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&
Adolescents**

A Case Study of Sri Lanka

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AND
ADOLESCENTS

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A CASE STUDY OF SRI LANKA



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PREFACE

The present study attempts to describe and analyse the prevailing situation in regard to the needs of children and adolescents. These needs have been examined in relation to four major areas - formal education, non-formal education, health and recreation, including sports and cultural activities. In each of the sectors the available data and information has been assembled and the main features of the existing system for the delivery of services to children and adolescents in the different fields whether health, education, non-formal education or recreation, have been delineated as clearly as possible. Thereafter, the delivery of these services has been examined in relation to the level of performance and the degree of participation in the system by the clientele for which they were designed. The analysis attempts to bring out the significant regional variations both in regard to the availability of services and their performance.

Apart from the educational services which by their very nature are specifically directed to the young population, it would be correct to state that the wide range of age specific needs of the population, particularly the young age groups have not received adequate attention. There has been no consciously planned and co-ordinated effort to provide these services so essential to the young population. The study therefore, attempts to identify feasible methods of correcting this deficiency. In the first chapter, it draws attention to the different demographic profiles in the different districts which call for appropriate strategies of investment and development. It identifies three typical age structures. In the subsequent chapters, the study attempts to define typical variants in regard to the needs of children and young people in the different sectors - health, education, non-formal education and recreation. In doing so, it has tentatively selected 5 groups of districts each of which presents a different combination of problems and needs. The approach outlined in this study makes it possible to develop a series of typical programmes which integrate the various services in a co-ordinated and mutually

complementary manner. In the course of the study, the institute did not undertake field investigations for the collection of primary data on the needs of children and adolescents. The study was based on the collection of relevant data which was available both in published documents as well as from unpublished sources. It must be emphasised that the data and information are of a very uneven quality. Every effort has been made however to check on the available data and improve their reliability. It has not been possible to adopt a single base year for the collection of the data. This would have certainly facilitated the comparative analysis and added to the reliability of the conclusions. However, the data available was not in a form which lent itself to collection in this manner. Therefore, in many sections, the information and data have been put together from different sources and different pieces of evidence. As far as possible these have been assembled to provide a consistent and coherent picture. The data which is printed in the report are the latest available during the period when the study was in progress - 1974. The study reveals large gaps in information and the necessity for relating the collection of data to well defined planning objectives. The improvement of the existing statistical system, both in order to direct the collection of statistics to meaningful uses as well as to enhance their accuracy, has to be supported by a well organised programme of research and surveys. These surveys have to be undertaken in those areas which are critical in the planning of services which cater to the young age groups. These studies should include the low rates of participation and the high drop out rate in the schools system, the links between informal, non-formal and formal education, particularly in the rural sector, the high rates of repetition the age specific rates of morbidity, the participation in immunisation programmes, the levels of nutrition in different regions and income groups, variations in fertility and family size, the patterns of upbringing of the pre-school age group, the activity pattern of the out of school population between 6 and 14 years of age. These are some areas where further research is required to give us the blocks of knowledge which are necessary to construct the total picture in regard to the young population.

CHAPTER I

THE DEMOGRAPHIC FRAME

I

Introduction

The population data pertaining to the age groups which are the subject of this study are presented in Tables I, II, III and IV appended to this chapter. Table I gives the census data for the age structure of the population for the country as a whole and shows the proportionate share of the 0-14 and 15-24 age groups over the period 1901-1971. Tables II, III and IV present the age-wise distribution of population in the 22 administrative districts of the Island and the proportionate shares of the different age groups. In Tables V, VI and VII the population data are analysed on a sectoral basis and the different profiles for the urban and rural sectors are presented. Table VII gives the annual growth rate of the population in the child, adolescent and youth groups for the period 1946-1971. Table IX contains a projection of these age groups for the years 1978 and 1988. Finally Tables X and XI gives the age, specific birth and death rates for the period 1965-1970.

The Tables appended to this chapter are designed to provide an overview of the principal demographic characteristics of the age-group under study; on the past, present and future growth of this age group, its dominant share in the total population and its regional distribution. The demographic framework which emerges helps us to assess the availability of services for this age-group both in relation

to national as well as regional requirements. It will also distinguish certain special demographic features in regard to the regional distribution of this age group, and the growth of particular segments within it, and thereby help us to identify the changes in the pattern of demand for the services required of this age group and the new pressures that will develop on these services.

II

National and sectoral data on age groups below 25 years

In demographic generalisations about Sri Lanka, the high proportion of the age group below 24 in the country's total population is often discussed as a relatively recent phenomenon following the decline in infant mortality and the high rates of population growth. The data in Table I distinctly contradict this assumption.

Although the rate of growth of the population has increased from 1.4% in the period 1901-1946 to 2.7% in the period 1946-1971, there has not been any increase in the dependency ratio in respect of the age group 0-14 years of age. The proportionate share of the population taken by the age groups 0-14, 15-24 and 25-49 have also remained relatively constant over the entire period 1901-1971. With the doubling of the population during 1946-1971 there have been corresponding increases in these age groups. The age groups 0-14 increased from 2.479 million in 1946 to 4.998 million in 1971 and the 15-24 age group from 1.322 million to 2.608 million. In fact, in 1901 the age group 0-24 years was 63.08% of the total population and higher than in 1971 when the corresponding figure was 59.83%. The popular assertion that the high rate of population growth in the last 25 years has produced a youthful population in Sri Lanka with an unusually high proportion in the age group below 25 years is not borne out by the change in the age structure of the population over the last twenty years.

On the other hand, the dramatic improvement in life expectancy has led to a marginal decline in the percentage share of this age group in the total population.¹

The proportionate share of the population in the 0-14 age group in 1901 was 42.24%. It decreased gradually to 37.23% in 1946.² It had risen again to 41.47% in 1963, an increase which reflected the high rate of population increase in the intercensal period. By 1971 it had again declined to 39.32% with the slow decrease in the birth rate. The percentage share of the 15-24 year age group which was 20.84% in 1901 stood at 18.01% in 1963. In 1971 it had risen to 20.51% as the high birth rate in the late 'forties and early 'fifties began to have their effects on this age group after 1963. The population in the 25-49 year age group was 29.47% of the total population in 1901 and the proportion increased slightly over the following census periods and thereafter dropped to 27.73% in 1971. It is only in respect of the age group 50 years and over that there has been an appreciable change in the proportionate share of the population. It increased steadily from 7.45% in 1901 to 12.43% in 1971. This increase was primarily due to the fact that the expectation of life at birth rose from 31.7 in 1920-22 to 65.8 years in 1967.

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1. The earlier census had to deal with a population at significantly lower levels of literacy and the response received to questions regarding age would have been subject to a fairly high margin of error. Some allowance should be made for this factor when comparing the age stratification in the different censuses.
 2. There was a steady stream of immigrant labour from India during the second half of the 19th and first half of the 20th century. The large majority of this immigrant population was recruited for manual labour in plantations and would have belonged to the physically active young, highly reproductive age group. At the same time this segment of the population would have contained a higher proportion of males. The age structure of the population would have been affected by this inflow. But the available information which is itself not altogether adequate needs to be further analysed before any firm conclusion could be drawn in regard to the demographic effects of this stream of immigration.

The census data from 1901-1971 indicate that the male population has had the larger share in the total population.³ In 1901 males outnumbered females by approximately 226,000 in a population of 3.566 million. In the 0-14 age group the male population was nearly 12% higher than the female. By 1971 the difference had narrowed. In a population of 12.711 million there were 341,000 more males than females and in the 0-14 age group the difference in favour of the males had reduced itself to about 3%, while in the 15-24 age group each sex had an almost equal share of the population. During the period 1901-1971 the distribution of the population between the sexes in the younger age groups has been progressively better balanced. The difference in the proportionate share of the male and female population has gradually been moving up from the younger age groups to the age group over 50 years in which the males still continue to outnumber the females by approximately 300,000 in 1971.

Tables V, VI and VII present the data on the distribution of the population in the age groups 0-14, 15-24 and 25 and over between the urban and rural sectors for the years 1946, 1963 and 1971. During the period 1946-1971 the urban sector increased its share of the young population in the 0-14 and 15-24 age groups. In 1946 the urban sector contained 12.4% of the 0-14 age group and 18.3% of the 15-24 age group. In 1971 the urban sector had increased its share to 20.8% and 23.6% respectively. There are some significant differences in the age structures of the population in the urban and rural sectors. The share of the population in the 0-14 age group is lower for the urban sector in all three censuses. Equally significant is the evidence that the difference has progressively diminished during the period and that there is an increasing degree of correspondence between the population structures in the two sectors. A comparison of the urban and rural age structures for 1946 and 1970 is given below.

3. Vide footnote 2. The imbalance between the male and female population may be attributable in part to the sex composition of the immigrant population.

Age Group	1946		1971	
	Urban Sector	Rural Sector	Urban Sector	Rural Sector
0 — 14	29.9	38.5	36.6	40.1
15 — 24	23.6	19.2	21.6	20.2
25 & over	46.4	42.3	41.8	39.7

The 0-14 age group in the urban sector recorded a considerable increase in its share of the urban population during the two inter-censal periods. The share increased from 29.9% in 1946 to 37.24% in 1963 and 36.6% in 1971. In the rural sector the trend was somewhat different in that the increase in share has been marginal; it rose from 38.5% in 1946 to 40.1% in 1971. The 15-24 age group in the urban sector dropped its share of the urban population from 23.6% in 1946 to 20% in 1963 and again increased it to 21.6% in 1971. Similarly, in the rural sector this age group dropped its share from 19.2% in 1946 to 17.5% in 1963 and increased it to 20.2% in 1971.

The rural sector continues to contain a relatively "younger" population than the population in the urban sector. An analysis of the population into districts brings this out more sharply. In 1963 in ten districts the rural sector had more than 45% of its population in the age group 0-14, and in three of these districts the share was as high as 49%. One district which deviated from the normal pattern where the urban population had a higher share in the 0-14 age group than the rural population was Amparai which had 45.1% compared to 44.3% in its rural sector.

