respectively, and added to the adjusted census populations for the rest of Indonesia to obtain adjusted census figures for all Indonesia (see table 2 and appendix table A-3).

Indonesia has a vital registration system, but it is considered to be incomplete due to lack of uniformity in registration laws, irregular distribution of forms, and uneven coverage of regions. A 3-year sample vital registration project to assess the quality of civil registration and to provide a framework for testing methods of improving registration was begun in 10 subdistricts of the country in July 1974. While results are available from this project, they "refer only to several small and distinct clusters, not a viable probability sample" and thus, cannot be extended to wider areas (i.e., to the provincial or national level).

Conducted in March 1973 by the University of Indonesia, the Fertility-Mortality Survey (FM Survey) was a large one-round sample survey covering such topics as marriage, fertility, childhood mortality, and knowledge, attitudes, and practice of contraception in the provinces of Java (excluding

Jakarta), Sumatera, Sulawesi, and Bali (86 percent of the total population of Indonesia). The urban and rural age-specific fertility rates presented in the preliminary survey report for each area show an increase in fertility from the late 1950's up to 1970 and a subsequent decline for the 1971-72 period (see University of Indonesia, 1974a, 1974b, 1974c, 1974d, 1974e, and 1975b). Because of the doubts raised in the preliminary and final survey reports regarding the precipitous decline in fertility from 1969-70 to 1971-72, the 1971-72 rates were not accepted for direct use in this profile. The authors of Monograph No. 1 of the FM Survey (University of Indonesia, 1975a, pp. 39 and 40) refer to the reported decline from 1969-70 to 1971-72 as follows:

"We can safely conclude that for most of the regions, little, if any, of the decline was real The explanation would appear to be a compound of age misstatement, underregistration of births of young children, and, in the case of Bali and East Java at least, some actual decline in fertility. The last factor can account for only a small part of the measured decline; the main explanation would appear to lie in age misstatement and underregistration."

The final age-specific fertility rates for 1965-70, given in Monograph No. 1 (see appendix table A-6), were considered in obtaining the final age-specific fertility rate estimates for the late sixties (see fertility discussion in the Technical Notes in the appendix).

The 1976 Intercensal Population Survey (IPS), implemented in March 1976 by the Central Bureau of Statistics, was divided into 3 integrated, multipurpose phases (see Indonesia, 1976c). Phase I was a large household listing, covering almost all areas of the country, in which information on name, family relationship, sex, age, marital status and own-mother status was obtained. The information from Phase I was used to obtain fertility estimates based on the own-children method (see Grabill and Cho, 1965 for discussion of this method) for each area in which the survey was carried out (see appendix tables A-6 and A-7).

Phase II of the IPS was designed to collect more detailed data from a subsample of the respondents selected from Phase I. Topics covered in this phase included individual characteristics for the household members, marital history, own children, fertility (e.g., children ever born and date of last birth), mortality, contraceptive knowledge and practices, household information, work status, and other socio-economic items. See appendix table A-4 for the age-sex distribution from Phase II of the 1976 IPS. Final fertility estimates based on the own-children method were not available at the time this profile was prepared.

Phase III, the Indonesian Fertility Survey, was conducted in connection with the national family planning program and in line with the series of surveys done for the World Fertility Survey (WFS). Phase III, which was a subsample of Phase II, covered only the islands of Java and Bali (66 percent of the total population in 1971). The questionnaire for this phase was adapted from the WFS core questionnaire, incorporating the Fertility Regulation, Abortion, and Family Planning modules (International Statistical Institute, 1978).

The Indonesian Planned Parenthood Association (IPPA), an affiliate of the International Planned Parenthood Federation, was established in 1957. IPPA provided limited family planning services until 1965 (primarily information services) when changes in government policy allowed the Association to expand the number of family planning clinics. In 1968, the official government family planning program was established as part of the Ministry of Health, and the National Family Planning Institute was created to coordinate family planning programs. The Institute was replaced by the National Family Planning Coordinating Board in 1970, under the direct responsibility of the President.

The government national family planning program, under the leadership of the National Family Planning Coordinating Board, was in full swing by 1971 on the islands of Java and Bali. In 1974, the program was expanded to 10 Outer Island provinces leaving 11 provinces not yet covered by the national program. The annual number of program acceptors has more than quadrupled since 1971 (see table 13). On the islands of Java and Bali the number of active users of contraceptive methods (program and non-program methods), as a percent of married women ages 15 to 49 years, more than doubled from 1973 to 1976 (see table 14). A comprehensive discussion of the national family planning program is presented in Hull, et. al., 1977.

Fertility data from all three phases of the 1976 IPS as well as data from the 1973 Fertility-Mortality Survey and the 1971 census were considered in making final fertility estimates for the late sixties and for 1971. Data from the 1976 IPS as well as data from the national family planning

program were used for estimating the levels and trends of fertility after 1971. Childhood mortality estimates based on data from the 1971 census, 1973 FM Survey, and Phase II and Phase III of the 1976 IPS as well as intercensal survival ratios based on the 1961 and 1971 census populations, by age and sex, were used in preparing mortality estimates for the profile. For a detailed discussion of mortality and fertility see the Technical Notes in the appendix.

All fertility and mortality estimates made at the U.S. Bureau of the Census (see tables 3, 4, 5, and 7 and appendix tables A-5, A-10, and A-11) were assumed to apply to all Indonesia (including East Timor). Total population figures given in the time series (table 1) and all projected population figures (see tables 2 and 6) also refer to all Indonesia.

Data presented on the labor force in tables 18 through 21 must be used with caution if any comparisons are to be made between figures for 1971 and 1976. Changes in definition in 1976 may have produced an upward bias among persons counted in the labor force, especially for females.

The user should recognize that in many instances, although the estimates are the best that can be prepared on the basis of available information, they are only tentative and new observations may well lead to different conclusions. The user is urged to consider all data in the context of the source notes which describe how the figures were derived. Complete documentation, including worksheets and other notes on all sources considered, is maintained in the Population Division. The user who has special interest in the data is invited to correspond with the Population Division for further details as well as to offer comments.

Glossary

(Following are definitions of terms as used in the tables and the notes of this profile)

- Active users.** Persons using methods of contraception at a given point in time.
- Age pattern of fertility.** The percent distribution of a set of age-specific fertility rates. It expresses the relative contribution of each age group to total fertility.
- Age-specific fertility rate.** The number of births during 1 year to women in a given 5-year age group per 1,000 women in the same age group (based on midyear population).
- Age-specific marital fertility rate.** The number of births to married women in a given age group per 1,000 married women in the same age group.
- Birth rate.** The number of births during 1 year per 1,000 persons (based on midyear population). Also called crude birth rate.
- Children ever born.** The number of live births a woman has had, regardless of the woman's present or past marital status and regardless of whether the children are now living or dead, or living with or away from the mother.
- Cohort.** A group of individuals who experience the same event in the same calendar period, such as the same year of birth or marriage.
- Component method.** A method of projecting the size of a population by age and sex, in which separate assumptions are made concerning the future fertility, mortality, and migration rates of the population.
- Crude birth rate.** See birth rate.
- Crude death rate.** See death rate.
- Death rate.** The number of deaths during 1 year per 1,000 persons (based on midyear population). Also called crude death rate.
- Ever-married women.** All women who are now, or who have been, married. The category includes the currently married, those living in consensual unions, and the widowed, divorced, or separated.
- Gross reproduction rate.** The average number of daughters born per woman in a group of women passing through the childbearing years and experiencing a given set of age-specific fertility rates. This rate implicitly assumes that all the women live to the end of the childbearing years. (See also net reproduction rate.)
- Growth rate.** The annual increase (or decrease) to the population resulting from a surplus or deficit of births over deaths and a surplus or deficit of migrants into or out of the country, expressed as a percentage of the base population.
- Infant mortality rate.** The number of deaths of children under 1 year of age per 1,000 live births in a calendar year.
- Life expectancy at birth.** The average number of years to be lived by persons born in a certain year if mortality rates for each age group remain constant in the future.
- Median age of childbearing.** The midpoint age that separates the younger half of all women giving birth in a given year from the older half.
- Net reproduction rate.** A refinement of the gross reproduction rate that allows for mortality of women from birth to the end of their reproductive years.
- New acceptors.** Persons accepting methods of contraception from family planning systems, including clients accepting contraceptive services for the first time; clients changing to another service organization; clients changing to a different contraceptive method; and clients resuming acceptance of contraceptive services after a lapse of 1 year.
- Rate of nature increase.** The annual increase (or decrease) to the population resulting from a surplus (or deficit) of births over deaths, expressed as a percentage of the midyear population. The natural increase of the population does not include the migration of persons into or out of the country.
- Sex ratio at birth.** The number of male births for each female birth.
- Total fertility rate (TFR).** The average number of children that would be born per woman if all women lived to the end of their childbearing years and bore children according to a given set of age-specific fertility rates. It is five times the sum of the age-specific fertility rates, divided by 1,000.
- United Nations Age-Sex Accuracy Index.** An index developed by the United Nations to measure irregularities in age distributions in 5-year age groups. Index values of less than 20 usually describe "reasonably reliable" age distributions, values between 20 and 40 "fairly unreliable" age distributions, and values over 40 "quite unreliable" age distributions. The United Nations states that although high test scores may reflect actual irregularities in the age data caused by past demographic fluctuations or international migrations, usually, to a larger extent, they reflect errors in the age data.

Table 1. Estimates and Projections of Midyear Population: 1950 to 1978

(In thousands)

Year	Population	Year	Population	Year	Population
ESTIMATES		ESTIMATES--Con.		ESTIMATES--Con.	
1950.....	83,414	1960.....	100,655	1970.....	122,671
1951.....	84,557	1961.....	102,900	1971.....	125,353
1952.....	85,869	1962.....	105,242	PROJECTIONS	
1953.....	87,348	1963.....	107,627	1972.....	128,175
1954.....	88,986	1964.....	110,055	1973.....	131,020
1955.....	90,727	1965.....	112,269	1974.....	133,824
1956.....	92,539	1966.....	114,176	1975.....	136,578
1957.....	94,434	1967.....	116,115	1976.....	139,349
1958.....	96,415	1968.....	118,123	1977.....	142,187
1959.....	98,497	1969.....	120,286	1978.....	145,094

Source: The 1950 to 1971 estimates are based on the results of the 1961 and 1971 population censuses, adjusted at the U.S. Bureau of the Census for estimated net underenumeration of 5.9 percent and 4.9 percent, respectively, and estimated fertility and mortality trends from 1950 to 1971. The 1961 and 1971 population censuses of Indonesia, excluding East Timor, were adjusted at the U.S. Bureau of the Census by a cohort analysis, by age and sex, using estimated levels of mortality and fertility during the intercensal period (see tables 5 and 7, and appendix table A-5) and assuming certain trends in the sex ratios of each age cohort during the 10-year period (see Technical Notes in the appendix for further details). The 1960 and 1970 census populations for East Timor (annexed by Indonesia in July 1976), adjusted for the same percent underenumeration estimated for the rest of Indonesia in 1961 and 1971, respectively, were projected to October 31, 1961 and September 24, 1971, respectively, and added to the adjusted census populations for the rest of Indonesia to obtain adjusted population census figures for all Indonesia (see table 2 and appendix table A-3).

The 1972 to 1978 figures were projected by the component method. The base of the projections was the adjusted 1971 census population, by age and sex, moved to midyear 1971. From 1971 to 1975 the total fertility rate (TFR) was estimated to decline from 5.54 to 4.75, a drop of 14 percent. The 1975 TFR is consistent with the 1971 TFR of 5.54 and a TFR of 5.20 for 1971-75 derived by applying the own-children method to data from Phase I of the 1976 Intercensal Population Survey. Life expectancy at birth was estimated to increase from 41 years in 1971 to 45 years in 1975 for males and from 44 years in 1971 to 48 years in 1975 for females. See table 7 for age-specific fertility rates, appendix table A-10 and A-11 for life tables, and the Technical Notes in the appendix for further discussion. Net international migration was assumed to be nil during this period. Assumptions for the projections from 1975 to 1978 were as follows:

Fertility: The total fertility rate of 4.75 in 1975 decreased to 4.44 in 1978, a drop of 6.5 percent. The 1978 TFR was extrapolated from 1975 considering the estimated trend of decline in TFR's from 1971 to 1975 (from 5.54 to 4.75). See appendix table A-5 for age-specific fertility rates and the Technical Notes in the appendix for further discussion.

