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DOI

[10.1163/22134360-90002156](https://doi.org/10.1163/22134360-90002156)

Publication date

1977

Document Version

Final published version

Published in

Nieuwe West-Indische Gids

[Link to publication](#)

Citation for published version (APA):

Boldewijn, A. C., Lamur, H. E., & Lamur, R. A. (1977). Live Table for Suriname 1964-1970. *Nieuwe West-Indische Gids*, 52(1/2), 51-57. <https://doi.org/10.1163/22134360-90002156>

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LIFE TABLE FOR SURINAME 1964 - 1970

Between 1923 and 1962, the mortality rate of Surinam fell sharply from 24.4 to 8.8 per 1000 inhabitants. This downward trend continued after 1962, although its rate of decline was less pronounced than in the pre-1962 period: the deathrate decreased from 8.8 per 1000 in 1962 to 6.6 in 1973 (Lamur 1973: 96-98; 1974: 551). The small decline during the 1960s is related to the fact that as mortality drops, an optimum (saturation point) is reached. As a result, the rate of the continuing decline diminishes.

Table 1 indicates that the mortality decline is observable not only for Surinam.

TABLE 1

Death Rates for Guyana, Surinam and Trinidad

<i>year</i>	<i>Guyana</i>	<i>Surinam</i>	<i>Trinidad</i>
1923	28.5	24.4	20.8
1930	23.2	16.0	18.9
1940	18.6	14.4	15.7
1950	14.6	11.6	12.1
1960	9.5	8.4	7.9
1970	6.8	7.4	6.7
1971	—	7.4	6.8
1972	—	6.8	—
1973	—	6.6	—

Countries whose socio-economic structure is roughly similar to that of Surinam, that is, Guyana and Trinidad, evince a similar declining trend in their death rates. This is shown by the figures published in the *Demographic Yearbook*. Guyana's mortality decreased from 28.5 per 1000 in 1923 to 6.8 per 1000 in 1970. The figures for Trinidad were 20.8 and 6.8 (in 1971). The substantial decrease in Surinam's death rate is closely connected with the de-

clining importance of contagious and parasitic diseases as mortality causes and this resulted from measures taken to improve public health just before and after the Second World War (Lamur 1973: 100-109).

The relatively low mortality level of Surinam is demonstrated not only in the low death rates, but can also be derived from other measurements such as mortality probability and life expectancy. The purpose of this article is to discuss the changes in these indices between 1964 and 1970. The analysis is based on data collected in 1971 in Surinam.

In discussing the probability of dying and the life expectancy of Surinam's population, migration has partly been ignored because of the lack of information that would permit a complete investigation of the role of this factor. However, this does not mean that in general this variable may be omitted in studies on life tables. And since migration to Holland was an important component of the population growth of Surinam in the post-1962 period, some remarks on this demographic variable are needed to gain an insight into the mortality level. Insofar as migration is concerned in this article the discussion will be confined to two factors, namely the age structure of the population and the numerical representation of the ethnic groups.

Finally, it must be pointed out that the 50,000 Surinamers — Maroons and Amerindians — living in tribes are excluded from the investigation, since the data for these groups have not been broken down into categories and, in the available material, information on age, sex and ethnic group is often omitted.

Probability of dying

The mortality probability and the life expectancy are computed on the basis of 'a hypothetical cohort, which is taken through all the ages of life and, at each of the various ages, is subjected to the mortality conditions observed for real cohorts in the year (or group of years) studied' (Pressat 1972: 113). For Surinam the construction of the life table is derived from a cohort of 100,000 newborn.

The results of the computations show that the mortality probabilities for men exceeded those for women. But for both sexes the rates remained virtually unchanged between 1964 and 1970.

TABLE 2

Life Table for Surinam, 1964 and 1970, and for Trinidad & Tobago, 1970 (Selected Age Group).

Age X	Male				Female			
	Probability of dying within age interval	Survivors to age X	Deaths within age interval	Life expectancy at age X	Probability of dying within age interval	Survivors to age X	Deaths within age interval	Life expectancy at age X
<i>Suriname 1964</i>								
0-1	0.04390	100000	4390	61.0	0.04069	100000	4069	65.0
15-19	0.00455	92950	422	49.0	0.00460	93777	432	55.0
30-34	0.01910	90601	1730	35.0	0.01575	91326	1438	38.0
45-49	0.04785	84445	4040	22.0	0.03170	86493	2741	25.0
60-64	0.16080	69293	11142	10.0	0.11980	72362	8668	14.0
<i>Suriname 1970</i>								
0-1	0.03848	100000	3848	61.0	0.03334	100000	3334	65.0
15-19	0.00745	93665	697	48.0	0.00475	94631	449	52.0
30-34	0.01930	90438	1745	34.0	0.01310	92906	1217	36.0
45-49	0.04285	84323	3613	22.0	0.04125	88471	3649	24.0
60-64	0.16460	67398	11093	10.0	0.13000	73746	9586	13.0
<i>Trinidad & Tobago 1970</i>								
0-1	0.03764	100000	—	64.0	0.03115	100000	—	69.0
15-19	0.00454	94753	—	52.0	0.00414	95742	—	56.0
30-34	0.01351	94544	—	39.0	0.01015	94129	—	42.0
45-49	0.03724	88136	—	25.0	0.02669	90195	—	28.0
60-64	0.12953	72840	—	14.0	0.10852	78381	—	16.0

Table 2 also indicates that the risks of mortality for infants decreased during the period under review. For boys the rate declined from 43.9 to 38.4 per 1000 live births, while the equivalent figures for girls were 40.6 and 33.3. This favorable (declining) effect for infants was partly counterbalanced by a slight increase of the risks for some of the higher age categories, namely the brackets 15-19, 60-64 for men, and 45-49, 60-64 for women. In the case of the high age groups, however, the rise in the mortality rates is apparently due to the small numbers per category.