III

The demographic profile for the Districts

Tables II, III, IV and VIII present the data on the distribution of the population below 24 years of age among the 22 administrative districts of the Island classified in age

groups 0-4, 5-9, 10-14, 15-19 and 20-24 for the years 1946, 1963 and 1971; a comparative analysis of the district-wise distribution of the age-groups 0-14 and 15-24 for the years 1946, 1963 and 1971; the percentage share of these age groups in the district populations; and the annual average growth rates of the population in these age groups in the different districts for the two intercensal periods 1946-1963 and 1963-1971.

There are significant variations in the age structures of population in the different districts. While the percentage share of the 0-14 group in the country's total population was 39.32% in 1971, there were 13 of the 22 districts with percentage shares above 40%, and of these, seven districts - Moneragala, Batticaloa, Amparai, Trincomalee, Polonnaruwa, Kurunegala and Anuradhapura, in that order - had shares exceeding 45%. The 13 districts contained 40.4% of the 0-14 age group in the country although their share in the total population was 36.1%. In the 15-24 age group the percentage shares in the different districts were more evenly balanced, but the situation is the opposite of that which prevails in the 0-14 age group. Many of the districts which have a percentage share higher than the national average in respect of the 0-14 age group have a percentage share lower than the national share for the age group 15-24. This is true of 8 of the 13 districts referred to earlier. The age pyramids for the 22 districts are given in the Appendix for the segment 0-24. For the Colombo District the five-year cohorts are fairly evenly balanced for the age group 0-14, and maintains a ratio of 7.8:7 for the 0-4 year cohort compared to the 20-24 year cohort. Districts such as Moneragala, Anuradhapura, Amparai, have an age structure more pyramidal in shape with the population rapidly diminishing as it moves up the age structure with each 5-year cohort. For example, the ratio of the 5-year cohort 0-4 to the 10-14 year cohort in Anuradhapura is 6.1 : 5.5, and to the 20-24 year cohort is 3.5 : 1.8. For Amparai the figures are 4.5 : 3.7 and 4.5 : 2.4.

The age structures in the different districts indicate the pressures that will develop on the various services for the different age groups in different parts of the country. In many of the districts where the 5-year cohorts are more or less evenly balanced the demand for primary education, for example, is not likely to exceed the capacities that are already installed in these districts. The situation in regard to secondary education in these districts would be somewhat different as the expansion at this stage would be influenced by factors other than the growth of the age group such as improvements in the drop-out rates and participation rates. On the whole, districts with a relatively balanced demographic structure will not have to contend with a rapidly growing demand for existing services. For example, in Colombo, Kandy and Kalutara the three 5-year cohorts from 0-14 are approximately of the same numerical size, and existing educational facilities up to about the 8th grade should be more or less adequate for at least the next five years at prevailing rates of participation, provided of course the facilities available at present are themselves adequate to meet the current demand. In these cases apart from qualitative improvements, the quantitative expansion need only look after the marginal increase in demand such as those arising out of improvements in the rate of participation or in the reduction of the dropout.

In the districts with populations which have age structures of a pronounced pyramidal shape and 5-year cohorts which progressively diminish in number, the situation is likely to be different. Available facilities cater at present to cohorts which are much smaller in size than those which will soon enter the relevant age groups. In Polonnaruwa the 0-4 cohort is at least 30% higher than the 10-14; the corresponding figures for Moneragala, Anuradhapura and Amparai are 22%, 21% and 11%. In these districts existing services of various types for the young in different age groups will require rapid expansion to cater to the increasing demand as cohorts progressively larger in size move into these age groups. The pressure will be felt at all stages but will mount steadily over the next ten years for services catering to the 15-19 year cohorts.

In the case of the 15-19 cohort, existing capacities in all districts will be inadequate to meet the demand of this age group even at the current level of per capita services. For the country as a whole the 5-year cohort of 1.62 million in the 10-14 year age group in 1971 is already moving into the 15-19 year age group which numbered only 1.36 million in 1971. The problem, however, will be felt most in districts in which the 0-14 cohorts have percentage shares in the population which are significantly higher than the cohorts preceding them.

At the same time this analysis of the age structures in the districts should not obscure the fact that the districts which are already thickly populated in the South, South-West and Central parts of the country contain the major share of the population in the young age groups. Therefore, in terms of absolute numbers small percentage increases of the young age groups in these districts will require substantial outlays in the provision of new services. Again, the age structures of the population in the different districts should not be regarded as isolated entities which are self-contained within each district. The movement of population within districts resulting in the net inflow of migration into some districts and the net outflow into others will modify these age structures. The past trends indicate that the net inflow of migrants was to those districts in which the youngest age groups had the larger share of the district population and where consequently the age structure was distinctly pyramidal in shape. As would be pointed out in the concluding section of this chapter, the plans and programmes for future agricultural settlements tend to confirm the assumption that past trends will continue and that there would be a net inflow of migrants to those very districts where unbalanced demographic structures are likely to cause pressures on existing services.

The annual rates of growth for the 0-14 and 15-24 groups during the two intercensal periods 1946-1963 and 1963-1971 bear out the analysis given in the preceding sections. For the 0-14 age group the national rate of growth dropped from 3.4% in the first period to 1.8% the second,

reflecting a drop in the overall growth rate (from 2.78 to 2.32) as well as the relative stability in the mortality rate in this age group after the dramatic decline in the first intercensal period. For the 15-24 age group the rate increased from 2.2 to 3.6 in the two intercensal periods; the steep increase in the rate of population growth during the first intercensal period had its impact on the 15-24 age group during the second intercensal period for all districts. The rates of growth of the 0-14 age groups in the period 1963-71 were higher than the national rate in 10 districts and these are also the districts with populations in which the 0-14 age group had significantly higher percentage shares than the older age groups. The rate of growth of the 0-14 age groups were highest in Trincomalee, Polonnaruwa, Moneragala - 4.7, 4.8 and 4.6 respectively. The next highest rates were in Amparai, Vavuniya and Anuradhapura - 3.8, 3.6 and 3.5 respectively. A similar rapid upsurge in the population in the 15-24 age group can be observed in these same districts for the period 1963-71. Rates of growth of this age group during this period ranged from 8.0% for Moneragala to 7.8% in Anuradhapura, 6.4% in Polonnaruwa and 4.0% in Amparai. The rates of growth for the total population in these districts in the period 1963-71 ranged from 4.7 for Moneragala to 4.18 for Anuradhapura and 3.43 for Amparai. The high rates of total population growth as well as the growth of the young age group are not only the result of high birth rates and high fertility rates. Internal migration has also contributed to the rapid increase of the total population in these districts as well as that of the young age groups and their proportionate share in the population.

IV

Demographic change and services for the young population

The main conclusions of the demographical analysis that has been made could now be summarised.

The 0-24 age group (forms) a (large segment) of the total population. Regarded in purely quantitative terms this is not a recent phenomenon nor is it linked with a high rate of natural increase in the population. The young age group 0-24 had an equally high proportionate share of the population as far back as 1901. But a simple delineation of the age structure of the populations and a straight quantitative comparison across time may neglect profound qualitative changes that have occurred during this period which will affect the demographic criteria we use. First, life expectancy more than doubled in the last fifty years. On current measurements, the Sri Lanka population in the early 1920s with an average life expectancy of 31.7 years would necessarily be a "young population"; that is a population with a high proportion in the age group below 24 years. Our present concepts of "youth" and "age" would not be valid in relation to a population with less than half the present life expectancy. The distribution of responsibility between different age groups, the integration of the young in economic activity, the time span of "childhood" and adolescence may all be influenced in various ways by the average life span in a society. The fundamental societal changes that have occurred with the introduction of formal education and the extension of both childhood and the period of dependency that has resulted, is also related to the increase in life expectancy. The improvement in health, the decline in mortality and the increase in the life span created conditions which were conducive to the extension of "childhood" and the withdrawal of the young from socio-economic activity into institutional education. Therefore, the "young" populations of today with relatively high life expectancy are organically different from the "young" populations of the past with their low life expectancy. In the latter, the period of "dependency" was shorter, the participation in economic life began earlier. "childhood" and "adolescence" imperceptibly merged with adulthood through work and other social roles at a much earlier age.

According to the demographic data available, the rural sector in Sri Lanka has a "younger" population than the urban sector in that the share of the population in the 0-24 age group is larger in the rural than the urban sector. As a result the share of the population in the 0-19 age group is larger in the rural than in the urban sector. At the same time, the rural share of the population in the 0-24 age group is larger than the rural share of the total population. This situation is likely to continue for some time in the future. It is the product of a low rate of urbanisation on the one hand and the absence of a major rural to urban drift on the other. Internal migration is likely to continue on a pattern similar to the past. The major new settlements under the Mahaweli Scheme, the Walawe Scheme, and the Southern development schemes will result in transfer of population from the thickly populated South, South-West and Centre of Sri Lanka to the sparsely populated Dry Zone. The forecast of the age distribution in the District populations make allowance for this factor. These programmes of planned migration will further help to contain the rural-to-urban movement of population and to some extent control the "over-urbanisation" which is assuming serious proportions in most developing countries. While the allocation of resources for the services to young age groups must take account of this situation, a rural-urban balance of this kind will produce its own pattern of needs among the young age groups and require its own pattern of services. This will have particular relevance for education and educational curricula, for extra-curricular activity and recreation, for vocational training, planning of civic centres in the rural sector and a host of other activities.

One other demographic development of somewhat lesser importance that should nevertheless be noted is the manner in which the imbalance between the male and female population in the young age groups was progressively reduced during the period 1945-1971. For example, in 1946 the 15-24 age group had 10% more males than females, whereas in 1971 the shares of the male and female population were

equal. in the period ahead the two sexes would have more or less equal shares in the 0-24 age group. This would have some bearing on health facilities, education, patterns of relationship between sexes, the age of marriage, and participation in the workforce and these aspects would have to be borne in mind both in formulation of future policies for this group, and in future demographic research relating to these age groups. For instance, it would be useful to inquire how the emerging demographic pattern affects the prospects for early marriage, the retention of the female population in the educational system and their motivation to seek employment.

National plans and policies would need to make timely responses to the different demographic situations in the different districts as indicated in the analysis of the age structures of the district populations.