Mortality: Life expectancy at birth was assumed to increase from 45 years in 1975 to 47 years in 1978 for males and from 48 years in 1975 to 50 years in 1978 for females. The projected mortality trend was derived by considering the trend of mortality for 1961 to 1975 estimated by the U.S. Bureau of the Census and the mortality trend assumed by the Indonesia Central Bureau of the Statistics (1978f) for their official population projections.

Table 2. Estimated and Projected Population by Age and Sex: September 1971 and Midyear 1978

(In thousands. Figures may not add to totals due to rounding)

Age	Adjusted census, September 1971 ¹			Projected population, midyear 1978		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages.....	126,014	62,493	63,521	145,095	72,165	72,930
0 to 4 years.....	20,506	10,389	10,117	21,416	10,856	10,561
5 to 9 years.....	17,974	9,073	8,901	19,660	9,936	9,723
10 to 14 years.....	16,213	8,190	8,023	17,317	8,989	8,828
15 to 19 years.....	14,313	7,228	7,085	16,377	8,261	8,117
20 to 24 years.....	9,584	4,771	4,813	14,849	7,499	7,350
25 to 29 years.....	8,906	4,394	4,513	10,858	5,441	5,418
30 to 34 years.....	8,606	4,212	4,394	8,444	4,170	4,273
35 to 39 years.....	7,854	3,824	4,031	8,251	4,039	4,212
40 to 44 years.....	6,299	3,050	3,250	7,652	3,713	3,939
45 to 49 years.....	4,877	2,351	2,526	6,314	3,036	3,278
50 to 54 years.....	3,742	1,783	1,958	4,752	2,263	2,489
55 to 59 years.....	2,735	1,289	1,447	3,488	1,636	1,852
60 to 64 years.....	1,852	861	991	2,422	1,114	1,308
65 to 69 years.....	1,207	542	666	1,494	674	820
70 to 74 years.....	809	338	470	790	343	447
75 years and over.....	536	198	338	510	195	315

¹For unadjusted 1971 census figures for Indonesia excluding East Timor and unadjusted 1970 census figures for East Timor, see appendix tables A-1 and A-2, respectively.

Source: See note to table 1.

Table 3. Estimated and Projected Vital Rates for Selected Years: 1961 to 1978

Year	Births per 1,000 population	Deaths per 1,000 population	Rate of natural increase (percent)	Growth rate (percent)
ESTIMATED				
1961.....	46	24	2.2	2.2
1971.....	42	19	2.3	2.3
1975.....	36-38	16	2.0-2.1	2.0-2.1
PROJECTED				
1978.....	34-36	15	2.0-2.1	2.0-2.1

Source: 1961 and 1971 - Crude birth and death rates were estimated at the U.S. Bureau of the Census based on adjusted census populations, by age and sex, moved to midyear, estimated age-specific fertility rates (see table 7 and appendix table A-5), and age-sex-specific mortality rates (see appendix table A-10 for 1971 rates) for 1961 and 1971. The 1961 age-specific mortality rates were from 1961 life tables estimated at the U.S. Bureau of the Census (1975b).

1975 - The estimated range in vital rates is implied by alternate component population projections based on the 1971 adjusted midyear population, by age and sex, two estimates of fertility trends, and one estimate of the trend of mortality. The upper-bound series is consistent with a total fertility rate (TFR) of 4.97 in 1975 which implies a 10-percent drop in fertility since 1971 (TFR=5.54). The 1975 TFR was estimated by Hull (1978b) based on date of last birth data and female population, by age, from Phase II of the 1976 Intercensal Population Survey (see age-specific fertility rates in table 7).

The lower-bound series was based on a TFR of 4.75 in 1975, implying a 14-percent decline in fertility since 1971 (TFR=5.54). The 1975 TFR is consistent with the 1971 TFR of 5.54 and a TFR of 5.20 for 1971-75 derived by applying the own-children method to data from Phase I of the 1976 Intercensal Population Survey. Age-specific fertility rates for 1975 are given in table 7.

For both projection series, life expectancy at birth was estimated to increase from 41 years in 1971 to 45 years in 1975 for males and from 44 years in 1971 to 48 years in 1975 for females (see appendix tables A-10 and A-11 for life tables and the Technical Notes in the appendix for further discussion). Net international migration was assumed to be nil during the 1971 to 1975 period.

1978 - The range in vital rates is implied by three alternate component population projections. The upper-bound projection was based on the 1975 estimated midyear population, by age and sex, derived in the upper-bound projection discussed above. For this projection series, the 1975 estimated TFR of 4.97 was assumed to decline to 4.62 in 1978, a drop of 7 percent.

The middle and lower-bound projections were based on the 1975 estimated midyear population, by age and sex, derived in the lower-bound projection discussed above. The 1975 estimated TFR of 4.75 was assumed to decline to 4.44, a drop of 6.5 percent, for the middle series and to 4.35, a drop of 8 percent, for the lower-bound series in 1978.

For all three series, the 1978 TFR's were derived by considering the trends of decline in TFR's from 1971 to 1975 estimated by the U.S. Bureau of the Census (see above) and the trend of decline in TFR's from 1971 to 1981 assumed by the Indonesia Central Bureau of Statistics (1978f) for their official population projections. Age-specific fertility rates are given in appendix table A-5.

All three projection series assumed that life expectancy at birth would increase from 45 years in 1975 to 47 years in 1978 for males and from 48 years in 1975 to 50 years in 1978 for females. The projected mortality trend was derived by considering the trend of mortality for 1961 to 1975 estimated by the U.S. Bureau of the Census and the mortality trend assumed by the Indonesia Central Bureau of Statistics (1978f) for their official population projections.

Net international migration was assumed to be nil for the projection series.

A crude birth rate of 35, a crude death rate of 15, and a rate of natural increase of 2.0 percent for 1978 are consistent with the population series in table 1 (the middle projection series).

For all years, rates of natural increase were calculated from unrounded crude birth and death rates. They may not equal the difference between the crude birth and death rates shown due to rounding. Growth rates are the same as the rates of natural increase indicating that net international migration was not significant.

Table 4. Estimated Infant Mortality Rate and Life Expectancy at Birth: 1961 to 1971

Period	Infant deaths per 1,000 live births	Life expectancy at birth (years)
1961 to 1971.....	149	39

Note: Estimated infant mortality rates and life expectancies at birth for 1971 and 1975 are given in appendix tables A-10 and A-11.

Source: The infant mortality rate was derived from the 1961-71 life tables discussed below. Infant deaths and births by sex (q_0 values), from the life tables (see table 5) were weighted by a sex ratio at birth of 1.05 to estimate the infant mortality for both sexes. The 1961-71 life tables were estimated using census survival ratios (based on preliminary adjustments of the 1961 and 1971 age-sex distributions) adjusted by the logit technique (see U.S. Bureau of the Census, 1975, table B and C). Also considered were infant mortality rates derived from the application of the Brass mortality technique to children-ever-born and children-surviving data from the 1971 census and the 1964-65 National Socio-Economic Survey.

Table 5. Estimated Life Table Values by Sex: 1961 to 1971

Age interval (x to x+n)	Annual number of deaths per 1,000 persons occurring between age x and age x + n $\left(1000 \frac{m}{n} x\right)$	In stationary population		Average number of years of life remaining for those alive at exact age x $\left(e_x\right)$
		Number of of persons living at exact age x $\left(l_x\right)$	Number of persons living between age x and age x + n $\left(L_x\right)$	
MALE				
Under 1 year.....	172.3	100,000	90,066	37.4
1 to 4 years.....	33.6	84,478	308,785	43.2
5 to 9 years.....	8.2	74,113	358,373	45.1
10 to 14 years.....	7.7	71,169	349,076	41.9
15 to 19 years.....	8.6	68,467	335,226	38.5
20 to 24 years.....	9.7	65,590	320,273	35.0
25 to 29 years.....	10.5	62,492	304,516	31.7
30 to 34 years.....	11.6	59,294	288,232	28.2
35 to 39 years.....	13.7	55,956	270,676	24.8
40 to 44 years.....	16.9	52,239	250,869	21.3
45 to 49 years.....	22.4	47,993	227,637	18.0
50 to 54 years.....	31.5	42,892	199,263	14.8
55 to 59 years.....	45.4	36,615	164,876	11.9
60 to 64 years.....	69.9	29,135	124,146	9.3
65 to 69 years.....	102.6	20,453	81,026	7.2
70 to 74 years.....	150.3	12,137	43,440	5.5
75 to 79 years.....	235.8	5,607	16,527	4.1
80 years and over....	261.0	1,710	6,553	3.8
FEMALE				
Under 1 year.....	156.4	100,000	90,646	40.0
1 to 4 years.....	29.5	85,827	317,230	45.5
5 to 9 years.....	8.3	76,480	374,134	46.9
10 to 14 years.....	7.8	73,388	359,920	43.8
15 to 19 years.....	8.4	70,586	345,829	40.5
20 to 24 years.....	9.3	67,671	330,708	37.1
25 to 29 years.....	9.8	64,602	315,250	33.7
30 to 34 years.....	10.6	61,500	299,632	30.3
35 to 39 years.....	12.3	58,325	283,253	26.8
40 to 44 years.....	14.9	54,855	264,697	23.4
45 to 49 years.....	18.9	50,908	243,527	20.0
50 to 54 years.....	26.4	46,311	218,152	16.7
55 to 59 years.....	39.5	40,548	185,510	13.7
60 to 64 years.....	57.1	33,228	145,616	11.1
65 to 69 years.....	79.3	24,920	103,702	9.0
70 to 74 years.....	107.7	16,694	64,767	7.2
75 to 79 years.....	137.3	9,721	35,084	5.6
80 years and over....	248.1	4,904	19,772	4.0

Source: See table 4 for detailed source note.

Table 6. Estimated and Projected Number of Women of Childbearing Age: 1971, and 1975 to 1985

(Midyear population in thousands. Figures may not add to totals due to rounding)

Year	All women, 15 to 49 years	15 to 19 years	20 to 24 years	25 to 29 years	30 to 34 years	35 to 39 years	40 to 44 years	45 to 49 years
ESTIMATED								
1971.....	30,450	7,048	4,788	4,489	4,371	4,010	3,233	2,513
1975.....	33,860	7,714	6,507	4,466	4,357	4,184	3,718	2,914
PROJECTED								
1976.....	34,756	7,832	6,888	4,657	4,341	4,197	3,812	3,030
1977.....	35,666	7,970	7,163	4,982	4,310	4,205	3,884	3,152
1978.....	36,586	8,117	7,350	5,418	4,273	4,212	3,939	3,278
1979.....	37,509	8,265	7,476	5,907	4,269	4,214	3,978	3,400
1980.....	38,426	8,404	7,584	6,368	4,345	4,209	4,004	3,511
1981.....	39,334	8,525	7,704	6,745	4,535	4,198	4,021	3,604
1982.....	40,232	8,630	7,844	7,018	4,855	4,172	4,034	3,678
1983.....	41,125	8,724	7,992	7,206	5,284	4,140	4,044	3,734
1984.....	42,022	8,817	8,142	7,333	5,765	4,139	4,051	3,775
1985.....	42,939	8,922	8,282	7,443	6,220	4,218	4,040	3,805

Source: Projection based on 1971 adjusted census population (see table 2). Assumptions were as follows:

Fertility: Assumptions regarding fertility have no effect on the number of women in these ages.

Mortality: Life expectancy at birth for women was assumed to increase from 43 years in 1971 to 54 years in 1985.

Migration: Net international migration was assumed to be nil during the projection period.

Table 7. Estimated Age-Specific Fertility Rates and Selected Derived Measures, for Selected Periods: 1967 to 1975

Age	Births per 1,000 women				Derived measures	1967 to 1970	1971	1975	
	1967 to 1970	1971	1975					Upper	Lower
			Upper	Lower					
15 to 19 years.....	155	151	111	106	Total fertility				
20 to 24 years.....	286	283	253	242	rate per woman.....	5.60	5.54	4.97	4.75
25 to 29 years.....	273	270	238	227	Gross reproduction				
30 to 34 years.....	211	209	194	185	rate per woman.....	2.73	2.70	2.42	2.32
35 to 39 years.....	124	123	121	116	Net reproduction				
40 to 44 years.....	55	55	58	55	rate per woman.....	(NA)	1.84	1.76	1.68
45 to 49 years.....	17	17	19	18	Sex ratio at birth..	1.05	1.05	1.05	1.05

NA Data not available.