Life expectancy

The mean length of life at age X is the number of years lived after attaining that age. Table 3 indicates that life expectancy at birth was higher for women than for men. In the period under review the mean yearly discrepancy was roughly 4 points for Surinam as a whole. For the Hindustani, the Creoles and the Javanese the differences amounted to 3, 4, 5 points respectively. The life expectancy at birth remained virtually unchanged between 1964 and 1970, holding at the level of 61.0 years for males, and 65.0 for females. With the possible exception of the Javanese, this conclusion applies more or less also to the ethnic groups. This trend is consistent with the fact referred to earlier that the crude death rate did not change either (Table 1). However, this particular case of similarity between the measurements of mortality, life expectancy and crude death rate, does not necessarily hold for other periods of Surinam's demographic history.

As regards the various age groups, it is worth noting that the mean length of life for the productive age group showed a slight decline. This tends to indicate that — other things remaining equal — the average number of economic-active years available per member of the productive age category did not change dramatically between 1964 and 1970. In other words, the mean length of time for which the group might continue as members of the labour force remained unchanged.

Trinidad, which has a socio-economic structure somewhat similar to that of Surinam has a life expectancy at birth that is 3 points higher on average than Surinam's. For the year 1970 the

figures were 64.0 years for men and 68.0 for women (Central Stat. Off. 1973 : 34-35; Popul. Index 1975 : 337). The lower life expectancy at birth for Surinam as a whole is partly due to the fact the ethnic groups with a low life expectancy — Hindustani and Javanese — form a greater proportion of Surinam's total population than is the case in Trinidad and Tobago (see Table 4).

Apparently, the difference between Surinam and Trinidad concerning the numerical representation of the ethnic groups has

TABLE 3

Life expectancy in Surinam at Birth, 1964-1970

Year	<i>Creole</i>		<i>Hindustani</i>		<i>Javanese</i>		<i>Surinam</i>	
	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>	<i>M</i>	<i>F</i>
1964	65.0	68.0	60.0	63.0	60.0	62.0	61.0	65.0
1965	64.0	69.0	58.0	63.0	62.0	66.0	62.0	64.0
1966	66.0	70.0	61.0	63.0	63.0	64.0	63.0	67.0
1967	65.0	71.0	60.0	62.0	60.0	64.0	61.0	66.0
1968	65.0	71.0	60.0	62.0	64.0	67.0	62.0	67.0
1969	65.0	70.0	60.0	63.0	61.0	67.0	61.0	67.0
1970	66.0	69.0	60.0	63.0	61.0	65.0	61.0	65.0

Surinam includes small ethnic groups, but excludes tribal groups.

Values are rounded off: over 0.5 becomes 1.0.

TABLE 4

Population by Ethnic Group in Surinam and Trinidad, 1960

<i>Surinam</i>					
(includes small ethnic groups, but excludes tribal groups)					
<i>Creole</i>		<i>Hindustani / Javanese</i>		<i>Surinam</i>	
number	%	number	%	number	%
102,649	40.0	142,049	55.3	256,526	100.0
<i>Trinidad</i>					
(includes small ethnic groups. Source: Harewood 1975)					
<i>Creole</i>		<i>Indian (= Hindustani)</i>		<i>Trinidad</i>	
number	%	number	%	number	%
493,337	59.6	301,946	36.5	827,957	100.0

increased during the 1960s. This growing discrepancy is mainly caused by the ethnic-selective emigration of Surinamers to Holland. 'Creole overrepresentation is also visible in the emigration percentages: during this period the average yearly numbers were 17.9 per 1000 population for the Creoles, 4.8 per 1000 for the Hindustani, and 1.6 for the Javanese. Note, however, that the differences between the ethnic-specific emigration rates are steadily declining.' (Lamur 1973: 131-132).

Apart from the numerical positions of ethnic groups, the age-selective character of emigration may also influence the difference in life expectancy between Surinam and Trinidad. However, the migration figures for the two countries did not differ dramatically during the period under review. As regards Surinam an average of more than 70% of the net migrants were of working age (15-64 years), while for Trinidad the equivalent rate was 80% (Harewood 1975: 22-23). So it is not likely that this factor can explain the difference between the two countries.

A third possible cause of the mortality differentials between the two countries is the growing urbanization of Maroons and Amerindians. It has been pointed out earlier in this article that tribal groups were omitted. However, this proved to be impossible for members of these groups who had already settled in the capital of Surinam when the research for this paper began in 1971. Since these groups have a relatively low mean length of life, their inclusion in the sample has contributed to Surinam's low life expectancy as compared with Trinidad, where both Maroons and Amerindians are absent. The 1964 General Population Census put the number of Maroons and Amerindians in Surinam at 32,000, while the 1971 census counts 50,000 tribal people. Of this total at least 8000 members had settled in Paramaribo and surroundings.

The life table 1964-1970 in this article represents only selected age groups. The complete table will be used together with the fertility table for the same period (Lamur & Lamur in prep.) to carry out demographic projections, both for the total population and the labour force.

The authors are grateful to Rod Aya for his assistance in preparing the English version of this article.

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