As pointed out earlier, the demand for services specific to the age group 15-24 will rise steadily over the next few years. The later stages of secondary education, tertiary education, vocational and pre-employment training and services, recreation, sports and youth activity in general, will feel the pressure of the demand. Districts which contain populations starting on a broad base of the 0-4 age group and narrowing sharply in the succeeding age groups are likely to face the problems in a more acute form. In their case the pressure will be felt on the whole continuum of services from the pre-school stage through primary and secondary education to later stages. Districts with relatively balanced age structures may find it possible to make adjustments with available capacities; even in the case of districts where the populations are large in size this may be possible if the percentage increase in each group is marginal. It would be therefore necessary to match existing capacities with future demand arising from the demographic changes, identify space capacities and wherever possible optimise on the allocation and use of resources. These general observations could lead to more specific conclusions which have a bearing on techniques of planning as well as on priorities in regard to the needs of children and adolescents.

In the demographic analysis that has been attempted in this chapter it is possible to distinguish broadly several types of age structures among the different districts as already indicated in Section III.

There are the age structures in districts such as Colombo, Kalutara, Galle, Matara, Jaffna, Kurunegala and Hambantota where the three age cohorts 0-4, 5-9, 10-14 are almost equal in size with smaller cohorts in the two older age groups 15-24.

There are the age structures in districts such as Kandy, Badulla, Matale, Nuwara Eliya, Trincomalee, Batticaloa, Puttalam, Mannar where the age cohorts 0-4, 5-9, are almost equal in size, with the structure tapering progressively as it proceeds to the higher age cohorts 10-14 and 15-19.

There are the other districts with a structure more recognizably pyramidal in shape with each succeeding age cohort larger than the preceding one - Anuradhapura, Polonnaruwa, Amparai, Moneragala, Vavuniya, Hambantota.

These demographic characteristics are of critical importance in planning for the young age groups in the country. Each of the three groups that have been broadly identified here call for different strategies, a different mix of programmes, and different patterns of investment. In the **first** group of districts the natural increases in the age cohorts upto 15 years will be negligible and pressures on the existing services on account of this factor will be correspondingly marginal in character. For example, facilities in primary and secondary education would be adequate to cater to these age groups at prevailing standards and levels of performance. The situation in regard to the 0-4 age group would depend on the trends in the birth rate and the mortality rates for this age group. What the programmes for future outlays would have to take into account are the qualitative changes and the new patterns of demand that may arise in respect of the 0-14 age group as a result of higher rates of participation, inflow of population from other districts, improvement in the quality of services and so on. The critical

segment in this group of districts as in all other districts will be the **15-24 age cohorts** which will continue to receive increasing numbers. The strengthening and improvement of services for this age group particularly during the next five years must receive very high priority. In the **second** group the pressures would be high at the **secondary** level—the 10-14 age group, while in the **third** group the demographic pressure will operate **at all levels**.

The demographic profile highlights the importance of sound demographic projections on a district-wise breakdown for planning and programming for the needs of the different age groups. This becomes indispensable for the formulation of sound integrated plans for the fast growing segments of the population, the children and adolescents. While current national and sectoral plans take account of aggregate population projections and the demands that are generated for the total population, a systematic analysis of demands and needs related to the age structure of the population has received little attention. The disaggregation of age structures to the district level has been almost entirely neglected, and has not been attempted in the formulation of sector plans or plans for districts. The demographic analysis and projections provided in this report are based on available data and the methodology that has been adopted has been dictated by the limitations in such data and is therefore relatively crude. They need to be further refined before they could be used as reliable tools in regional planning.

This could best be done by selecting one district in each of the three groups and preparing model demographic projections which would clearly reveal the special demographic characteristics in each district and identify the further changes in the age structures. These could then be examined in relation to the existing services catering to the young age groups. The imbalances between available services and needs as they develop in relation to the demographic changes could be analysed. The predictive capability of such projections would depend a great deal on the accuracy with which basic data have been assembled and the reliability of the

techniques adopted for making the projections. It should be noted that these projections will be limited to the forecast of quantitative changes. In an estimate of age specific needs such as educational facilities, it will be necessary to make appropriate adjustments for a whole range of other factors including qualitative changes that will affect demand. Demographic projections of this type will provide the quantitative frame for regional planning as a whole, but they become indispensable in the formulation of age-specific plans related to the needs of children and adolescents.

Conclusions

- The 0-24 age group constitutes a high proportion of the total population. Regarded in purely quantitative terms, this is not a recent phenomenon. The young age group 0-24 had an equally high proportion of the young population as far back as 1901. The profound qualitative changes such as the dramatic increase in life expectancy, the introduction of formal education and the withdrawal of the young from socio-economic activity into institutional education for a longer period than in the past have produced conditions in which the "young" populations of today organically differ from the "young" population of the past.
- According to the demographic data available, the share of the population in the 0-19 age group, is larger in the rural than in the urban sector. The programmes of planned migration will contribute to a continuance of this situation and will help to contain the rural-to-urban movement of population.
- One other demographic development of somewhat lesser importance is the manner in which the imbalance between the male and female population in the young age groups has been progressively reduced during the period 1946-1971.
- It is possible to distinguish, broadly, 3 types of age structures among the different districts. First, the age structures in districts such as Colombo, Kalutara, Matara,

Kurunegala, Jaffna, Galle and Hambantota where the 3 five-year age cohorts from 0-14 are almost equal in size with somewhat larger cohorts in the two older age groups 15-24. Next, there are the age structures for districts such as Kandy, Badulla, Nuwara Eliya, Trincomalee, Batticaloa, Puttalam and Mannar where the two 5-year age cohorts from 0-9 are almost equal in size with the structure tapering progressively as it reaches the higher age groups 10-14, 15-19. Finally, there are the other districts which have a structure more distinctly pyramidal in shape, with each cohort larger than the preceding one.

- In the first group of districts, pressures on the existing services on account of natural increase in each cohort up to 15 years will be negligible. For example, existing facilities in primary and secondary education will be adequate to cater to these groups at prevailing standards and levels of participation. The critical segment in this group of districts as in all other districts will be the 15-19 age cohort. In the second group of districts, the pressures will be high at the secondary level for the 10-14 age group as well as the 15-19 age group. In the third group of districts, the demographic pressures will operate at all levels.
- The current national and sectoral plans do not give adequate attention to the systematic analysis of demands and needs related to the age structures of the population. The disaggregation of age structures at the district level has been almost neglected.
- Sound demographic projections on a district-wise breakdown is essential for the formulation of age specific plans which take account of the needs of children and adolescents. One district from each of the 3 groups of districts which have been classified above according to their demographic structures could be selected for the preparation of model demographic projections. These projections could provide the quantitative frame for

identifying prevailing imbalances between available services and needs in respect of the young population and formulating the future plans for this age group, in relation to typical demographic situations which are broadly representative of the three groups of Districts.

CHAPTER II

FORMAL EDUCATION

Section I

Basic information on the educational system

The current situation in regard to the educational needs of the younger generation in Sri Lanka has to be placed in the historical context of educational development in the country. Universal free education was first introduced in Sri Lanka in 1945; it covered all stages of education from the primary to the tertiary levels. The national languages became the media of instruction for the primary and secondary stages and subsequently for the tertiary level as well. These measures helped to break down the dualism which had earlier prevailed in the educational system. In that system, one educational sector comprising the English-medium schools provided all three levels of education to a well-to-do urban minority, and another consisting of Sinhala and Tamil media schools provided education in the primary and secondary level in the rural sector. Substantial government outlays from the late nineteen forties onwards resulted in a rapid expansion of schooling facilities. This policy ensured that education was freely available to a progressively increasing share of the population of school-going age in all parts of the country. The share of educational expenditures in the government current budget remained at a consistently high level during the period 1950 to 1970 and ranged between 16% to 18%. Expressed as a share of Gross Domestic product, expenditure on formal education was in the region of 4%. Adult literacy improved from an estimated 57.8% in 1946 to 85% in 1970. 60.0% of the population between the ages 5-19 were in attendance at educational institutions in 1971.

The rates of participation at the primary level in the age group 5-9 were in the region of 84.5%; in the age group 10-14 it was approximately 71.2%. However, in the age group 15-19 it dropped sharply to 16.3%.

The description and analysis in this chapter generally refer to the situation which prevailed in the period immediately preceding the introduction of the major curricular reforms in 1972. At the outset, it would be useful to present a very brief account of the salient features of the system as this would provide the necessary background to the analysis which follows. The segment of the educational system in which all children of school going age were eligible to participate consisted of a 10 year span from Grade 1 to Grade 10 with the age of entry at five years; Grades 1-5 being regarded as the primary level and Grades 6-10 as the junior secondary level. In 1972, this open access span was reduced to 9 years and the age of entry raised to 6 years. This period of schooling terminates with a qualifying examination. Following on the open access span (there is a further two year segment of schooling in Grades 11 and 12 (or Grades 10 and 11 in the new system). Admission to this two year segment is selective and based on the minimum standard required at the terminal examination at the junior secondary level. This two year segment which can be described as the senior secondary level leads to a higher qualifying examination and the performance at this examination provides the basis of selection to the University and other educational institutions at the tertiary level.

Alongside the school system of formal education, programmes on vocational and technical education are provided in junior and senior technical institutions and practical farm schools. Programmes of higher education beyond Grade 12 are provided in the University of Sri Lanka, the Polytechnical institutes, Teacher Training Colleges, the Institute of Agriculture and the Institute of Art and Design.

With the introduction of free education, the State progressively assumed the responsibility for providing education at all levels. Today, the preponderant majority of the educational

institutions are managed and financed by the State. Education in the open access span is provided in approximately 8500 schools throughout the country. Of this, approximately 1500 schools provide education in the two year segment at the senior secondary level as well. The number of private schools providing educational facilities at the primary and secondary levels is approximately 90. Apart from these private schools, there are a considerable number of private institutions which offer courses and training programmes for students who have left the school system and who are either repeating the examinations at the Ordinary and Advanced levels, or are pursuing studies in selected fields such as book-keeping, accountancy, management and so on. At the lower end of the education span, there are several private sector institutions which cater to the needs of pre-school children. These are mainly located in the urban sector.