Note: For additional information on estimated age-specific fertility rates for the period 1961 to 1978, see appendix tables A-5, A-6, A-7, and A-8.

Source: Total and age-specific fertility rates - The rates for 1967-70 were derived by applying the own-children method (Grabill and Cho, 1965) to data from the 1971 census (Indonesia, 1976b). The total fertility rate for 1971 was estimated at the U.S. Bureau of the Census by considering the trend of decline implied by a 1961-66 total fertility rate (TFR) of 5.66 (average of 1961-63 and 1964-66 fertility rates derived by the own-children method using data from the 1971 census; see appendix table A-6) and the 1967-70 TFR of 5.60. The age pattern of fertility for 1971 was based on the age patterns of fertility derived from 1967-70 and 1971-75 fertility rates obtained using the own-children method and data from the 1971 census and 1976 survey, respectively (see appendix table A-6).

The upper-bound estimates for 1975 were derived by Hull (1978b) based on date of last birth data and female population, by age, from Phase II of the 1976 Intercensal Population Survey. The lower-bound total fertility rate for 1975 was estimated at the U.S. Bureau of the Census for consistency with the 1971 TFR of 5.54 and a 1971-75 TFR of 5.20 derived by applying the own-children method to data from Phase I of the 1976 Intercensal Population Survey (see appendix table A-6). The lower-bound age-specific fertility rates for 1975 were estimated using the estimated TFR of 4.75 and the age pattern of fertility from the upper-bound rates.

Gross reproduction rates - Based on the total fertility rates and the sex ratios at birth.

Net reproduction rates - Based on the estimated age-specific fertility rates, sex ratios at birth, and L_x values from estimated female life tables for 1971 and 1975 (see appendix tables A-10 and A-11).

Sex ratio at birth - Assumption based on estimates used by other investigators (Widjojo, 1970, p. 155; University of Indonesia, 1973b; Cho, 1978; and Hull and Rohde, 1978). This estimate is also consistent with data for the 1970-76 period from Phase III (Indonesia Fertility Survey) of the 1976 Intercensal Population Survey tabulated at the U.S. Bureau of the Census from the Phase III computer tape.

Table 8. Ever-Married Women, Ages 15 to 49 Years, by Number of Children Ever Born: 1971 and 1976

(In thousands. Figures may not add to totals due to rounding)

Age	Total	Number of children ever born									Average number of children ever born per ever-married woman	
		0	1	2	3	4	5	6	7 or more	Not stated	All women	Reporting women ¹
1971²												
All ever-married women, 15 to 49 years.....	23,755	2,171	3,333	3,050	2,783	2,510	2,203	1,771	4,071	1,863	3.5	3.9
15 to 19 years.....	2,144	753	656	181	41	11	3	1	2	495	0.6	0.7
20 to 24 years.....	3,612	450	1,012	900	508	230	93	32	24	364	1.7	1.9
25 to 29 years.....	4,702	287	606	785	877	765	536	300	256	292	3.1	3.3
30 to 34 years.....	4,122	108	326	416	517	586	603	491	784	211	4.2	4.4
35 to 39 years.....	3,974	185	289	323	370	425	465	461	1,257	200	4.9	5.2
40 to 44 years.....	3,001	170	247	249	268	293	296	291	1,019	169	5.0	5.3
45 to 49 years.....	2,200	137	198	198	203	202	207	194	729	133	4.9	5.2
1976³												
All ever-married women, 15 to 49 years.....	24,544	3,075	3,822	3,533	2,956	2,570	2,278	1,859	4,178	273	3.6	3.6
15 to 19 years.....	2,464	1,177	902	246	49	12	1	-	(Z)	78	0.6	0.7
20 to 24 years.....	4,017	729	1,279	1,121	540	203	55	17	10	62	1.6	1.6
25 to 29 years.....	4,129	339	573	884	898	653	431	180	141	31	2.9	2.9
30 to 34 years.....	3,944	229	328	449	562	626	620	480	631	19	4.2	4.2
35 to 39 years.....	4,124	202	284	347	397	477	559	559	1,280	19	5.1	5.1
40 to 44 years.....	3,180	205	240	246	281	334	351	356	1,135	32	5.3	5.3
45 to 49 years.....	2,687	195	216	242	229	264	262	267	981	31	5.3	5.3

- Represents zero.

Z Less than 500.

¹Women who did not report number of children ever born are excluded from the base.²Excludes data for rural West Irian and East Timor.³Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Source: Indonesia, 1975b, table 25 and 1978b, table 2.

Table 9. Average Number of Children Ever Born Per Women, by Age, from Selected Sources: 1971, 1973, and 1976

Age	1971 ¹		1973	1976 ⁴	
	All women	Reporting women ²	All women ³	All women	Reporting women ³
All women, 15 to 49 years....	2.9	3.2	3.0	2.9	2.9
15 to 19 years.....	0.2	0.2	0.2	0.2	0.2
20 to 24 years.....	1.4	1.5	1.2	1.3	1.3
25 to 29 years.....	2.9	3.1	2.8	2.7	2.7
30 to 34 years.....	4.1	4.3	4.1	4.1	4.1
35 to 39 years.....	4.8	5.1	4.9	5.0	5.0
40 to 44 years.....	4.9	5.2	5.3	5.2	5.3
45 to 49 years.....	4.8	5.2	5.1	5.2	5.3

¹Excludes data for East Timor and rural West Irian.²Excludes 1,862,677 women not reporting number of children ever born (see table 8 for age distribution of women) from the base population.³Based on data which covered the provinces of Java (except for Jakarta), Sumatera, Sulawesi, and Bali (86 percent of the total population of the country).⁴Excludes data for East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.⁵Excludes 272,796 women not reporting number of children ever born from the base population.

Source: The 1971 estimates are based on 1971 census data (Indonesia, 1975b, tables 3 and 25), the 1973 estimates on data from the 1973 Fertility - Mortality Survey (University of Indonesia, 1974a-1974e and 1975b, selected tables), and the 1976 estimates on data from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978b, table 2).

Table 10. Distribution of Births, by Order of Birth: 1975

(Figures do not add to totals due to rounding)

Birth order	Percent ¹
All orders.....	100.0
1st birth.....	22.6
2nd birth.....	18.2
3rd birth.....	14.2
4th birth.....	11.2
5th birth.....	9.3
6th birth.....	7.5
7th birth.....	6.4
8th birth.....	4.4
9th birth.....	2.5
10th birth and over.....	3.5
Median birth order.....	3.1

¹The base of the percentages is the number of births of known order (4,234,760). Excludes 1,498 births of unknown order. Also excludes data for East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Note: See appendix table A-9 for a distribution of births in 1975 for Java and Bali.

Source: Based on data from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978b, table 14).

Table 11. Percent Distribution of Women, Ages 15 to 49 Years, by Marital Status: 1971 and 1976

(Figures may not add to totals due to rounding)

Age	Total	Single	Married ¹	Widowed	Divorced or separated
1971 ²					
All women, 15 to 49 years..	100.0	17.0	70.8	7.7	4.5
15 to 19 years.....	100.0	62.6	32.2	1.4	3.8
20 to 24 years.....	100.0	18.5	73.2	3.0	5.4
25 to 29 years.....	100.0	5.0	86.7	3.8	4.6
30 to 34 years.....	100.0	2.2	87.4	6.2	4.3
35 to 39 years.....	100.0	1.4	84.0	10.2	4.4
40 to 44 years.....	100.0	1.2	75.5	18.7	4.7
45 to 49 years.....	100.0	1.0	68.8	25.6	4.6
	Total	Single	Married ¹	Divorced or widowed	Separated
1976 ³					
All women, 15 to 49 years..	100.0	20.7	67.4	10.5	1.4
15 to 19 years.....	100.0	67.8	27.5	3.5	1.1
20 to 24 years.....	100.0	23.5	67.7	6.9	1.9
25 to 29 years.....	100.0	6.8	83.8	7.8	1.7
30 to 34 years.....	100.0	2.7	86.7	9.2	1.4
35 to 39 years.....	100.0	1.3	84.8	12.5	1.4
40 to 44 years.....	100.0	0.9	77.5	20.2	1.4
45 to 49 years.....	100.0	0.8	67.4	27.2	1.2

¹Includes women in consensual unions.²Excludes data for East Timor and rural West Irian.³Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Note: The base of the percentages is the number of women of known marital status in each age group. Divorced, widowed, and separated categories combined and tabulated differently in 1971 and 1976.

Source: Based on data from the 1971 census given in Indonesia, 1975b, table 8 and data from unpublished tabulations of Phase I of the 1976 Intercensal Population Survey.

Table 12. Legal Age at Marriage and Age at Which Specified Percent of Women Are Ever Married: 1971 and 1976

Item	1971	1976
Minimum legal age at marriage.....	(¹)	16 years
Age at which 25 percent of all women are ever married.....	17 years	17 years
Age at which 50 percent of all women are ever married.....	19 years	19 years
Age at which 75 percent of all women are ever married.....	21 years	22 years

¹Minimum legal age at marriage was not established in 1971.

Source: The law establishing a minimum legal age at marriage was passed in 1974 and went into effect on October 1, 1975 (University of Indonesia, 1974a, p. 12). The percent of women ever-married in 1971, by age, is based on 1971 census data (excluding East Timor and rural West Irian) from Indonesia, 1975b, table 8 (see table 11). For 1976, the percent of women ever-married, by age, is based on data from unpublished tabulations of Phase I of the 1976 Intercensal Population Survey (see table 11). The 1976 data exclude East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, and West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Table 13. Number of Acceptors of Contraception, by Method: 1968 to 1977

(Numbers in thousands and may not add to totals due to rounding)

Method	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
All methods.....	26	53	181	521	1,079	1,343	1,593	1,967	2,213	2,246
Oral contraceptives.....	5	15	80	282	607	839	¹ 1,092	¹ 1,342	¹ 1,509	¹ 1,594
IUD's.....	16	29	76	213	380	288	187	252	400	366
Condoms.....	(NA)	(NA)	(NA)	16	77	208	277	329	264	195
Sterilization:										
Male.....	-	-	(Z)	1	(NA)	(NA)	2	2	4	10
Female.....	-	-			(NA)	(NA)	8	13	19	26
Other.....	5	10	25	9	² 14	² 8	³ 27	³ 29	³ 17	³ 7

- Represents zero.

NA Data not available.

Z Less than 500.

¹Includes acceptors of injectables numbering 4,283 in 1974, 11,451 in 1975, 27,536 in 1976, and 48,435 in 1977.²Includes sterilizations.³Acceptors of condoms as reported by the Agency for International Development (see above) were subtracted from the "Other" category of acceptors as reported by Nortman and Hofstatter and The Population Council.

Note: Data are for the period April 1 of the year shown to March 31 of the following year as reported by the National Family Planning Coordinating Board.

Source: Data for 1968 to 1973 are from U.S. Bureau of the Census, 1975, p. 31. Data, other than condoms, for 1974 to 1976 are from Nortman and Hofstatter, 1978, table 16; and for 1977, unpublished data from The Population Council. Data on condoms for 1974 to 1977 are from U.S. Agency for International Development, no date a, p. 9; no date b, p. 17; no date c, p. 25 and unpublished data from the Family Planning Services Division, Office of Population, Development Support Bureau, U.S. Agency for International Development.

Table 14. Active Users of Contraception as a Percent of Married Women, Ages 15 to 49 Years, by Method, for Selected Areas of Indonesia: 1973 and 1976

Method	1973 Fertility-Mortality Survey		1976 Intercensal Population Survey- Java and Bali
	Java and Bali ¹	Survey area ²	
All methods.....	10.8	8.6	26.3
Oral contraceptives.....	4.7	3.3	14.8
IUD's.....	4.7	3.4	5.6
Condoms.....	0.5	0.5	1.8
Sterilization.....	(NA)	(NA)	0.3
Other.....	0.9	1.5	3.8

NA Data not available.

¹Excludes Jakarta.²Includes the islands of Java, Bali, Sumatera, and Sulawesi (86 percent of total Indonesia in 1971). Excludes Jakarta.

Source: Figures for 1973 were derived at the U.S. Bureau of the Census based on data for urban and rural areas for each province of Java and for the islands of Sumatera, Sulawesi, and Bali (see Indonesia, 1974a, 1974b, 1974c, 1974d, 1974e, and 1975b). Figures for 1976 were derived using data tabulated at the U.S. Bureau of the Census from the computer tape for Phase III (Indonesia Fertility Survey) of the 1976 Intercensal Population Survey.