The educational programmes in the open access span are primarily intended to provide a broadbased general education. Prior to 1972, the curriculum from Grade 8 onwards was divided into two distinct streams, one providing an education in arts, humanities and social studies and the other in the sciences. The curricular reforms in 1972 introduced a comprehensive curriculum up to Grade 9, which removed this division and provided a common programme for pupils up to Grade 9. The new system has also introduced programmes of pre-vocational studies which are related to the socio-economic environment of the schools as well as to the job opportunities available in the labour market. These programmes have been included in the curricula in Grades 6 to 9.

The technical and vocational programmes provide courses for the training of craftsmen and middle-grade technicians. The duration of the craft level courses is generally a full time period of 2 years or a part-time period of 3 years. These courses could be regarded as a vocational equivalent of the junior secondary stream. The craftsmen level courses are provided in 12 junior and senior technical institutes. The technician level courses would generally correspond to the senior secondary level and are approximately of two years duration full-time

followed by one year of practical work in industries. Part-time and evening courses generally extend over three years. Admission is either by interview or on the basis of a common entrance examination conducted by the Commissioner of Examinations. The Ceylon Technical College and the Hardy Senior Technical Institute provide courses at this level. Further programmes at the post-secondary levels are provided at the Ceylon Technical College and at the Ceylon College of Technology. These include diploma courses in technology and diploma courses in valuation and in accountancy extending up to four years. Admissions to these programmes are made on the results of the G. C. E. Advanced Level examination or on the basis of a competitive entrance examination. These programmes may be regarded as third level programmes in vocational training. The total enrolment in all these institutes was approximately 7,800 in 1970.

Programmes of higher education at the tertiary level are organised in the University of Sri Lanka (the four independent universities and the Ceylon College of Technology were integrated to form one university in 1971). The University of Sri Lanka consists of five campuses, namely, (1) Colombo, (2) Peradeniya in Kandy District, (3) Vidyodaya in Colombo District, (4) Vidyalandara in Colombo District, (5) Katubedda in Colombo District. Admissions to the University are based on the performance of students at the G. C. E. (Advanced Level) examination which is conducted annually by the Commissioner of Examinations. This examination has been subsequently designated the National Certificate of Higher Education. In effect, every student had to have at least 12 years of general education before he or she entered the university. With the recent reforms, the time span has been reduced to a minimum of 11 years.

The Ministry of Education has established six Polytechnical Institutions. Students who fail to enter the university may gain admission to these institutes provided they have a minimum of three Advanced Level passes. These Institutes are essentially vocational training institutes, somewhat similar to the technical schools, but the programmes are more diversified.

Although there was a rapid expansion of educational facilities and increasing participation in the school system, the formal education as it was imparted during the period 1944-1971 contained deficiencies of a fundamental nature which became increasingly apparent with the passage of time. The problems surfaced as the products of the system entered the workforce. Perhaps no other sector has received as much critical attention in Sri Lanka as the educational sector. The appraisal and analysis provided in several recent reports - for example the I. B. R. D. survey on education, report of the ILO Mission on employment, the Five-Year Plan-highlight the basic shortcomings. While a critical evaluation of the educational system does not fall within the scope of the present study, a brief comment on those elements in the educational system which have become dysfunctional would be relevant for an understanding of the educational needs of the younger generation. To begin with, although the participation rate has been relatively high by average Asian standards, out of 100 pupils who enrolled in Grade 1, an average of about 52 reached Grade 5 and about 33 reached Grade 10. (Vide Table XI). The pattern of education, however and the curricula and structure of knowledge were designed to prepare students for the academic tests at the terminal points of the system - that is at Grade 10 and above. In such a scheme those who left in the earlier stages were "dropouts" and had failed to qualify in terms of the demands set up by the system. The system, structured as it was, could at best provide these drop-outs with an incomplete body of skills and knowledge which were merely preparatory steps in the academic ladder. In the prevailing situation, nearly two-thirds of the school-going population fell into this category. A school system which neglected to provide a 'terminal education' to the majority of school-leavers was obviously wasteful and ill adapted to its socio-economic environment.

On the other hand, even those who had reached the terminal points in the system found it extremely difficult to obtain productive employment. Analysis of data on employment indicates that, of the 796,000 who were estimated to be unemployed at the 1971 census, approximately 250,000

had academic qualifications at the 'O' level or above. School leavers with educational attainments at the secondary level and above generally sought employment in the modern sector. The education system itself had helped to form job expectations and structure the demand for employment in this direction. The modern sector, however, could not expand fast enough and generate sufficient employment to keep pace with the demand. The educational system, therefore, failed to match the occupational needs of the economy at its present stage of development; as a result, it produced large numbers of disoriented job seekers who on the one hand could not find the employment they expected nor on the other seize the work opportunities in agriculture and the other sectors that the economy was capable of offering.

Finally, even within the academic educational system that prevailed, its heavy bias towards humanistic and non-technical studies had aggravated the problems. The enrolment in the Arts stream in Grades 9-12 was approximately 75%, science studies accounted for the balance 25%. The output from the non-science stream was far in excess of the demand. In the science stream itself, although signs of over-supply and incipient problems of unemployment were manifesting themselves in regard to certain professional categories such as engineers, shortages of specific technical and scientific skills persisted - e.g. technologists in different industries, chemical engineers, agricultural scientists and so on. The academic content of the system itself had, therefore, to undergo much greater diversification if it were to cater successfully to the growing manpower needs of the economy.

The Government has recently introduced a series of educational reforms to correct some of these imbalances in the system. Among the objectives the Government has set for its programme of educational development, it has assigned high priority to.

- (i) improving the present average rates of participation of the age group 5-9 in primary education which were 88.4 for boys and 88.5 for girls in 1971 to about 90% by 1980.;

- (ii) replacing the curriculum which is divided into science and non-science streams at the secondary level with a comprehensive curriculum up to Grade 9 in which students will select subjects from a common programme of studies. The new programme will avoid the early separation of arts and science studies into two distinct streams.
- (iii) enriching the curricula for primary education in Grades 1 to 5 by including environmental activities and creative studies in addition to language and mathematics;
- (iv) changing the content of junior secondary education programmes 6-9 to include pre-vocational studies related to occupations and economic activities in the socio-economic environment in which the school is located;
- (v) introducing curricular changes at the tertiary level so as to make these courses more job-oriented.

These reforms are now in the process of implementation. The changes which can be of fundamental significance are those which affect the primary and secondary stages. The reforms at these levels seek to establish links between the school curricula and the immediate social and economic environment of the school so as to promote the formation of aptitudes and the development of skills relevant to that environment and its modernisation. Although the pronouncements of the Government do not explicitly state it, there is an attempt to introduce some element of terminal education at various points in the system, so that school-leavers who opt out of the system in the earlier stages will leave equipped with a coherent body of knowledge and an assortment of relevant skills. It is premature at this stage to comment on the success of these innovations.

The comprehensive curriculum which has been introduced at the secondary level is expected to provide a common programme of education which does away with the present

division of pupils at the junior secondary level into the science and arts streams. However, the abolition of this distinction by itself will not result in the removal of the imbalances that have developed within the present system in which a minority of schools have enjoyed better educational facilities and achieved higher standards in the science stream. The present pattern of performance in the science stream can continue and will be reflected in the participation in the arts and science streams at the senior secondary level unless the shortcomings in the present distribution of facilities and teaching skills are corrected. The development of a sound system of terminal education and the successful implementation of the curricular innovations will call for a sustained and systematic programme. In such a programme, international assistance could play a significant role. The problems of such a programme become exceedingly complex as it has to be adapted imaginatively to the needs of different regions and districts. This aspect could be further elaborated in the analysis and discussion of the varying educational situations in the different districts, as prescribed in the sections that follow.

II

The availability of educational services - A district-wise analysis

The data relating to the availability of educational services are analysed and presented in Tables 1-6. The tables set out the prevailing conditions in each of the 22 districts. They include the distribution of schools in relation to school-going population and area, classroom accommodation, the teacher-pupil ratio, expenditures on library and sports facilities, and the facilities for diversification of curricula.

Tables 1, 2 and 3 show how the stock of schools are distributed among the different districts. The number of schools per thousand of the population of school-going age is, however, a relatively crude indication of the availability of services. When districts are ranked on this criteria it would be observed that Colombo comes last for junior schools and

eighth for senior schools. The physical number by itself does not give any indication of the size of the schools, and the number of pupils served. The population densities in the Colombo District and other thickly populated districts such as Kalutara, Kandy, Galle, make it possible to provide a smaller number of larger schools. It would be observed that all these districts rank low on the criterion relating to the number of schools per 1000 of the age group 5-19. On the other hand, districts which are educationally at a lower level are at the top according to this criterion - Vavuniya, Mannar, Amparai, Anuradhapura. Therefore, these data need to be examined in combination with other indicators relating to the number of schools within a 2 mile radius and classroom accomodation which are more reliable measurements in regard to access to school facilities and their availability,

The mix of junior and senior schools and their different shares in the system provide us with a general indicator in regard to the structure of education in each district and the balance between the different levels of primary, secondary and pre-university education. On this criterion the major urban centres Colombo, Kalutara, Kandy, Galle, Nuwara-Eliya, Jaffna, Kegalle, which are commonly regarded as enjoying superior educational facilities rank in the first half of the list. Anuradhapura, Puttalam, Vavuniya, Mannar, Batticaloa, Amparai, Kurunegala are in the bottom half. Vavuniya, it will be seen, ranks high when the availability of both junior schools as well as senior schools are measured in terms of the population of school-going age. The low ratio of senior to junior schools is primarily due to the fact that the number of junior schools is larger than average. Vavuniya, however, may illustrate another problem. In a district where the population is thinly distributed or where the human settlements are scattered, the number of schools could be an important factor. In Vavuniya it is possible that while educational facilities at the junior level are within easy reach, access to educational opportunities at the higher levels are much more difficult. These aspects will be examined further in a later section of the chapter. Another district where

the criteria used here do not seem to be significantly related to the availability of educational facilities is the Badulla District. Here the estate sector distorts the picture as the schooling facilities in this sector have been excluded in calculating the distribution and relative shares of the two categories of schools. If these are included, the position would be considerably altered. The Polonnaruwa District is somewhat exceptional; although predominantly rural it has a relatively well balanced structure of educational facilities in which the proportion of senior schools approximates to that of districts which are educationally better served. We could later examine whether these features bear any relation to the level of participation in the school system and the rates of dropout. It is, however, necessary to exercise extreme caution when deriving casual relationships between availability of services and level of participation. The criteria that have been used here cannot by themselves throw much light on the factors which have contributed to better rates of participation in the upper segment of the education system. The expansion of senior school facilities could be as much a cause as an effect of such participation. It could both be a response to the demand for higher education in these districts as well as the stimulus for the increase in demand. For the causative factors one would have to reach further and examine the socio-economic conditions, the patterns of income distribution and social stratification which influence both the capacity and motivation for participation in the educational system.