Table 15. Percent Literate, Ages 15 Years and Over, by Sex: 1971 and 1976

Age	1971 ¹			1976 ²		
	Both sexes	Male	Female	Both sexes	Male	Female
Total, 15 years and over.....	56.6	69.5	44.6	64.0	75.0	53.6
15 to 24 years.....	80.1	86.7	74.2	84.5	89.0	80.2
25 to 34 years.....	61.9	77.9	48.5	72.9	83.3	63.7
35 years and over.....	38.5	54.7	22.4	45.5	61.6	30.0

¹Excludes East Timor and rural West Irian.

²Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor. Also excludes 611,294 persons of unknown literacy.

Note: Literacy is defined as the ability to read and write in any script.

Source: The 1971 percents are based on 1971 census data (Indonesia, 1975b, table 15) and the 1976 percents are based on data from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978a, table 5).

Table 16. Percent of Population, Ages 5 to 19 Years Enrolled in School, by Sex: 1971 and 1976

Age	1971 ¹			1976 ²		
	Both sexes	Male	Female	Both sexes	Male	Female
Total, 5 to 19 years.....	40.4	43.6	37.1	48.7	51.9	45.5
5 to 9 years.....	34.7	35.0	34.4	51.3	51.6	50.9
10 to 14 years.....	61.5	65.2	57.5	68.1	71.8	64.2
15 to 19 years.....	23.3	29.7	17.0	22.6	28.0	17.4

¹Excludes East Timor and rural West Irian.

²Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for urban areas of Kabupaten Jayapura, and East Timor. Excludes 61,574 persons of unknown status regarding school attendance.

Note: Enrollment is defined as attendance at any public or private educational institution at any level for courses with a minimum duration of 1 year.

Source: The 1971 percents are based on 1971 census data (Indonesia, 1975b, table 22) and the 1976 percents are based on data from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978a, table 4).

Table 17. Percent of Population Ages 15 Years and Over Who Have Completed School, by Level and Sex: 1976

Age	Percent who have completed at least								
	Primary school			Secondary school			Higher level		
	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female
Total, 15 years and over.....	28.0	35.1	21.3	3.8	5.4	2.4	0.4	0.7	0.2
15 to 24 years.....	43.3	48.9	37.9	4.5	5.5	3.5	0.1	0.1	0.1
25 to 34 years.....	33.9	44.2	24.8	6.6	9.6	4.0	0.9	1.4	0.5
35 years and over.....	14.5	21.5	7.8	2.1	3.4	0.9	0.4	0.7	0.1

Note: Primary education is defined as completing at least 6 years of primary school; secondary education as completing at least 6 years of secondary school (general or vocational); and higher education as completing at least 3 years at a technical institution or 4 years at a university. Thus, the primary and secondary school categories include persons who have completed schooling at a higher level.

Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor. Also excludes 219,571 persons with unknown educational attainment.

Source: Percents are based on data from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978a, table 3).

Table 18. Percent of Population Economically Active, by Age and Sex: 1971 and 1976

Age	1971 ¹		1976 ²	
	Male	Female	Male	Female
Total, 10 years and over.....	71.0	33.6	73.8	36.8
10 to 14 years.....	18.6	14.0	16.7	10.9
15 to 19 years.....	53.4	31.2	58.8	34.2
20 to 24 years.....	79.9	33.9	87.1	37.5
25 to 29 years.....	92.1	35.7	96.9	40.1
30 to 34 years.....	94.9	39.6	98.7	44.4
35 to 39 years.....	95.3	41.8	98.8	48.3
40 to 44 years.....	94.6	45.1	98.2	51.6
45 to 49 years.....	93.4	45.4	97.1	51.6
50 to 54 years.....	90.6	43.5	93.2	49.1
55 to 59 years.....	86.0	40.5	88.2	43.2
60 to 64 years.....	79.3	35.2	81.6	37.1
65 years and over.....	62.9	24.5	60.9	20.0

¹Percentages are based on total population figures excluding 366,216 males and 544,350 females for whom economic activity status was not reported and economically active (4,804 males and 3,076 females) and noneconomically active (424 males and 2,547 females) persons for whom age was not reported. Excludes rural West Irian and East Timor.

²Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Note: The data for 1971 (September) and 1976 (September-December) are not comparable due to a change in the definition of the economically active population. The increase in the percent economically active between 1971 and 1976 may be partly due to the change in the definition rather than completely due to an actual increase in the labor force.

In the 1971 census the economically active population was defined as all persons who, during the week preceding the enumeration, worked for at least 2 days for pay or profit; did not work for at least 2 days, but were permanent workers temporarily absent from work due to illness, strike, or leave, etc.; farmers operating agricultural holdings not working because of bad weather, etc.; and those who were seeking work.

The definition of economically active population in the 1976 National Labor Force Survey was changed to represent all persons who, during the week preceding the enumeration, worked for at least 1 hour for pay or profit; assisted other in obtaining pay or profit for at least 1 hour; did not work for at least 1 hour, but were permanent workers temporarily absent from work due to illness, leave, etc.; farmers with farmland waiting for another season, etc.; and those who were seeking work.

Source: Data are from the 1971 census (Indonesia, 1975b, table 36) and the 1976 National Labor Force Survey (Indonesia 1978e, tables 01.7 and 01.8).

Table 19. Distribution of Labor Force, by Sex and Industry: 1971 and 1976

(Figures may not add to totals due to rounding)

Industry	1971 ¹			1976 ²		
	Both sexes	Male	Female	Both sexes	Male	Female
PERCENT³						
All industries.....	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture, forestry, hunting, and fishing.....	67.2	67.3	67.0	61.6	62.6	59.6
Mining and quarrying.....	0.2	0.3	(Z)	0.2	0.3	0.1
Manufacturing.....	6.8	5.8	9.0	8.4	6.7	11.7
Construction.....	1.7	2.5	0.1	1.9	2.6	0.1
Electricity, gas, and water.....	0.1	0.1	(Z)	0.1	0.1	(Z)
Wholesale and retail trade, restaurants, and hotels.....	10.8	9.0	14.7	14.4	11.7	19.6
Transport, storage, and communication.....	2.4	3.5	0.1	2.7	4.1	0.1
Financing, insurance, real estate, and business services.....	0.2	0.3	0.1	0.2	0.3	0.1
Community, social, and personal services.....	10.5	11.2	8.9	10.7	11.7	8.7
NUMBER (in thousands)						
Total classified workers.....	39,383	26,712	12,671	47,280	30,986	16,294
Workers not classified by industry ⁴	1,878	863	1,015	1,151	883	268
Total labor force.....	41,261	27,575	13,686	48,431	31,869	16,562

Z Less than 0.05 percent.

¹Excludes rural West Irian and East Timor.²Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.³The base of the percentages is the total classified workers.⁴Includes persons whose activities were not adequately defined and those who were seeking work.

Note: The 1971 census definition of economically active differs from that used for the 1976 National Labor Force Survey (see note to table 18).

Source: Indonesia, 1975b, table 43 and 1978e, tables 03.7, 03.8, and 03.9.

Table 20. Distribution of Labor Force, by Sex and Occupation: 1971 and 1976

(Figures may not add to totals due to rounding)

Occupation	1971 ¹			1976 ²		
	Both sexes	Male	Female	Both sexes	Male	Female
PERCENT ³						
All occupations.....	100.0	100.0	100.0	100.0	100.0	100.0
Professional, technical, and related workers.....	2.3	2.3	2.3	2.3	2.4	2.1
Administrative, managerial workers.	0.5	0.7	0.1	0.1	0.1	(Z)
Clerical and related workers.....	3.4	4.4	1.1	2.9	4.0	0.9
Sales workers.....	11.1	9.1	15.1	14.0	11.2	19.2
Farmers, fishermen, hunters, loggers, and related workers.....	66.4	66.8	65.4	61.7	62.8	59.5
Production and related workers, transport equipment operators.....	12.3	13.2	10.4	14.5	15.2	13.1
Service workers.....	4.2	3.5	5.6	4.1	4.3	5.1
NUMBER (in thousands)						
Total classified workers.....	37,893	25,741	12,152	47,040	30,758	16,283
Workers not classified by occupation.....	3,368	1,834	1,534	41,391	1,111	279
Total labor force.....	41,261	27,575	13,686	48,431	31,869	16,562

Z Less than 0.05 percent.

¹Excludes rural West Irian and East Timor.²Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.³The base of the percentages is the total classified workers.⁴Includes persons whose activities were not adequately defined, those who were seeking work, and those who were in the Armed Forces.

Note: The 1971 census definition of economically active differs from that used for the 1976 National Labor Force Survey (see note to table 18).

Source: Indonesia, 1975b, table 40 and 1978e, tables 04.7, 04.8, and 04.9.

**Table 21. Distribution of Agricultural and Nonagricultural Workers, by Sex and Status:
1971 and 1976**

(Figures may not add to totals due to rounding)

Year and status	Both sexes		Male		Female	
	Agri-cultural	Nonagri-cultural	Agri-cultural	Nonagri-cultural	Agri-cultural	Nonagri-cultural
1971 ¹						
PERCENT ²						
Total labor force.....	100.0	100.0	100.0	100.0	100.0	100.0
Employers.....	4.0	3.5	4.5	4.3	3.0	1.8
Workers on own account.....	39.1	33.2	47.6	29.0	21.1	41.8
Salaried employees and wage earners	23.6	54.3	23.6	61.3	23.7	39.6
Unpaid family workers.....	33.3	9.0	24.4	5.3	52.2	16.8
NUMBER (in thousands)						
Total classified workers ³	26,473	12,910	17,978	8,734	8,495	4,176
1976 ⁴						
PERCENT ²						
Total labor force.....	100.0		100.0		100.0	
Employers.....	18.3		23.7		8.1	
Workers on own account.....	22.4		24.1		19.3	
Salaried employees and wage earners	33.4		35.7		29.2	
Unpaid family workers.....	25.8		16.5		43.5	
NUMBER (in thousands)						
Total classified workers ⁵	47,306		31,007		16,299	

¹Excludes rural West Irian and East Timor.

²The base of the percentages is the total classified workers.

³Excludes 442,885 males and 396,888 females seeking work for the first time, and 420,064 males and 618,362 females of unclassified industry.

⁴Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

⁵Excludes 861,542 males and 263,175 females who were seeking work.

Note: The 1971 census definition of economically active differ from that used for the 1976 National Labor Force Survey (see note to table 18).

Source: Indonesia, 1975b, table 39 and 1978e, tables 12.7, 12.8, and 12.9.

**Table 22. Percent Distribution of Households by
Number of Persons: 1971**

Persons per household	Percent
All households.....	100.0
1 person.....	4.9
2 persons.....	11.7
3 persons.....	16.1
4 persons.....	16.5
5 persons.....	15.3
6 persons.....	12.8
7 persons.....	9.4
8 persons.....	6.1
9 persons.....	3.5
10 persons and over.....	3.7
OTHER HOUSEHOLD MEASURES	
Number of households.....	24,506,742
Mean number of persons per household...	4.8
Median number of persons per household.	4.6

Note: A household is a person or group of persons occupying a part or the whole of a building and generally eating together from one kitchen. Households include both rumah biasa (regular households) and rumah khusus (special or institutional households). Excludes data for East Timor and rural West Irian.

Source: Indonesia, 1975a, tables 1 and 2.

**Table 23. Selected Urban Measures:
1971 and 1976**

Year and measure	Number or percent
1971 ¹	
Urban areas ² :	
Population.....	20,465,377
Percent of country's total population.....	17.2
Cities with 100,000 inhabitants or more:	
Number of cities.....	29
Population.....	13,528,000
Percent of country's total population.....	11.3
1976 ³	
Urban areas ² :	
Population.....	23,329,864
Percent of country's total population.....	18.5

¹Excludes East Timor.

²Urban areas comprise municipalities, Kabupaten capitals, and other places with urban characteristics as judged by census and local government officials. Municipalities are administratively delimited; all other urban areas consist of several adjoining village complexes (desa).

³Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Source: Total and percent urban for 1971 are from the 1971 census (Indonesia, 1975b, table 2). Census data on city size for 1971 is from McNicoll and Mamas, 1973, p. 31. The 1976 data is from Phase II of the 1976 Intercensal Population Survey (Indonesia, 1978a, table 1).