The classroom space provided per pupil in Sri Lanka is an average of 11.29 sq. ft. The Ministry of Education on the advice of the UNESCO Asian Regional Institute of School Building Research, considers that a classroom space of 10 sq. ft. per pupil is a reasonable norm for schools in Sri Lanka.

Tabel III gives the districtwise provision of classroom space for pupils in 1972. It will be noted that in 17 out of 22 districts the space in permanent buildings per child is over 10 sq. ft. If semi-permanent and temporary buildings are included, 19 districts are above the norm. The largest floor area allocation

per pupil is in Vavuniya District where the average space per child is 15.59 sq. ft. inclusive of space in semi-permanent and temporary buildings. Next comes Jaffna District where the classroom space per pupil is 14.49 sq. ft. Mannar District is third with a classroom space per pupil of 13.81 sq. ft. Galle District comes fourth with a classroom space of 12.31 sq. ft. per pupil. In Colombo District, Kalutara District, Kandy District, Matale District, Matara District, Hambantota District, Batticaloa District, Amparai District, Polonnaruwa District, Badulla District, and Kegalle District, floor space per pupil is over 10 sq. ft. In three districts the floor space per child is less than 10 sq. ft., namely, Nuwara Eliya District, Moneragala District, and Ratnapura District, where the space per pupil varies between 9 and 10 sq. ft. It will thus be noted that the regional discrepancies in regard to classroom space per child are not very great. The average floor space per child in Moneragala District of 9.51 sq. ft. is very near the national average. However, the Ministry of Education is engaged in a programme of school building construction which is aimed at the removal of regional disparities. It will also be observed in Table IV that over 93 per cent of all classrooms are housed in permanent buildings and only 7 per cent are housed in semi-permanent and temporary buildings. Kurunegala District and Puttalam District have a high share of the semi-permanent and temporary school buildings followed by Anuradhapura District and Nuwara Eliya District. In the other districts the share of semi-permanent and temporary classrooms are very near the national average of 0.38 sq. ft. of semi-permanent classroom space and 0.41 sq. ft. of temporary classroom space per student.

The data on classroom accommodation that have been examined seem to indicate that by and large the provision of school facilities has been keeping pace with the current demand and that there are no signs of severe congestion. In terms of the accepted norm, signs of incipient congestion are found only in three districts. It should be noted that all students seeking admission are found places in the school system. Within the overall situation, however, the

demand for entry into particular schools with an acknowledged reputation for the superior quality of services often exceeds the capacity of these schools. Again, it has to be borne in mind that classroom accommodation per pupil is no indication of the facilities available in terms of the potential student population. Table VI sets out the class-room accommodation required per district on the assumption that participation rates reach 60% which is the approximate level in Districts such as Colombo, Galle, Kalutara. The legal provision regarding compulsory attendance at school has not been systematically enforced nor can it be said that there has been systematic programmes to induce higher participation in Districts which are at low levels. In a situation where such efforts are made, Districts which will require substantial expansion of schooling facilities are Moneragala, Nuwara Eliya, Ratnapura and Badulla.

The Ministry of Education observes and enforces the rule that there should be a **school within "reasonable" distance** from a child's home. The "reasonable" distance operative at present is two miles or less which means that there should be a school or schools for every 12.57 sq. miles. There are on an average 4.3 schools in the Island for every 12.57 sq. miles of land area, i.e. 8,551 Government schools, 85 private schools and 77 estate schools in a land area of 24,968 square miles. Table IV gives the number of schools in each district and the average number of schools located per 12.57 sq. miles of land area in each district. Colombo District has 16.8 schools per unit of 12.57 sq. miles and, therefore, enjoys the largest concentration of schools. There are 1,061 schools in 792 square miles. Next in point of concentration comes Kegalle District where there are 558 schools in 643 square miles of land area, i.e. 10.9 schools per 12.57 square miles. Next comes Matale District with 10.2 schools, Galle District with 10.1 schools, Kalutara District with 8.9 schools and Jaffna District with 7.3 schools. At the other extreme, Moneragala District has only 0.7 schools for every 12.57 square miles. Polonnaruwa District has only 1.1 schools for every 12.57 square miles. Mannar District has 1.4 and Anuradhapura District has 2.2.

In the other districts the numbers vary between 3 and 7 schools for every 12.57 square miles. The wide regional disparities are due to the physical and demographic features of the various districts such as the uneven spread of population. It should be remembered that about two-thirds of the land area of the Island are not inhabited. Even so, the number of schools within a two-mile radius are not consistently correlated to population densities, as would be seen from the data in Table IV. For example, Vavuniya and Mannar with a density of 65 and 80 respectively have 1.4 and 1.6 schools per 2 mile radius, whereas Moneragala with a density of 87 and Polonnaruwa with a density of 113 have 0.7 and 1.1 schools respectively. Of course, the scatter of settlements and the spread of population has to be known in greater detail before we use this average measurement as an indicator of access to school facilities. But the indicator focuses attention on districts where the physical location of schools in relation to the layout of settlements may be creating problems of access - these are Anuradhapura, Polonnaruwa, Amparai, Trincomalee, Mannar, Vavuniya and Moneragala. Even on the assumption that only one-third of the total area is inhabited, Mannar, Polonnaruwa and Moneragala are still likely to be problem districts.

The all-Island **pupil-teacher ratio** in the primary and secondary levels of general education was 29.3% in 1971; that is, there were 90,625 teachers for 2,654,427 pupils. Table XVIII gives pupil-teacher ratios in the following categories - (1) Pupils in G. C. E. (Ordinary Level) and (Advanced Level) as a ratio of total number of graduate teachers, (2) pupils in all grades as a ratio of total number of teachers, (3) ratios of G. C. E. 'O' Level and 'A' Level Arts and Science students to total number of Arts and Science graduate teachers respectively, (4) Pupils in all grades as a ratio of trained, certificated teachers, specialist teachers, uncertificated teachers and pupil teachers respectively. All these ratios are broken down by districts in the same Table.

The pupil-teacher ratio would be one obvious indicator of the adequacy of educational services. The national average for all categories of teachers and pupils in the primary and

secondary levels was 29.3. Eight Districts - Colombo, Kalutara, Kandy, Galle, Batticaloa, Anuradhapura, Polonnaruwa, and Kegalle - were below this average. The districts which were marginally above the average, i.e. around 31, were four - Matale, Jaffna, Mannar and Badulla. The rest were around 32 and above. Trincomalee had a ratio of 35 and Moneragala 34.8. The aggregate pupil - teacher ratio, however, is not a reliable indicator of the quality of the services. The quality would be reflected in the availability of trained certificated and graduate teachers. The proportion of teachers with third level attainments and trained skills in the total cadre of teachers, as well as the pupil - teacher ratios in the different categories of teachers, would help us to ascertain to some degree the efficiency and quality of the teaching services. According to these criteria Jaffna, Colombo, Kalutara, Galle, Batticaloa, Vavuniya, Mannar, Kegalle and Polonnaruwa have ratios of pupils to **trained and certificated** teachers below the national average of 44.9. The districts with ratios above 50 are Anuradhapura, Moneragala, Ratnapura, Matale, Hambantota/Matara, Trincomalee. There are wide disparities in regard to the ratios of 'O' and 'A' level pupils to **graduate teachers**. The best served districts are Jaffna, Moneragala, Polonnaruwa, Trincomalee, Anuradhapura which have ratios well below the national average of 35.9, ranging from 22.2 to 28.2. Districts which are around the National average are Colombo, Matale, Nuwara Eliya, Mannar, Vavuniya, Badulla with ratios ranging from 33.6 to 36.3. Districts with ratios much higher than the national average are Puttalam/Kurunegala, Ratnapura, Kegalle, Kandy, Kalutara, Hambantota, Matara, Amparai, Batticaloa with ratios between 37 and 49.9. The breakdown of graduate teachers to Arts and Science again reveals a different picture. Ratios of Arts pupils to Arts graduates although they reveal disparities indicate on the average adequate levels of service in respect of this segment. The national average is 28.6, and the highest ratio 39.4 while the better ratios are as low as 17.4 and 17.7. The disparities are widest in regard to science teaching. They range from 24.2, 28.2, 33.1, 51.4 and 56.4 in respect of Jaffna, Mannar, Trincomalee, Vavuniya and Batticaloa to

269, 201.4, 199.2, 184 and 157 in respect of Ratnapura, Kegalle, Hambantota, Matara, Badulla and Anuradhapura. The low ratios in the Tamil speaking districts are a result of the relatively large supply of science graduates in the Tamil medium. The disparities in the other districts could reflect the absence of well defined policies in regard to the deployment of science cadres.

On the data available it is difficult to perceive a consistent pattern in the mix of teaching skills in the different districts. It appears that, in certain districts, the shortage of trained and certificated teachers is offset by favourable pupil-teacher ratio in relation to graduate teachers, e. g. Moneragala, Anuradhapura, Trincomalee. On the other hand, a district like Kegalle which has unfavourable ratios for graduate teachers has a ratio below the national average for trained and certificated teachers. The short supply of science graduates has evidently led to the concentration of these cadres on 'A' level teaching, while 'O' level pupils are serviced by cadres with intermediate educational attainments. It is only in a few districts, notably the the Tamil speaking districts and Colombo that the supply of science graduates has been adequate to cater to the needs at the 'O' level as well. The districts which have a proportion of uncertificated teachers higher than the national average, higher than average ratios of pupils to both graduate and trained teachers and very high ratios of science students to science graduate teachers are Hambantota / Matara, Nuwara-Eliya, Kegalle, Kurunegala and Ratnapura. It is in these districts that the composition of teaching skills appear to be most unfavourable. The data analysed here reflect the situation in 1971; it is possible that action has since been taken to adjust some of these imbalances. The analysis of the 1971 situation, however, reveals that the composition of teaching skills in each district and the equitable distribution of scarce skills in science teaching are two major problem areas.