Table 24. Provincial Population, Growth Rates, and Migration Data

Province	1961 population (in thousands)	1971 population (in thousands)	1971 population born outside province (percent)	Annual growth rate 1961 to 1971 (percent)
Java				
Central Java.....	18,407	21,877	1.2	1.8
East Java.....	21,823	25,517	1.3	1.6
Jakarta Raya.....	2,907	4,579	40.1	4.6
West Java.....	17,615	21,624	1.9	2.1
Yogyakarta.....	2,241	2,489	4.1	1.1
Sumatera				
Aceh.....	1,629	2,009	3.1	2.1
Bengkulu.....	406	519	7.0	2.5
Jambi.....	744	1,006	15.9	3.0
Lampung.....	1,668	2,777	36.2	5.1
North Sumatera.....	4,965	6,622	8.3	2.9
Riau.....	1,235	1,642	13.2	2.9
South Sumatera.....	2,773	3,441	9.7	2.2
West Sumatera.....	2,319	2,793	3.2	1.9
Kalimantan				
Central Kalimantan.....	497	702	7.2	3.5
East Kalimantan.....	551	734	5.6	2.9
South Kalimantan.....	1,473	1,699	4.0	1.4
West Kalimantan.....	1,581	2,110	1.2	2.9
Sulawesi				
Central Sulawesi.....	693	914	5.6	2.8
North Sulawesi.....	1,310	1,719	2.9	2.7
South Sulawesi.....	4,517	5,181	1.4	1.4
Southeast Sulawesi.....	560	714	3.6	2.4
Bali.....	1,783	2,120	1.1	1.7
East Timor.....	1,517	2,609	(NA)	³ 1.6
East Nusatenggara.....	1,967	2,295	0.6	1.6
West Nusatenggara.....	1,808	2,203	1.6	2.0
Maluku.....	790	1,090	4.0	3.2
West Irian.....	758	923	22.5	2.0

NA Data not available.

¹Population for December 15, 1960.

²Population for December 15, 1970.

³Growth rate from 1960 to 1970.

Source: The 1961 (1960) census data are from Indonesia, 1962, table 10 and Portugal, 1971, table 4, p. 13. The 1971 (1970) census data are from Indonesia, 1975b, table 23 and Portugal, 1975, table 4, p. 16.

Table 25. Selected Social and Economic Items

Item	Year	Number or rate
Total area.....	1974	191,928,000 hectares
Agricultural area ¹	1974	28,605,000 hectares
Daily newspaper circulation ²	1965	7.0 per 1,000 population
Radio receivers ²	1975	37.0 per 1,000 population
Television receivers ²	1975	2.0 per 1,000 population

¹Includes arable land, land under permanent crops, and permanent meadows and pastures.

²Excludes East Timor.

Source: Total area and agricultural area from Food and Agriculture Organization, 1975, table 1. Other items from United Nations Educational, Scientific and Cultural Organization, 1977, tables 12.1, 15.2, and 16.2.

Appendix

Technical Notes

SUMMARY

The demographic data presented in this profile cover the period 1950 to 1978. National vital registration data for this period are not available. Fertility and mortality estimates are based on information from the 1961 and 1971 population censuses, the 1973 Fertility-Mortality Survey, and the 1976 Intercensal Population Survey. After an analysis of the available census and survey information, fertility and mortality estimates were derived, and the 1961 and 1971 censuses were evaluated.

FERTILITY

Prior to 1971, fertility estimates for Indonesia were based on inadequate data from such sources as the 1930 and 1961 population censuses and various rounds of the National Socio-Economic Survey conducted during the mid-1960's (see appendix table A-6 for examples of estimates based on data available during the sixties). For further discussion of fertility during and prior to the sixties, see Widjojo, 1970; Iskandar, 1970; University of Indonesia, 1973a; and McNicoll and Mamas, 1973.

Since 1971, more adequate information has become available from which fertility estimates can be derived. This information includes: a) data on children living with their mothers by age of child and age of mother required for applying the own-children method. Such data are available from the 1971 Population Census, and Phases I and II of the 1976 Intercensal Population Survey (IPS); b) pregnancy history data from the 1973 Fertility-Mortality Survey (FM Survey), and Phase III of the 1976 IPS; c) data on children ever born, by age of mother, from the 1971 Population Census, the 1973 FM Survey, and Phases II and III of the 1976 IPS; and d) data on date of last birth, by age of mother, from Phase II of the 1976 IPS; and e) current pregnancy status data from Phase III of the 1976 IPS.

Using these data, fertility estimates have been prepared by various investigators for selected periods from 1961 to 1976 (see appendix tables A-6, A-7, and A-8). Since the 1971 census and Phase I and Phase II of the 1976 IPS obtained information for the whole country, fertility estimates are available from these sources for the total country as well as by province. Fertility estimates based on the 1973 FM Survey and Phase III of the 1976 IPS do not apply to the whole country.

In addition to the estimates based on the own-children, pregnancy history, and current pregnancy status methods, other techniques, such as the Brass (1968) fertility method and the Arriaga fertility estimation method (Arriaga and Anderson, 1976), were applied to data from the 1971 census, the 1973 FM Survey, and the 1976 IPS. However, although estimates based on the Brass and Arriaga fertility estimation methods were considered, they were not used in deriving the final estimates presented in this profile due to inconsistencies in the data on children-ever-born and/or limited applicability of the methods under conditions of declining fertility.

1961 to 1971 Estimates

After considering all available fertility estimates and the possible limitations of the data and methodologies involved, it was concluded that the *levels* of fertility for the late sixties derived from the own-children method applied to results from the 1971 census (see appendix tables A-6, A-7, and A-8) could be used for deriving the fertility estimate for all Indonesia for the late 1960's. Comparison of these results with those obtained by application of the own-children method to Phase I of the 1976 IPS, and the pregnancy-history data from Phases I and III of the 1976 IPS, indicated that the levels of fertility for all Indonesia and for the provinces of Java and Bali were consistent. The data for Jakarta and Yogyakarta presented some differences. The results from the 1973 FM Survey, while generally supporting the level of fertility for the late sixties indicated by the 1971 census and 1976 survey showed variations for some provinces, and thus was not directly used in making the final estimate.

There is less consistency in the *age patterns* of fertility from the various sources than in the level of fertility (see appendix tables A-6 and A-8). Nevertheless, since all estimates show a broad-peak pattern (high fertility in ages 20 to 24 and 25 to 29 years), such a pattern was accepted for the final fertility estimates for the late sixties.

The age-specific fertility rates for 1967-70 (total fertility rate of 5.60), derived by applying the own-children method to 1971 census data, were accepted directly (see table 7 and appendix table A-6). Since there was some indication what fertility levels may have declined slightly during the sixties and early seventies (age at first marriage went up—see Hull, and Singarimbun, 1977, p. 44), a slightly declining trend of total fertility rates from 1961 to 1971 was assumed.

By averaging the 1961-63 and 1964-66 total fertility rates [derived by applying the own-children method to 1971 census data (see appendix table A-6)], a total fertility rate of 5.66 for 1961-66 was obtained. Total fertility rates of 5.68 for 1961 and 5.54 for 1971 were estimated by graphical extrapolation of the 1961-66 and 1967-70 total fertility rates.

1971 to 1975 Fertility Estimates

Several estimates of fertility rates were available for various periods from 1971 through 1976 (see appendix tables A-6, A-7, and A-8) for all Indonesia and for Java and Bali based on data from the 1976 Intercensal Population Survey. While all of the estimates indicated that fertility had declined substantially since the late sixties, there were differences in the extent of decline depending on which set of post-1970 estimates were compared with the 1967-70 total fertility rate. For this reason, it was decided that a range of total fertility rates would be estimated for 1975 (see table 7). The 1975 total fertility rate (4.97) estimated by Hull (1978b) was accepted as the upper bound of the range. For the lower bound, a 1975 total fertility rate of 4.75 was estimated to be consistent with the 1971 total fertility rate of 5.54 and the 1971-75 total fertility rate of 5.20, derived using the own-children method and data from Phase I of the 1976 Intercensal Population Survey (see appendix table A-6). The age-specific fertility rates estimated by Hull for 1975 were accepted for the upper-bound estimate and the same age pattern of fertility was assumed to apply for the lower-bound estimate. The trends of fertility for intervening years during the period from 1971 to 1975 were estimated considering available information from Phases I and III of the 1976 Intercensal Population Survey and new acceptor data from the National Family Planning Coordinating Board (see table 13).

1975 to 1978 Projection Assumptions

Fertility assumptions for 1975 to 1978 (see appendix table A-5) were made considering the trends of decline in TFR's from 1971 to 1975 estimated by the U.S. Bureau of the Census, new acceptor data from the National Family Planning Coordinating Board, and the trend of decline in TFR's from 1971 to 1981 assumed by the Indonesia Central Bureau of Statistics (1978f) for their official population projections.

MORTALITY

Little is known about levels, patterns, and trends of mortality in Indonesia. Deaths reported in the country's vital registration system are greatly underregistered and recent surveys have failed to record a substantial proportion of the deaths which had occurred (see discussions in University of Indonesia, 1975a; Siquefield and Kartoyo, 1977; and Hull and Rohde, 1978). In the past, most estimates of mortality

levels have been derived using childhood mortality estimates based on survey and census data and model life tables (see Siquefield and Kartoyo, 1977, p. 26 and Hull and Rohde, 1978). In recent years more attention has been given to the age pattern of mortality using data from the 1961 and 1971 censuses, the 1973 Fertility-Mortality Survey, the 1976 Intercensal Population Survey (Phase II), and the Sample Vital Registration Project (see U.S. Bureau of the Census, 1975b; Siquefield and Kartoyo, 1977; McDonald, 1978a and 1978b; and Gardiner, 1978). However, questions raised regarding the quality of these data (underreporting of deaths, underenumeration of the population, and age misreporting) indicate that no firm conclusion can yet be made regarding the pattern of mortality in Indonesia. Hopefully, results from future surveys and from vital registration systems in selected areas will enable demographers to estimate more reliable life tables for Indonesia. Additional analysis of existing data (e.g. orphanhood and widowhood information) from the 1973 Fertility-Mortality Survey and the 1976 Intercensal Population Survey, perhaps by regions as well as for the whole country, may allow one to make more definite conclusions regarding the pattern of mortality than can currently be made.

Life tables for 1961-71 previously estimated by Heligman (U.S. Bureau of the Census, 1975) were accepted for the profile and also used in evaluating the 1961 and 1971 censuses. The 1961-71 life tables were estimated using census survival ratios (based on preliminary adjustments of the 1961 and 1971 age-sex distributions) adjusted by the logit technique. Also considered were infant mortality rates derived from the application of the Brass mortality technique (Brass and Coale, 1968) to children-ever-born and children-surviving data from the 1971 census and the 1964-65 National Socio-Economic Survey.

For estimating the trend of mortality after the mid sixties, infant mortality rates derived from the application of the Brass mortality technique to children-ever-born and children-surviving data from the 1971 census, the 1973 Fertility-Mortality Survey, and Phase II of the 1976 Intercensal Population Survey were considered. Appendix table A-12 gives the estimated levels of infant and childhood mortality and their approximate reference periods from these sources. Comparison of the infant mortality rates derived by the Brass mortality technique, using child mortality estimates from birth up to age 2 and age 3 (experience has shown estimates for these ages to be the most reliable) from the 1971 census and 1976 survey, indicates a decline of about 20 percent in infant mortality during a 4 to 5 year period (from 1966-69 to 1971-74). Such a rapid decline is considered to be doubtful since there is little evidence of substantial increases during this period in such areas as the income of the population, or in the quality and coverage of medical services, which might have supported such a decline (see Indonesia, 1976d and Hull and Rohde, 1978, p. 13).

Hull (1978a) estimated an infant mortality rate of 114 for 1975 using data on date of last birth and number of last births still living from Phase II of the 1976 Intercensal

Population Survey. Comparison of Hull's estimate with the estimated infant mortality rates derived from the 1971 census for the 1966-69 period (see appendix table A-12) implies a 15 to 26 percent decline (depending on which Coale-Demeny region the 1966-69 infant mortality rate related to) in infant mortality during the 7 to 8 year period. While both sets of estimates imply that infant mortality has been declining significantly since the late sixties, it was decided that the rate of decline implied by Hull's estimate appeared to be more reasonable and thus, this estimate was accepted for the profile.