The availability of facilities for technical education does not lend itself to the same district-wise analysis as is possible for general education. **Technical Education** programmes are organised in 11 technical institutes, namely, the Ceylon Technical College, Colombo; the Ceylon College of Technology,

Katubedde; the Hardy Senior Technical Institute, Amparai; the Junior Technical Institute at Galle, Kandy, Jaffna, Kegalle, Anuradhapura, Badulla, Kurunegala and Ratmalana. Since 1971 the Ceylon College of Technology, Katubedde, has been converted into a campus of the University of Sri Lanka. The total enrolments in all these institutes in 1970 was 7800. The distribution of the enrolments by level and type of programmes is indicated in Table XVI. It will be observed from this Table that the enrolment of 7800 students in technical institutes compares poorly with enrolments in Grades 9 to 12 of general education. Expressed as a percentage of total enrolments in Grades 9 to 12, the enrolment in technical education is only about 2%.

There are two institutions established by the Ministry of Education and the Ministry of Agriculture which train agricultural technicians, namely, the Hardy Senior Technical Institute, and the School of Agriculture at Kundasale in Kandy District. The annual output of both these institutes is 78 technicians. It will be seen that facilities for technical education are heavily concentrated in the main urban centres. The technical institutes have, however, been located in the main provincial towns to cater to a group of outlying districts.

Table XVI which gives the enrolment figures for the **technical institutes** once again reflects the different levels of **participation in science and technical studies** which were observed in respect of the 'O' and 'A' levels. If the institutes in Amparai and Colombo which are senior technical institutes which recruit students from all parts of the Island are excluded, it would be observed that the enrolment in the technical institutes is highest in the Jaffna District. There is a balanced participation in the different courses for technicians, commerce and engineering crafts. In other district institutes - Badulla, Anuradhapura and Kegalle have no enrolments at the technical level.

Programmes of education at the tertiary level are organised in the five campuses of the University of Sri Lanka, namely, Peradeniya, Colombo, Vidyalkara, Vidyodaya and Katubedde and also in six polytechnical institutes established by the Ministry of Education. In pursuance of policies which are designed to make educational facilities at the tertiary level available in different parts of the country, Government has recently established a campus in Jaffna and proposed to establish another campus in the south of Sri Lanka. These campuses will, however, not provide courses in all the major disciplines and will concentrate on selected fields of study. Within these limits, the location of tertiary level institutions is intended to improve access to University education at the regional level.

The admissions to Level III education – the University – are based on the results of the G. C. E. (Advanced Level) Examination. The marks scored by students at the G. C. E. (Advanced Level) Examination are standardised subject-wise as well as language medium-wise in order to determine the order of merit on which candidates are admitted to the University. In addition to standardisation, the Ministry of Education has introduced this year a scheme of selection of students to the University on a district basis in order to compensate students from backward districts for the inequalities of educational opportunity provided in senior secondary schools. Data on the district-wise distribution of the University intake is shown in Table XXII. The graduate output of the four Universities in 1969 and 1970 and of the five campuses of the University of Sri Lanka in 1971 are given in Table XXIII which also gives the percentage distribution of graduates by speciality.

The number of students who sat the G. C. E. (Advanced Level) Examination in December 1967 in each subject group, namely, (1) Bio-Science, (2) Physical Science, (3) Arts and the numbers who gained admission to the four Universities in each group are indicated below:

Subject Group	GCE (AL) candidates 1967	Admission to University 1968	Admission as percentage at GCE (AL) candidates
Bio-Science	5,655	503	8.8
Physical Science	2,705	435	16.0
Arts	<u>22,210</u>	<u>2,752</u>	<u>12.3</u>
	<u>30,570</u>	<u>3,690</u>	<u>12</u>

It will thus be seen that only 12% of the candidates who sat the G. C. E. (Advanced Level) Examination in 1967 obtained admission to the universities in 1968. The situation up to 1973 was not appreciably different. A vast majority of the candidates for the G. C. E. (Advanced Level) drop out of the educational system and enter the labour market.

All schools are permitted by the Ministry of Education to levy 'facilities fees' from students for the upkeep of **libraries and the provision of sports equipment and sports facilities**. Schools in their discretion may levy fees not exceeding Rs. 5 per child per month. In practice, schools levy a much smaller fee depending on the financial circumstances of the students. Government schools are provided with libraries at State expense from centrally allocated funds. Playgrounds, pavilions and other sports facilities are also provided from similar allocations. Additional facilities are provided by individual Government schools, the cost of which is met out of the facilities fees fund. In private schools, however, the only resource out of which libraries, sports facilities and equipment are provided is the facilities fees fund. Table XX, XXI gives the total amounts collected by Government schools in each district in 1971, the amounts spent by them and the average expenditure per student in each district on libraries, sports facilities and equipment.

The average expenditure per student in all Government schools was Rs. 1.30 in 1971. The highest rate of expenditure was observed in Jaffna District where schools spent Rs. 5.28 per child in that year. Next came Colombo District with Rs. 1.83 per child, and Matale, Kandy, Batticaloa, Trincomalee and Galle in that order. At the other end, in Moneragala District schools spent only 9 cents per child and Polonnaruwa 29 cents.

The collections for sports and library facilities evidently do not depend on the average income levels in the districts. The collections in Jaffna are well above the average. The collection per student is approximately three times that of Colombo. The collection per student in Batticaloa is much higher than that in Kalutara and is almost five times the collection in Polonnaruwa. The payment of facilities fees is some indication of a particular community's concern for its schools and the facilities offered to its children, as well as the links between the school and the parent population.

Organised pre-school education in Sri Lanka started with a few urban schools in the 1920s. **Pre-school children's programmes** in education are mainly directed towards the preparation of children between 4-6 years of age for their entry into the formal education system. The curricula of these pre-school units aim at stimulating the interests of the child in the learning experience, developing basic cognitive and manipulative skills and taking him through the initial process of socialisation. As will be seen in a later section of this chapter, the repetition rates of students in the primary grades has been consistently high ranging from 27.5% in Grade I to 13.8% in Grade V (1971). A sound pre-school system which prepares children for formal education would be helpful in reducing the waste and expense involved in the high rates of repetition. The transition from the pre-school environment to a modern formal school system when it has to be made in a society which is in the process of rapid social and economic transformation presents its own unique set of problems to the young child. He or she is

called upon to contend with a sudden and discontinuous change. The home environment in the average rural household does little to prepare children for the modes of learning or the structures of knowledge which he has to acquire in the formal schooling system. In a minority of relatively affluent households with elders possessing high educational attainments, the world of experience and knowledge in which the pre-school child moves and which he begins to absorb may normally have some continuity with the knowledge and experience he encounters in the formal learning system. This, however, would not be the case in the large majority of households. In such a situation, a well conceived programme of pre-school preparation for formal education could perform a very useful function.

The pre-school programmes which are currently implemented fall broadly into two categories. First, there are the pre-school institutions which are fee-levying and self-financing which serve largely the relatively well-to-do minority in the urban sector. Next, there are the free nursery schools and other pre-school units run by voluntary agencies such as the Lanka Mahila Samiti and Sarvodaya which cater to the low income population in the rural sector.

In the last half century the kindergarten became popular in Sri Lanka and recently urban centres such as Colombo, Kandy and Jaffna have had an increase of these pre-schools. These pre-school institutions are run by private organisations and are essentially an urban phenomenon. Since they are fee-levying and charge between Rs. 20 and Rs. 30 per month, only parents in the middle and upper income groups are able to afford pre-school education for their children.

It is estimated that there are about 200 pre-school centres in the Island, concentrated mainly in the urban centres. The average enrolment in pre-school centres is 50 students. They are looked after by a principal and one or two assistants. A pre-school teacher normally attends to about 15-20 children. However, some of the larger centres in and around Colombo cater to over 150 children, employing teachers as well as having pre-school teacher-trainees, who assist with the teaching as a part of their training programme.

The two popular pre-school systems are the Montessori and Kindergarten schools. Very often it is the kindergarten method that is adopted with some of the Montessori methods incorporated into it. The Montessori system follows Froebel's pre-school systems closely but differs from the kindergarten system in one basic fact. Froebel stresses the attention and guidance of the teacher to groups of 5 to 8 children, while Montessori concentrates on an individual child. In Sri Lanka's pre-schools a teacher with over 40 students in a class cannot concentrate on different groups involved in various activities and interests. On the other hand, the teacher would find it easier to organise avenues of interest that could be tackled individually by children, specially in activities like word-building or word association. In this sense, the Ceylonese 'method' is closer to Montessori. A standard curriculum for a pre-school of this type would take into account environment and home background of the child, concepts of number and language in play form, guided observation and discussion with regard to play, curiosity, interests and creative activity.

The rural sector has very little pre-school activity. Two organisations that have started to establish pre-school activity in the villages is the Sarvodaya Movement and Lanka Mahila Samiti. The goal of the Sarvodaya programme is the training of young girl volunteer pre-school teachers for a thousand village schools.

One of the main features of the programme is that these training courses for pre-school teachers are provided with indigenous teaching aids, without the use of imported materials. Plywood replaces quality paper cut-outs. Plant dyes are used instead of imported poster colours. Certain types of wood resin are substitutes for imported pastes and gums. An interesting experiment tried out by the training institute was the use of plant dyes from the leaves and flowers freely available in the garden. The trainees are taught basic carpentry and the handling of a fretsaw to help them make toys necessary for the pre-school programme. New Maths-oriented toys are cut out of plywood, and in

areas where this is not available they are taught the formula for the preparation of cardboard from cut-out shapes. Gum which is an expensive commodity in a village, is also obtained out of resin, for example, of the cashew nut tree. Thus, we see that, within the village and its surroundings, the pre-school teacher is able to find all her teaching and play-material at a nominal cost. Since the trainee is also given a basic education in child psychology and hygiene, she is able to discuss children's problems with the parents. In fact, she is given a course in leadership training and she forms the core around which the village mothers gather to seek information and guidance on weaning habits, hygiene and balanced diet.

The child is allocated at least an hour a day for "free play" when it can either play games imitating adult life - such as playing house, looking after children (with dolls), attending hospitals or cooking with real fire (under supervision.) The parents are informed by the teacher that this form of play develops the child mentally and physically. The creative aspect of a child is further nurtured through percussion instruments and art materials. The children are also encouraged to dramatise events during story time, helping them to overcome shyness and develop self-confidence. Handwork is done with materials that are easily found in the village environment, such as clay, rush, fibre etc. This handling of work material is the first step towards handling writing material which is introduced at the final year in pre-school.

The daily programme in a Sarvodaya village pre-school includes periods of at least 15 minutes each of -

- (1) Hand work - clay modelling, paper tearing etc.
- (2) Poetry - Action songs.
- (3) Art - Painting with finger or brush and printing (with potatoes etc.).
- (4) Individual work - Work with small jigsaws and wooden charts.

- (5) Group discussion with children - on subjects such as water, fire, village environment and activities.
- (6) Story telling - with the use of puppets improvised out of egg shells and empty boxes of matches and picture reading.
- (7) Free play. This is given one hour in the daily curriculum. The classroom has a minimum of furniture and is free of chairs and tables. All play material is within easy access of the child, and during the hour of free play, they are encouraged to arrange the play material according to their own patterns - the child's creative powers being given full freedom. Both the teacher and the child are encouraged to use their imagination in finding objects for play, a wealth of which is found within the village boundaries.

On the whole, pre-school education in Sri Lanka is still in its formative stage. Although the need for pre-school education began to be felt acutely since the raising of the school admission age from 5 years to 6 years in 1971, its development has been slow. It is also estimated that 10,000 children of the age group 4-6 years attend these centres. Thus, on this estimate only about 1.5% of the 4-6 year group of the population participate in pre-school education. Pre-school education is almost wholly a service provided by private enterprise. Its development has been slow because at the price now prevailing, the market for it is small, being confined to the higher income groups in society. In recent months, the Ministry of Social Services has taken the initiative in organising a national scheme of pre-school education at State expense. A few centres have recently been organised and the project is still in the early stages of implementation.

The population of 4 and 5 year olds is estimated at approximately 650,000. An adequate coverage of this population through a network of pre-school institutions run by the State would require a very heavy financial outlay.

The cost of such a programme will be prohibitive given the current constraints on government expenditure and the already high proportions of the budget devoted to the formal education system. It is necessary to explore low cost methods of providing a package of services to the pre-school population. Existing programmes of the Sarvodaya and Lanka Mahila Samiti could be co-ordinated and promoted. Other voluntary agencies could also be mobilised to provide these services. In a later section of this study, an experimental programme organised around the Maternal and Child Health centre is proposed. What is also required is a well developed curriculum for pre-school children which could be adopted as a standard for pre-school units run by various agencies. In this manner, it would be possible to formulate low-cost programmes of pre-school activity which could be co-ordinated, supervised and where necessary, assisted by the state.

Section II

Participation in the School System

Section I of this chapter presented and analysed the data pertaining to the availability of educational facilities in the different districts and identified some of the significant variations in the delivery of school services. This section proposes to examine the different levels of participation in the school system in the different districts. The two sets of data for the availability of services on the one hand and the levels of participation on the other would enable one to analyse how the two are matched and related.

Tables VII to XIX present the data on school enrolment, the age-wise participation in the school system, the male and female rates of participation, retention rates and the diversification of education. The analysis of this data would hopefully reveal the different characteristics of the educational systems prevailing in the different districts and serve to identify typical educational profiles with different sets of problems.

In 1970 the total school enrolment excluding the estate schools was 2,628,383. In 1971 it had risen to 2,717,719. In 1972 the enrolment dropped to 2,549,807 mainly on account of the higher age of entry in the new system which came into operation that year. The latest figures available are for 1974. The school census for that year recorded a total of 2,534,066 excluding the enrolment in estate schools. Even after making allowance for the reduction of the open access span from 10 years to 9 years, there appears to have been a marginal decline in the total school enrolment and the participation in the school system during the period 1971-1974.

An attempt has been made in Tables VII to IX to calculate the rates of participation for the three age groups in the primary, junior secondary and senior secondary levels

from age 5-19. There are, however, several problems in deriving the rates of participation from the data available. The data provided in the school census for 1971 does not include the age structure of the school-going population in the different districts. While the school census for 1974 provides this information, the estimate of the population in the school-going age groups in each district have to be derived from projections based on the data in the 1971 population census. Therefore, the information presented in the Tables for the years 1971 and 1974 should be regarded as indicative estimates which are likely to contain small margins of error. The basis of the calculations are set out in the explanatory note to the tables. These estimates should be compared with the rates of dropout by age and grade given in Table XII XIII and XIV. The district variations reflected in the estimates of participation are borne out in the data on the dropout and taken together they provide a reliable basis on which we are able to make several illuminating comparisons of the educational profiles in different districts.

Age-wise participation rates

The patterns of age-wise participation in the school system reflected in the two Tables for 1971 and 1974, derived by two different methods of computation are broadly similar. The highest rates of participation ranging between 64.4% to 67.4% are to be found in Jaffna, Matara, Galle, Colombo & Kegalle. In the middle group between 62.4% and 56% are districts Kalutara, Puttalam, Kurunegala, Hambantota. Districts with the lowest rates of participation are Moneragala, Batticaloa, Trincomalee, and Kandy.

A comparison of the participation in each of the three five-year age groups 5-9, 10-14, 15-19, reveals variations which are more significant and enable us to delineate the structure of education in each district in greater detail. It will be seen that the picture that emerges from an analysis of these participation rates is confirmed by the data on dropout and retention.

It is a notable feature in Sri Lanka that there are no wide differences between the **rates of male and female participation** in education. In the age group 5-9 years the respective rates of participation of male and female in 1971 were 88.4% for males and 80.5% for females. The regional discrepancies were also not very pronounced. The highest difference was observed in Matara District in this age group where male participation was 99.3% and female participation was 88.6%, the difference being 15.7%. In all districts male participation rates exceeded the female rate.

In the age group 10-14 years there is a considerable change in male and female participation rates. At the national level, the female rate is higher, 72% as compared to 70.5% for males. At the district level, we find 11 districts where the female participation rate exceeded that of the male. The districts in which female participation was higher are Colombo, Kalutara, Matale, Matara, Hambantota, Kurunegala, Anuradhapura, Polonnaruwa, Moneragala, Ratnapura and Kegalle. The districts where male participation rates were higher than the female were Nuwara Eliya, Jaffna, Batticaloa, Mannar, Amparai, Trincomalee, and Puttalam.

In the age group 15-19 years, we find the divergence in participation rates between the two sexes maintained at about the same degree at national level. At the district level we see, however, that more districts show a higher rate of female participation. There were only 10 districts where male participation rates exceeded the female. Of these, the difference was very marginal in seven districts. Kandy, Matale, Nuwara Eliya, Puttalam, Polonnaruwa, Badulla and Moneragala. The three districts where there was a clear preponderance of male participation were Jaffna, Batticaloa and Amparai.

The reasons for these wide differences in the rates of female participation in education have to be sought in the social and cultural traditions of the people inhabiting these districts. For example, the rate of participation in secondary education of Tamil and Muslim girls in the Northern and Eastern Provinces was lower than in other districts.

The data pertaining to the dropout in the school system are presented in Tables XI, XII, XIII Table XI indicates the progressively diminishing retention of pupils in the system from grades 1-12 during the 12-year period 1955 to 1967. The Table gives aggregate data for the system as a whole. If we disregard the reflections in each class for the reason indicated in the explanatory note to the table, only around 30% - 35% of the students entering Grade 1 reach Grade 9. The high level of repetitions in Grade 10 raise the retention in this grade to around 45% to 50%. The proportion reaching the 12th grade is in the region of 6% to 7%. The average dropout from the second year to the 9th year is in the region of 7% of the Grade 1 enrolment. One of the more disturbing features of the dropout pattern is the high percentage difference between the number in Grade 1 and the number proceeding to Grade 2. While this is partly explained by the fact that there has been an inordinately high level of repetition in Grade 1 (27.5% - vide Table XX) it still does not account for the fact that the percentage difference has persisted during the examined period. The data available for 1971 and 1974 indicates that this difference has been reduced considerably. Nevertheless, the evidence seems to point to the fact that a proportion which is not negligible leaves the system with barely one year's education.

The districtwise pattern is shown in Tables XII, XIII and XIV which set out the data of dropout by age and grade. The dropout by grade is given for the student population in the government school system by comparing enrolment in grades in 1971 and 1974. The districts in which the dropout is significant at the primary level are Colombo, Kalutara, Galle and Jaffna. The fact that in some of these districts the dropout below 10 years of age is negligible does not necessarily mean that the dropout at the primary level is low. In many of these districts the age of entry is higher than the prescribed norm and when this is taken together with the high level of repetition in the lower grades, the age at which students drop out is

no indication of the level of education attained. The districts which have low levels of drop out at the primary level are Trincomalee, Batticaloa, Mannar, Vavuniya, and Chilaw. The remaining districts are in an intermediate category with rates ranging from 61% to 76%

In the age group 10-14, the highest rates of dropout are in the districts Batticaloa, Kalmunai, Mannar, and Anuradhapura. This pattern is repeated in the dropout rate at the secondary level in these districts. As the two sets of figures are closely related this is to be expected. In these districts the simple average of the dropout percentages from grades 5-8 ranges from 13.9% to 16.6%. The districts with low rates of dropout at the secondary level and relatively low dropout in the age group 10-14 are Kalutara, Matara, Jaffna, Colombo and Kegalle. In these districts a considerable proportion of the student population is retained in the secondary stream. In the intermediate category are the districts where a relatively large proportion of students proceed beyond Grade 5 and participate at the secondary level but where the enrolment noticeably declines from Grades 6 to 8. These districts are Bandarawela, Nuwara Eliya, Amparai, Polonnaruwa and Moneragala.