Since the data collected in the Sample Vital Registration Project (SVRP) was not representative of the whole country (it was conducted only in ten sub-districts), the life tables derived using data from this project (life expectancy at birth of 48 years for males and 50 years for females in 1974-77) were not accepted for the profile (see Gardiner, 1978). It was decided, however, to use the age pattern of mortality implied by the SVRP data in estimating 1975 life tables.

The overall level of mortality for 1975 was estimated based on the projected levels of life expectancy at birth for 1971-76 and 1976-81, for Java and Outside Java, used by the Indonesia Central Bureau of Statistics (1978f) in making their official population projections. Accepting these estimated life expectancies at birth, Hull's infant mortality rate, and the SVRP age pattern of mortality ((after some slight smoothing of the age-specific death rates)), life tables for males and females for all Indonesia in 1975 were derived (see appendix table A-11).

Life tables for 1971 were estimated based on q_x values interpolated from the 1961-71 (see table 5) and 1975 (see appendix table A-11) life tables. These life tables are presented in appendix table A-10. Projected levels of mortality (see table 2 or table 3 for life expectancies at birth for 1978) were estimated by considering such factors as the increased implementation of rural health care using traveling medical teams to visit isolated areas and family planning field workers to give basic health and nutrition education, particularly to young women who are pregnant or have infants and small children; and changing economic conditions in the country. The assumptions of life expectancy at birth used by the Indonesia Central Bureau of Statistics (1978c) for making their official population projections were also considered.

CENSUS EVALUATION

The 1961 population census was the first census conducted after Indonesia's independence in 1945. This census and the one carried out in 1971 are the only truly modern censuses ever held in Indonesia. The 1930 census, the last and most reliable of the colonial era, although it incorporated some of the essential features did not fully meet the requirements of a modern census. This was reflected in its crude age classification—children who cannot walk, other children, and adults—and its incomplete coverage of areas outside the island of Java (University of Indonesia, 1973, pp. 1 and 2). Other population counts are available back to 1775 and although these are useful in gaining a rough picture of the

growth trends in Indonesia, the quality of the data is considered to be quite poor. For this profile, only the 1961 and 1971 censuses were evaluated.

In 1961, a post-enumeration survey (PES) was taken in the island of Java as well as in the provincial capitals. This PES, which encountered many problems and did not cover the entire country, gave an estimation of net underenumeration of 0.19 and 0.45 percent for Java and the provincial capitals, respectively (Indonesia, 1963, p. 16).

In 1971 it was decided that the 3.8 percent sample enumeration, conducted independently from the complete enumeration, would serve as a post-enumeration survey.

"Through a matching procedure, it has been estimated that underenumeration occurred at a rate of about 3.5 percent for the household listing and about 3.3 percent for the sample census. Considerable variation in the degree of coverage exists among different parts of the country. For the complete census, the rate of underenumeration fluctuated between 1 and 10 percent; for the sample, between 1 and 7 percent. Rural coverage was more complete than urban, in part because cooperation was greater in rural areas." (See East-West Population Institute, 1974, p. 20).

Other direct checks on the quality of the census data could not be made due to the lack of independent records, thus it was decided to also evaluate the 1961 and 1971 censuses by applying demographic techniques. This was carried out mainly by using age and sex cohort analysis.

The population census conducted on October 31, 1961 was a complete enumeration of persons who had resided in Indonesia for at least three months. No enumeration was carried out in West Irian, which was still occupied by the Dutch forces, but the census total, 97,018,829, does include an estimate of 700,000 persons for this area. Also excluded from the 1961 census were foreign military and diplomatic personnel and their families (Widjojo, 1970, p. 170). Age and sex data for the population was provided by the extended 1-percent sample tabulation (see appendix table A-3). A complete (100 percent) tabulation for the census was never made (Suharto, et.al, 1976).

The 1971 census was conducted in two stages. During September 6-24, 1971, the population residing in Indonesia, excluding persons with diplomatic status, was canvassed to obtain basic characteristics of the population—age, sex, and citizenship. To obtain more detailed information, a sample enumeration of persons living in selected census-blocks was conducted from September 20 to October 4, 1971. The coverage of the 1971 census did not include the rural areas of West Irian. The rural population was estimated to be 772,654 in 1971 based on the 1968 population census of West Irian (Suharto and Abdulmadjid, 1973, p. 18). The total population for the whole country was 119,232,499 in 1971, including the estimate for rural West Irian.

Before making the cohort analysis, the reported age-sex distributions for 1961 and 1971 were modified as follows:

1. For 1961, persons of unknown age and the estimated 700,000 population for West Irian were proportionately

distributed according to the age distribution for each sex group available from the 1-percent sample tabulation.

2. Since age data was obtained only by broad age groups (0 to 4, 5 to 14, 15 to 24, and 25 years and over) in the complete enumeration of the 1971 census, detailed age and sex distributions (by single years and 5-year age groups) obtained from the sample enumeration were used for making the evaluation (see appendix table A-1). These distributions were adjusted to equal the total population of 119,232,499 in 1971 from the complete count (including the estimated population for rural West Irian).

Comparison of the results from the two censuses indicated that the age-sex distributions from both censuses were distorted. Indonesia's deviation from an expected age pattern has led to contrary opinions among demographers as to the reason for such differences. Keyfitz (1965 and 1973) and Widjojo (1970, pp. 177 and 202) accept the 1961 age distributional pattern and attribute most of its abnormal structure to the influence World War II and the War for Independence and upon the vital rates during the forties. Others, such as Van de Walle and Iskandar (Tangoantiang), attribute the occurrence of the deep trough at ages 10 to 19 in 1961 and other irregularities to age misreporting and underenumeration (Van de Walle, 1966 and Iskandar, 1972). Comparison of the results from the 1961 and 1971 census tended to lend support to both of the above-mentioned hypotheses.

Acceptance of the trough in the age distributions due to the decreased level of fertility during the forties prevented stable population analysis or mathematical smoothing of these distributions to correct for age misreporting. Instead, a graphical cohort analysis of percent distributions, by 10-year age groups, from the two censuses (excluding data for East Timor) for each sex was made. Since all four distributions showed irregularities, it was decided to adjust the 1971 female distribution first and then obtain estimated 1961 and 1966 female distributions. This was done according to the following steps:

1. The percent distribution for 1971 females, by 5-year age groups was graphically smoothed and then applied to the total 1971 female census figure.
2. The 1971 smoothed females were rejuvenated to 1966 and 1961 using estimated life tables for the 1966-71 and 1961-66 periods, respectively.

Comparison of the 1961 and 1971 females under age 10 estimated in steps 1 and 2 with females from the 1961 and 1971 censuses, respectively, implied overenumeration in the age groups 0 to 4 and 5 to 9 (excessively high in ages 5 to 9) for both censuses which was considered to be unacceptable. Thus, further adjustments were needed for the population in the young age groups. The distributions for females ages 10 years and over in 1961, 15 years and over in 1966, and 20 years and over in 1971 in steps 1 and 2 were accepted as final estimates. Making use of the previously estimated fertility and mortality for the intercensal period, the population for each sex under age 20 in 1971, under age 15 in 1966, and

under age 10 in 1961 was derived by an iterative process. Iteration was needed because the first estimate of births during the intercensal period, needed for estimating the population in the young ages, was based on a preliminary estimate of females ages 15 to 19 in 1971 (obtained in step 1). Steps were as follows:

3. The 1971 population ages 0 to 4 and 5 to 9 was estimated by surviving an estimated number of births from 1961 to 1966 and from 1966 to 1971. The estimated births were based on: a) estimated age-specific fertility rates for the intercensal period (see discussion above); and b) female population in the childbearing ages estimated for 1961, 1966, and 1971 in steps 1 and 2. The population ages 5 to 9 was accepted as final and rejuvenated to 1966 to obtain the population ages 0 to 4 for that year.
4. Applying the 1961 census child-woman ratio for ages 5 to 9 (children ages 5 to 9 divided by female population ages 20 to 49) to the 1961 estimated females ages 20 to 49 gave an estimate of the population ages 5 to 9 in 1961. This population was accepted as final. Surviving the final 1961 population ages 5 to 9 to 1971 yielded a final population for ages 10 to 14 in 1966 and 15 to 19 in 1971.
5. The 1966 child-woman ratio for ages 5 to 9 was obtained by interpolation of 1961 and 1971 ratios. Applying the 1966 ratio to the females ages 20 to 49 in 1966 yielded a final estimate of the population ages 5 to 9 in 1966. Rejuvenation and projection of this population gave a final estimated population ages 0 to 4 in 1961 and 10 to 14 in 1971, respectively.
6. Based on the final distribution of females ages 15 to 49 in 1966 and 1971 (the final estimate of females ages 15 to 19 in 1971 was obtained in step 4) and age-specific fertility rates for these years, final estimates of births for the 1966-71 period were derived and, consequently, final estimates of the population ages 0 to 4 in 1971.

The pattern of reported sex ratios by age in the 1961 and 1971 census differ extensively from an expected sex-ratio pattern, thus suggesting serious defects in age reporting as well as special factors (e.g., results of the war, earlier migration, etc.) affecting the population. Accepting a sex ratio at birth of 1.05 (see table 7) and using the sex ratios by age for the population under age 20 in 1971 previously estimated, the pattern of reported 1971 sex ratios for ages 20 and over were graphically smoothed. The final census populations for Indonesia excluding East Timor for September 24, 1971 and October 31, 1961 were then obtained as follows:

7. The smoothed sex ratios by age were applied to the adjusted female population ages 20 years and over in 1971 to obtain the male population ages 20 years and over.
8. The 1971 adjusted male population, by age, was rejuvenated to 1961 using estimated life tables for 1961-66 and 1966-71.

9. Applying estimated age-specific fertility rates and age-sex specific life table death rates for 1961 to the estimated September 24, 1961 population (obtained in previous steps), crude birth and death rates and a growth rate for 1961 (net international migration considered to be negligible) were derived. Making use of this growth rate, the total population for September 24, 1961 was projected to the census date of October 31, 1961. The age-sex distribution estimated previously was assumed to apply to October 31.

The area of East Timor (formerly Portuguese Timor) was annexed by Indonesia in July 1976. For this profile, the population of East Timor in 1961 and 1971 was added to the population for the rest of Indonesia to obtain the adjusted census populations for the whole country. The adjusted 1961 and 1971 populations for East Timor were estimated as follows:

10. The total census populations for December 15, 1960 and 1970 were adjusted for the same percent net underenumeration as was estimated for the rest of Indonesia in 1961 and 1971, respectively (5.9 percent and 4.9 percent).

11. Based on the intercensal growth rate, the 1960 and 1970 adjusted census populations for East Timor were projected to October 31, 1961 and September 24, 1971, respectively.

12. Population figures by sex, but not by age, were available for East Timor in 1960. The 1960 census sex ratio was applied to the 1961 adjusted total population (see step 11) to obtain adjusted population, by sex. The 1961 age distribution for East Timor was assumed to be the same as that estimated for the rest of Indonesia.

13. Adjusted 1971 population, by sex, for East Timor was derived using the 1970 census sex ratio and the adjusted total population for 1971 (obtained in step 11). The 1970 age distributions (see appendix table A-2) were smoothed using Arriaga's splitting formulas (see Arriaga, 1968, p. 295), and then applied to the adjusted 1971 population for each sex to obtain an adjusted 1971 age-sex distribution.

By adding the adjusted age-sex distributions for East Timor to the adjusted distributions for the rest of Indonesia, adjusted populations, by age and sex, for September 24, 1971 and October 31, 1961 for the total country were obtained (see table 2 and appendix table A-3).

**Table A-1. Census Population, by Age and Sex, for Indonesia Excluding East Timor:
September 1971**

(In thousands. Figures may not add to totals due to rounding)

Age	Both sexes	Male	Female
All ages.....	118,368	58,339	60,029
0 to 4 years.....	19,099	9,606	9,493
5 to 9 years.....	18,762	9,525	9,237
10 to 14 years.....	14,180	7,353	6,826
15 to 19 years.....	11,325	5,588	5,738
20 to 24 years.....	8,031	3,602	4,429
25 to 29 years.....	8,925	3,978	4,947
30 to 34 years.....	7,904	3,690	4,214
35 to 39 years.....	7,979	3,948	4,031
40 to 44 years.....	6,102	3,064	3,038
45 to 49 years.....	4,650	2,427	2,223
50 to 54 years.....	3,864	1,903	1,961
55 to 59 years.....	2,226	1,126	1,100
60 to 64 years.....	2,338	1,082	1,256
65 to 69 years.....	1,143	549	594
70 to 74 years.....	1,039	510	528
75 years and over.....	787	380	406
Unknown.....	15	7	8

Note: Data are from the 3.8-percent sample census and exclude the rural population of West Irian (772,654 persons) and homeless persons on shipboard (67,725).

Source: Indonesia, 1975b, table 2.

Table A-2. Census Population, by Age and Sex, for East Timor: December 1970

(In thousands. Figures may not add to total due to rounding)

Age	Both sexes	Male	Female
All ages.....	609	316	293
0 to 4 years.....	83	43	40
5 to 9 years.....	87	47	40
10 to 14 years.....	75	42	33
15 to 19 years.....	51	27	24
20 to 24 years.....	48	24	23
25 to 29 years.....	46	24	22
30 to 34 years.....	43	21	22
35 to 39 years.....	39	20	19
40 to 44 years.....	30	14	15
45 to 49 years.....	26	13	13
50 to 54 years.....	21	10	12
55 to 59 years.....	18	9	9
60 to 64 years.....	17	8	9
65 to 69 years.....	12	6	5
70 to 74 years.....	7	4	3
75 years and over.....	5	3	2

Note: East Timor (formerly Portuguese Timor) was annexed by Indonesia in July 1976.

Source: Portugal, 1975, table 4, p. 16.

Table A-3. Enumerated and Adjusted Census Population, by Age and Sex: October 1961

(In thousands. Figures may not add to totals due to rounding)

Age	Enumerated ¹			Adjusted ²		
	Both sexes	Male	Female	Both sexes	Male	Female
All ages.....	96,319	47,494	48,825	103,668	51,205	52,463
0 to 4 years.....	17,042	8,462	8,580	18,533	9,392	9,141
5 to 9 years.....	15,323	7,684	7,639	15,571	7,861	7,710
10 to 14 years.....	8,179	4,319	3,861	10,448	5,194	5,254
15 to 19 years.....	7,708	3,834	3,874	9,794	4,831	4,962
20 to 24 years.....	7,791	3,452	4,339	9,541	4,677	4,865
25 to 29 years.....	15,876	7,334	8,542	8,807	4,301	4,506
30 to 34 years.....				7,200	3,506	3,695
35 to 39 years.....	11,083	5,720	5,363	5,748	2,798	2,950
40 to 44 years.....				4,640	2,248	2,392
45 to 49 years.....	7,042	3,559	3,483	3,693	1,780	1,913
50 to 54 years.....				2,863	1,378	1,485
55 to 59 years.....	3,748	1,898	1,850	2,277	1,093	1,184
60 to 64 years.....				1,988	948	1,041
65 years and over.....	2,409	1,173	1,236	2,565	1,199	1,366
Unknown.....	117	60	57	-	-	-

- Represents zero.

¹Excludes the estimated population of West Irian for October 31, 1961 (700,000 total population) and the census population of East Timor for December 15, 1960 (267,783 males and 249,926 females).

²Includes an adjusted population for West Irian and East Timor. The 1960 census population for East Timor was inflated for the same net underenumeration (5.9 percent) estimated for the rest of Indonesia yielding an adjusted population of 555,267. The 1960 adjusted population was projected to October 31, 1961 and added to the adjusted population for the rest of Indonesia. For further discussion see the Technical Notes in the appendix.

Source: Indonesia, 1963, table 2 and Portugal, 1971, table 4, p. 13.

Table A-4. Survey Population, by Age and Sex: February 1976

(In thousands. Figures may not add to totals due to rounding)

Age	Both sexes	Male	Female
All ages.....	126,093	62,357	63,736
0 to 4 years.....	18,930	9,621	9,309
5 to 9 years.....	18,296	9,309	8,987
10 to 14 years.....	15,859	8,104	7,755
15 to 19 years.....	13,530	6,592	6,938
20 to 24 years.....	9,882	4,771	5,111
25 to 29 years.....	8,282	3,853	4,429
30 to 34 years.....	7,690	3,646	4,045
35 to 39 years.....	8,059	3,885	4,174
40 to 44 years.....	6,359	3,148	3,210
45 to 49 years.....	5,586	2,875	2,711
50 to 54 years.....	4,273	2,081	2,192
55 to 59 years.....	3,173	1,583	1,590
60 to 64 years.....	2,507	1,189	1,318
65 to 69 years.....	1,472	677	795
70 to 74 years.....	1,125	513	611
75 years and over.....	1,028	481	546
Unknown.....	43	28	15

Note: Data are from Phase II of the 1976 Intercensal Population Survey and exclude population for East Nusatenggara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Source: Indonesia, 1978a, table 1.

Table A-5. Estimated and Projected Total and Age-Specific Fertility Rates: 1961, 1971, 1975, and 1978

Age	Estimated				Projected 1978		
	1961	1971	1975		Upper	Middle	Lower
			Upper	Lower			
Age-specific fertility rates (per 1,000 women)							
15 to 19 years.....	190	151	111	106	103	99	97
20 to 24 years.....	271	283	253	242	235	226	221
25 to 29 years.....	266	270	238	227	221	213	208
30 to 34 years.....	205	209	194	185	180	173	170
35 to 39 years.....	129	123	121	116	112	108	106
40 to 44 years.....	57	55	58	55	54	52	51
45 to 49 years.....	17	17	19	18	18	17	17
Total fertility rate (per woman).....	5.68	5.54	4.97	4.75	4.62	4.44	4.35

Source: The 1961 and 1971 total fertility rates were estimated by considering the trend of decline implied by a 1961-66 total fertility rate (TFR) of 5.66 (average of 1961-63 and 1964-66 fertility rates derived by the own-children method using data from the 1971 census; see appendix table A-6) and a 1967-70 TFR of 5.60 (see table 7). Age-specific fertility rates for 1961 were estimated by assuming that the age pattern of fertility from the 1961-66 fertility rates applied to 1961. The 1971 age-specific fertility rates were based on age patterns of fertility from the 1967-70 and 1971-75 fertility rates (own-children estimates from the 1976 survey; see appendix table A-6).

The upper-bound estimate for 1975 was derived by Hull (1978b) based on date of last birth data and female population, by age from Phase II of the 1976 Intercensal Population Survey. The lower-bound total fertility rate for 1975 was estimated for consistency with the 1971 TFR of 5.54 and a 1971-75 TFR of 5.20 (own-children estimate from the 1976 survey; see appendix table A-6). The lower-bound age-specific fertility rates for 1975 were estimated using the estimated TFR of 4.75 and the age pattern of fertility from the upper-bound rates.

For all three series, the 1978 total fertility rates were derived by considering the trend of decline in TFR's from 1971 to 1975 estimated by the U.S. Bureau of the Census, new acceptor data from the National Family Planning Coordinating Board, and the trend of decline in TFR's from 1971 to 1981 assumed by the Indonesia Central Bureau of Statistics (1978c) for their official population projections. For the upper series the 1975 upper-bound TFR (4.97) was assumed to decline to 4.62 (a drop of 7 percent) for 1978. The 1975 lower-bound TFR (4.75) was assumed to decline to 4.44 (a drop of 6.5 percent), for the middle series and to 4.35 (a drop of 8 percent), for the lower series in 1978. The age pattern of fertility in 1975 was assumed to remain constant to 1978 for all three series.

Table A-6. Alternate Estimates of Total and Age-Specific Rates from Selected Sources, for Indonesia, for Selected Periods: 1961 to 1975

Age	1961 Census (Bogue-Palmore regression model) ¹		1964-65 Socio-Economic Survey ²		1971 Census (own-children method) ³			
	High	Low	1963-64 unadjusted	1963-64 adjusted (Brass)	1961-63	1964-66	1967-70	1964-70
Age-specific fertility rates (per 1,000 women)								
15 to 19 years.....	123	120	100	125	179	199	155	175
20 to 24 years.....	281	287	215	269	258	284	286	277
25 to 29 years.....	295	286	175	219	255	275	273	268
30 to 34 years.....	241	217	148	185	197	210	211	207
35 to 39 years.....	179	150	99	124	130	128	124	127
40 to 44 years.....	82	64	45	56	58	56	55	56
45 to 49 years.....	21	17	14	17	(NA)	(NA)	17	17
Total fertility rate (per woman).....	6.12	5.70	3.98	4.98	4.5.38	4.5.76	5.60	5.64
	1973 Fertility- Mortality Survey ⁴		1976 Intercensal Population Survey, Phase I (own-children method) ⁴			1976 Intercensal Population Survey, Phase II (date of last birth) ⁵		
		1965-70	1964-66	1967-70	1971-75	1964-75		1975
Age-specific fertility rates (per 1,000 women)								
15 to 19 years.....		158	164	146	127	143		111
20 to 24 years.....		290	262	268	265	265		253
25 to 29 years.....		277	251	271	256	260		238
30 to 34 years.....		224	204	207	199	203		194
35 to 39 years.....		146	125	137	118	127		121
40 to 44 years.....		75	63	61	57	60		58
45 to 49 years.....		12	20	23	18	21		19
Total fertility rate (per woman).....		5.91	5.44	5.56	5.20	5.40		4.97

NA Data not available.

¹Excludes East Timor and West Irian.

²Excludes Jakarta, East Nusatenggara, Maluku, West Irian, and East Timor.

³Excludes East Timor and rural West Irian.

⁴For women ages 15 to 44 years.

⁵Excludes East Timor.

⁶Excludes East Nusatenggara except for Kabupaten Kupang, Maluku except for Katamadya Ambon, West Irian except for the urban area of Kabupaten Jayapura, and East Timor.

Source: The 1961 estimates made by Cho (1964, p.36) were derived using the Bogue-Palmore regression model, an indirect procedure for estimating fertility based on census data and other supplemental indices (see Bogue, 1964). Data from the 1961 census were used which might represent serious reporting errors. Since the high and low estimates depend directly on the assumption made on the completeness and accuracy of the indices used for estimating fertility, these estimates may reflect the assumptions made rather than the actual level of fertility.

The 1963-64 fertility estimates from the 1964-65 Socio-Economic Survey (see University of Indonesia, 1973a, p.75) are lower than all other fertility estimates made for various dates during the intercensal period. McNicoll and Mamas (1973, p.52) in discussing this survey indicated that the "overall sampling fraction of .001 means that sample error is often intrusive... Many of the data must be considered to be of dubious quality."

Total and age-specific fertility rates derived by applying the own-children method to 1971 census data are shown in Indonesia, 1976, table 1.1. Rates derived using the own-children method and data from Phase I of the 1976 Intercensal Population Survey are from Suharto and Cho, 1978. Final estimates based on the own-children method and data from Phase II of the 1976 Intercensal Population Survey were not available at the time this profile was prepared.

The 1965-70 rates are reported in University of Indonesia, 1975, table 4.4. These rates, for all Indonesia, are based on final rates for the survey area (provinces of Java, Sumatera, Sulawesi, and Bali) from the 1973 Fertility-Mortality Survey, adjusted to include estimates of fertility for the areas not covered in the survey (approximately 14 percent of the total population). The final age-specific fertility rates for all women in the survey were obtained by applying an adjusted proportion of currently married women to the survey age-specific marital fertility rates (derived by applying the pregnancy history method to data obtained in the survey).

Rates for 1975 were estimated by Hull (1978b) using date of last birth data and female population from Phase II of the 1976 Intercensal Population Survey. Hull adjusted the number of last births reported to have occurred in 1975 for non-statement, multiple births, and second to last births occurring during the year.

For further discussion of fertility estimates see the Technical Notes in the appendix.

Table A-7. Alternate Estimates of Total Fertility Rates From Selected Sources, for Provinces of Java and Bali, for Selected Periods: 1965 to 1976

Province	1971 Census (own-children method) 1967-70	1973 Fertility- Mortality Survey (pregnancy history method) 1965-70	1976 Intercensal Population Survey			
			Phase I (own-children method) 1967-70	Phase III		
				Pregnancy history method		Current pregnancy status method 1976
				1967-71	1972-73	
Jakarta.....	5.1	(NA)	4.9	5.9	5.4	4.5
West Java.....	5.9	6.6	5.8	6.0	5.8	5.3
Central Java.....	5.3	5.3	5.4	5.3	5.0	4.4
Yogyakarta.....	4.7	5.2	5.1	4.4	4.1	4.4
East Java.....	4.7	5.0	4.7	4.6	4.4	3.9
Bali.....	5.8	5.9	5.7	5.8	5.2	3.8
Java-Bali.....	5.3	5.6	5.3	5.3	5.0	4.5

NA Data not available.

Source: The 1967-70 total fertility rates (TFR's) derived by applying the own-children method to 1971 census data are reported in Indonesia, 1976b, table 1.1. The 1965-70 rates were derived using the pregnancy history method and data from the 1973 Fertility-Mortality Survey (University of Indonesia, 1975a, table 4.3). The 1965-70 total fertility rate for Yogyakarta is reported in Hull, et.al., table 14. The 1967-70 TFR's from the 1976 Intercensal Population Survey (IPS) were obtained by applying the own-children method to data from Phase I of this survey (see Suharto and Cho, 1978). Rates for 1967-71 and 1972-73 were derived by the pregnancy history method and for 1976 by the current pregnancy status method based on results from Phase III (Indonesia Fertility Survey) of the 1976 IPS (Sinquefield and Sungkono, 1978, table 1).

Table A-8. Alternate Estimates of Age-Specific Fertility Rates, for Java and Bali, for Selected Periods: 1961 to 1976

Age	1961-65	1966-70	1971-75	1976
Age-specific fertility rates (per 1,000 women)				
15 to 19 years.....	164	141	103	122
20 to 24 years.....	266	254	238	256
25 to 29 years.....	242	251	221	222
30 to 34 years.....	214	204	168	154
35 to 39 years.....	140	140	108	86
40 to 44 years.....	¹ 60	¹ 60	51	41
45 to 49 years.....	² 20	² 20	² 20	18
Total fertility rate (per woman).....	5.53	5.35	4.54	4.50

¹Based on the rate for the age group 40 to 44 years in 1971.

²Based on the rate for the age group 45 to 49 years in 1975.

Source: The fertility rates for 1961-65, 1966-70, and 1971-75 were based on pregnancy history data obtained from Phase III (Indonesia Fertility Survey) of the 1976 Intercensal Population Survey (Indonesia, 1978c, table 6.10). The fertility rates, by province, for 1976 (reference date is December 31) were derived by applying the current pregnancy status method (Sinquefield, 1977) to data from Phase III of the 1976 Intercensal Population Survey (Sinquefield and Sungkono, 1978, table 2).

Table A-9. Distribution of Births, by Order of Birth, for Java and Bali: 1975

(Figures do not add to total due to rounding)

Birth order	Percent
All orders.....	100.0
1st birth.....	26.8
2nd birth.....	19.3
3rd birth.....	14.0
4th birth.....	10.1
5th birth.....	8.4
6th birth.....	6.9
7th birth.....	4.5
8th birth.....	4.2
9th birth.....	2.3
10th birth and over.....	3.3
Median birth order.....	2.8

Note: Based on pregnancy history data obtained in Phase III of the 1976 Intercensal Population Survey. Phase III covered only the islands of Java and Bali which represented 66 percent of the total population in the 1971 census.

Source: Tabulations made at the U.S. Bureau of the Census from the computer tape for Phase III (Indonesia Fertility Survey) of the 1976 Intercensal Population Survey.

Table A-10. Estimated Life Table Values, by Sex: 1971

Age interval (x to x+n)	Annual number of deaths per 1,000 persons occurring between age x and age x + n $\left(1000 \frac{m_x}{n}\right)$	In stationary population		Average number of years of life remaining for those alive at exact age x $\left(e_x\right)$
		Number of persons living at exact age x $\left(l_x\right)$	Number of persons living between age x and age x + n $\left(nL_x\right)$	
MALE				
Under 1 year.....	150.2	100,000	90,855	41.4
1 to 4 years.....	30.4	86,351	319,653	46.9
5 to 9 years.....	6.9	76,626	376,619	48.7
10 to 14 years.....	5.1	74,022	365,420	45.3
15 to 19 years.....	5.8	72,147	355,585	41.4
20 to 24 years.....	6.7	70,088	344,683	37.6
25 to 29 years.....	7.7	67,786	332,522	33.8
30 to 34 years.....	9.1	65,223	318,868	30.0
35 to 39 years.....	11.4	62,324	303,005	26.3
40 to 44 years.....	14.6	58,878	284,032	22.7
45 to 49 years.....	19.7	54,735	260,832	19.2
50 to 54 years.....	27.6	49,598	231,968	15.9
55 to 59 years.....	39.5	43,190	196,545	12.9
60 to 64 years.....	58.8	35,429	154,436	10.2
65 to 69 years.....	87.7	26,346	108,049	7.9
70 to 74 years.....	136.8	16,874	62,868	5.9
75 to 79 years.....	214.7	8,273	26,918	4.4
80 years and over.....	257.7	2,494	9,678	3.9
FEMALE				
Under 1 year.....	132.5	100,000	92,071	44.1
1 to 4 years.....	27.1	87,801	327,732	49.2
5 to 9 years.....	7.1	78,907	387,661	50.6
10 to 14 years.....	4.9	76,158	376,213	47.3
15 to 19 years.....	5.5	74,328	366,559	43.4
20 to 24 years.....	6.4	72,296	355,785	39.6
25 to 29 years.....	7.3	70,018	343,813	35.8
30 to 34 years.....	8.4	67,507	330,613	32.0
35 to 39 years.....	10.1	64,738	315,740	28.3
40 to 44 years.....	12.6	61,558	298,429	24.6
45 to 49 years.....	16.2	57,814	277,836	21.1
50 to 54 years.....	22.4	53,321	252,463	17.6
55 to 59 years.....	32.7	47,665	220,314	14.4
60 to 64 years.....	48.2	40,461	180,551	11.5
65 to 69 years.....	71.7	31,759	134,667	9.0
70 to 74 years.....	110.5	22,107	86,618	6.9
75 to 79 years.....	167.0	12,540	44,235	5.2
80 years and over.....	247.1	5,155	20,861	4.0

Source: These life tables were calculated at the U. S. Bureau of the Census based on q_x values interpolated from the 1961-71 and 1975 life tables previously estimated (see table 5 and appendix table A-11).

Table A-11. Estimated Life Table Values, by Sex: 1975

Age interval (x to x+n)	Annual number of deaths per 1,000 persons occurring between age x and age x + n ($1000 \frac{m_x}{n_x}$)	In stationary population		Average number of years of life remaining for those alive at exact age x (e_x)
		Number of persons living at exact age x (l_x)	Number of persons living between age x and age x + n (${}_n L_x$)	
MALE				
Under 1 year.....	132.3	100,000	91,859	45.0
1 to 4 years.....	28.1	87,850	327,075	50.2
5 to 9 years.....	6.0	78,664	387,535	51.9
10 to 14 years.....	3.1	76,350	378,844	48.4
15 to 19 years.....	3.6	75,187	372,598	44.1
20 to 24 years.....	4.3	73,852	365,323	39.8
25 to 29 years.....	5.5	72,278	356,488	35.6
30 to 34 years.....	7.1	70,318	345,444	31.6
35 to 39 years.....	9.5	67,860	331,425	27.6
40 to 44 years.....	12.7	64,710	313,582	23.8
45 to 49 years.....	17.5	60,722	290,870	20.2
50 to 54 years.....	24.5	55,626	262,070	16.9
55 to 59 years.....	34.8	49,202	226,325	13.8
60 to 64 years.....	50.2	41,328	183,594	10.9
65 to 69 years.....	76.7	32,110	134,708	8.3
70 to 74 years.....	128.8	21,774	82,357	6.0
75 to 79 years.....	216.1	11,169	36,261	4.4
80 years and over.....	254.2	3,335	13,117	3.9
FEMALE				
Under 1 year.....	114.1	100,000	93,097	47.8
1 to 4 years.....	25.4	89,380	335,060	52.4
5 to 9 years.....	6.2	80,869	398,205	53.8
10 to 14 years.....	2.6	78,413	389,572	50.4
15 to 19 years.....	3.3	77,416	383,954	46.0
20 to 24 years.....	4.1	76,166	376,937	41.8
25 to 29 years.....	5.3	74,609	368,172	37.6
30 to 34 years.....	6.6	72,660	357,388	33.5
35 to 39 years.....	8.3	70,295	344,305	29.6
40 to 44 years.....	10.7	67,427	328,379	25.7
45 to 49 years.....	14.0	63,925	308,817	22.0
50 to 54 years.....	19.2	59,601	284,392	18.4
55 to 59 years.....	27.3	54,155	253,498	15.0
60 to 64 years.....	41.3	47,244	214,124	11.8
65 to 69 years.....	65.9	38,406	164,860	9.0
70 to 74 years.....	114.4	27,538	107,063	6.5
75 to 79 years.....	198.7	15,287	51,070	4.7
80 years and over.....	247.1	5,141	20,803	4.0

Source: An infant mortality rate of 114 for 1975 estimated by Hull (1978a) using data on date of last birth and number of last births still living from Phase II of the 1976 Intercensal Population Survey was accepted. Infant mortality rates, by sex, for 1975 were estimated based on the sex differentials in infant mortality implied by 1974-77 life tables for all centers in the Sample Vital Registration Project (Gardiner, 1978).

The overall level of mortality for 1975 was estimated based on the projected levels of life expectancy at birth for 1971-76 and 1976-81, for Java and Outside Java, used by the Indonesia Central Bureau of Statistics (1978f) in making their official population projections.

Since the data collected in the Sample Vital Registration Project (SVRP) was not representative of the whole country (it was conducted only in ten sub-districts), the life tables derived using data from this project (Gardiner, 1978) were not accepted for the profile. However, the age pattern of mortality implied by the SVRP data was used, together with the infant mortality rates and life expectancies at birth discussed above, to calculate life tables for 1975.

See the Technical Notes in the appendix for further discussion of mortality.

Table A-12. Estimates of Infant Mortality Rates Derived by the Brass Mortality Technique Using 1971 Census and 1976 Survey Data

Source and age of woman	Age of child (x)	Proportion dead by age x (xq_0)	Corresponding infant mortality rate ¹ (per 1,000 live births)				
			Approximate reference date	West	Norin	East	South
1971 Census²							
15 to 19 years.....	1	.153	1970-71.....	153	153	153	153
20 to 24 years.....	2	.178	1968-69.....	142	138	151	134
25 to 29 years.....	3	.198	1966-67.....	145	135	157	133
30 to 34 years.....	5	.219	1964-65.....	146	129	162	135
35 to 39 years.....	10	.241	1962-63.....	148	123	166	138
40 to 44 years.....	15	.261	1959-60.....	152	125	173	142
45 to 49 years.....	20	.284	1955-56.....	154	127	179	146
1976 Intercensal Population Survey, Phase II³							
15 to 19 years.....	1	.138	1975-76.....	138	138	138	138
20 to 24 years.....	2	.135	1973-74.....	110	106	116	107
25 to 29 years.....	3	.150	1971-72.....	112	105	121	108
30 to 34 years.....	5	.175	1969-70.....	120	106	132	115
35 to 39 years.....	10	.208	1966-67.....	129	108	145	123
40 to 44 years.....	15	.234	1963-64.....	136	113	156	131
45 to 49 years.....	20	.260	1960-61.....	140	116	164	136

¹The infant mortality rates are the $1q_0$ values from Coale-Demeny (1966) model life tables, for the region indicated, having the xq_0 value shown in the table.

²Based on children-ever-born (see average number of children ever born in table 9) and children-surviving data for reporting women from the 1971 census. Excludes data for rural West Irian and East Timor.

³Based on children-ever-born (see average number of children ever born in table 9) and children-surviving data for reporting women from Phase II of the 1976 Intercensal Population Survey. Excludes data for East Nusantara except for Kabupaten Kupang, Maluku except for Kotamadya Ambon, West Irian except for urban area of Kabupaten Jayapura, and East Timor.

Note: Application of the Brass mortality technique to data from the 1973 Fertility-Mortality Survey yielded an infant mortality rate of around 140 (per 1,000 live births) in the late 1960's with almost 210 per 1,000 children dying before their fifth birthday. These data are for the provinces of Java (excluding Jakarta), Sumatera, Sulawesi, and Bali.

Source: Indonesia, 1975b, tables 3, 25, and 26; Indonesia, 1978b, tables 1, 2, and 3; and University of Indonesia, 1975a, p.3.

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