Another indicator of the levels of retention achieved in the different districts is in the share of Grade 10 and 12 enrolments in the total school enrolment in each district. Although these rates do not reflect a pattern of flow of students over a period from grade to grade, they serve as an index of rates of retention in the school system in each district. These data are given in Table XXI. Grade 10 enrolments in all schools represented 7% of total enrolments in 1971. In 1972 it rose to 8.5% and in 1973 to 11.3%. Similarly, Grade 12 enrolments rose from 0.91% in 1971 to 1.05% in 1972 and 1.19% in 1973.

Here again, it will be observed that there are wide regional differences in the ratio of Grade 10 and Grade 12 enrolment to total enrolment. The significant differences are as follows.

Grade 10 enrolments. In 1971 Kegalle District had the highest ratio, namely, 8.3%, Galle had 8.1%, Kandy and Jaffna 7.8% each. At the other extreme, Mannar had the lowest ratio, namely, 2.9%. Trincomalee and Moneragala had 3.6% each and Vavuniya had 3.8%.

Grade 12 enrolments. As in the case of Grade 10 enrolments, Grade 12 enrolments reveal wide variations from district to district. The higher rates of enrolments over the national average rates were observed in Kalutara, Colombo, Jaffna, Kandy, Galle, and Matara, while enrolment rates below the national average rates were observed in other districts. The lowest rates were observed in Mannar, Trincomalee, Amparai Moneragala and Batticaloa.

The rates of repetition are one indicator of the effectiveness of instruction and the levels of performance in the education system. To the extent that students can make unimpeded and regular progress from grade to grade, the return on the educational investment would be at the maximum possible level, given of course other factors governing the quality of the education.

Table XXXI sets out the rates of repetition in the primary and secondary levels from grades 1 to 10 for all the districts. It would be observed that the rates of repetition for the primary grades are high for all the districts. The highest rates are recorded in Anuradhapura, Batticaloa, Trincomalee where the repetition for Grade 1 is over 40%. In grade 5 the repetitions range from approximately 11% to 24.5%. At the other end of the education stream the retention rates for grade 10 range from approximately 25% to 54%. The districts with repetition rates between 30% and 40% for grade 1 are Matale, Nuwara Eliya, Mannar, Vavuniya, Puttalam, Badulla, Moneragala. Only Colombo District has a repetition rate for Grade 1 which is below 20%. The remaining districts have rates between 20% and 30%. The districts with rates of retention above 30% continue to have high retention levels in Grade 5. From the data relating to schooling facilities such as classroom accommodation, pupil-teacher ratios, it

is difficult to attribute the high rate of repetition primarily to inadequacies of staff or lack of similar educational facilities. No reliable inferences can be drawn as the causes for the high repetition do not appear to have been adequately investigated. It is likely that high repetition is associated on the one hand with factors such as the irregularity of attendance and a home environment unfavourable to education and on the other to the inferior quality of instruction and the inefficiency of the school system itself. The causes would have to be investigated both from the delivery end of these services as well as the participating end.

In the introductory comment on the salient features of the prevailing educational system, attention was drawn to the lack of **diversification in education** and the heavy bias towards the humanities and non-technical studies. The different proportions of the school-going population enrolled in the different educational streams - arts, commerce and science, will provide some indication of the efficiency of the system and its capacity to supply the urgent manpower needs of the economy.

Before the introduction of the comprehensive curriculum in the new system, subject specialisation commenced from Grade 9. From Grade 9 to Grade 12 the programmes introduced specialisation of subjects classified into Arts, Science and Commerce. Students opting to specialise in any of these three subject groups were required to decide, on admission to Grade 9, the streams which they choose to follow up to the General Certificate of Education (Advanced Level) and thereafter in the university or other institute of Level III education. Enrolments at Grades 9 to 12 can, therefore, be classified into three distinct streams of education, namely, Arts, Science and Commerce. Table XV gives the enrolments at each grade for the whole Island and for each of the 22 Administrative Districts in each of the three streams.

In 1971, 131, 230 students were enrolled at Grade 9 of whom 78,086 were enrolled in the Arts stream that is 60%, 30,420 were enrolled in the Science stream, that is 23.2%, and 22,724 were enrolled in the Commerce stream, that is 17.3% as will be seen in Table XV.

In the last decade there has been a gradual increase in student preference for science courses in Grades 9 to 12 as is evidenced by the following rates of grade-wise enrolment in Arts and Science in the years 1965 to 1968 given below:

		1965	1966	1967	1968
Grade	9 and 10 Arts	80.8	81.4	80.2	79.6
„	9 and 10 Science	19.2	18.6	19.8	20.4
„	11 and 12 Arts	81.4	80.5	75.7	72.4
„	11 and 12 Science	18.6	19.5	24.3	27.7

In the above table Commerce subjects are included in the Arts courses. It will be observed that participation in Science courses at Grades 9 and 10 have increased from 19.2% in 1965 to 20.4% in 1968. At Grades 11 and 12 participation in Science courses has increased from 18.6% in 1965 to 27.6% in 1968. The growing bias towards a science - based education is the result of student preferences for courses which have better employment opportunities.

However, despite the increasing demand for science graduates and secondary school leavers with a science based education, the system was unable to cope with the demand. It was not possible to divert large numbers of students from the Arts stream to the Science stream because of a perennial shortage of science teachers and scarcity of laboratory facilities and equipment in senior schools. The facilities for science teaching in the Universities were also limited and imposed constraints on the admission of science students. These conditions created a vicious circle of shortages and acted as a severe restraint on the output of science graduates who could have been employed as Science teachers in schools, This problem was aggravated by the switchover of teaching from the English medium to the national languages after 1956, as a consequence of which there was a severe scarcity of teachers who could teach science in the national languages. The media of instruction in secondary schools and the universities became bi-lingual in the transitional period. The rates of wastage at the secondary levels of education and in the universities were high during the 'sixties'.

It will also be observed that there were wide disparities in the ratios of Arts and Science enrolments in the various districts. Except for Colombo District and Jaffna District where the Science enrolments exceeded the Arts enrolments in Grade 12, the Science enrolments in other districts were very much lower than the enrolments in Arts. For example, Amparai District had only 9 students enrolled in science at Grade 12. Polonnaruwa District had 10. Trincomalee District had 7. The science enrolments at Grade 12 in the districts expressed as a percentage of total enrolments in Grade 12 in 1971 are as follows:

District			
Colombo	...	48	per cent
Kalutara	...	28	„
Kandy	...	28	„
Matale	...	36	„
Nuwara Eliya	...	11	„
Galle	...	19	„
Matara & Hambantota		15	„
Jaffna	...	78	„
Mannar	...	0	„
Vavuniya	...	0	„
Batticaloa	...	35	„
Amparai	...	13	„
Trincomalee...	...	19	„
Kurunegala & Puttalam		19	„
Anuradhapura	...	11	„
Polonnaruwa	...	12	„
Badulla	...	23	„
Moneragala	...	0	„
Ratnapura	...	13	„
Kegalle	...	15	„

It will be observed that there were no enrolments in Commerce courses at Grade 12 in the following districts: Mannar, Vavuniya, Batticaloa, Amparai, Trincomalee and Moneragala.

According to the data given in Table XV, the districts in which the science enrolment was well above the national averages are Jaffna, Colombo, Batticaloa, Trincomalee and Amparai. Kandy, Galle, Matara, Hambantota, Mannar, Vavuniya, Badulla and Kalutara had shares ranging from 23% to 28% and were around the national average. The districts that were well below the national average were Matale, Nuwara Eliya, Kurunegala, Anuradhapura, Kegalle, Moneragala and Ratnapura. Districts with shares which fell below 20% and which seemed to reflect the poorest position in regard to participation in the science stream were Anuradhapura, Ratnapura, Moneragala and Kurunegala.

The curricular changes that were introduced in 1972 did away with the old system of dividing students at Grade 8 into separate streams specialising in science and non-science subjects. Under the new system students follow a common programme which contains a core of subjects from both the scientific disciplines as well as the arts and humanities. Specialisation will commence only at the senior secondary level. This common curriculum at the Junior Secondary Level will no doubt correct some of the imbalances which were produced through a specialisation which occurred too early in the school system. Nevertheless, the size and quality of the science streams in the schools at the senior secondary level will depend on the distribution of teaching skills and facilities in science education among the different schools in the districts. The analysis in the foregoing section presents the pattern of participation in the science stream and the regional variations in it. This pattern has to be seen against the distribution of teaching skills described in section I. The two sets of data taken together help us to identify the areas which will continue to demand attention even under the new scheme.

Section III

A comparative analysis of available services and levels of participation

In the analysis provided in Sections I and II, the district which ranks highest in terms of most of the criteria that have been used is the Jaffna District. The school system in this District shows the best performance in terms of the expectations and demands of the academic educational system, and for the purpose of our analysis we can initially use the Jaffna District as a standard. In regard to the availability of service, Jaffna has reached relatively high standards on all the indicators - the number of Junior and senior schools per 1000 population, the distance from schools, the balance between 1st level and 2nd level education, class room accommodation, composition of teaching skills, and expenditure on library and sports facilities. This is reflected in a correspondingly higher level of efficiency and participation in the system - a high rate of participation of the age groups 5-9, 10-14 and 15-19, a fairly well balanced participation for males and females, a high proportion of enrolments in the non-Arts and technical streams. In terms of the conventional criteria, in Jaffna District we have age cohorts going through the system with the lowest dropout rate in the country, and participating in a diversified educational system better adapted to the needs of the economy than the academic education in most other districts which is heavily biased towards the non-technical studies. Demographically, Jaffna falls into the first group of Districts where the pressures of the age cohorts entering the 5-9 and 10-14 age are comparatively low and where the significant pressures are felt in the 15-19 age group. The problems confronting the Jaffna District are, therefore, mainly those of maintaining prevailing standards and providing adequate outlays to absorb the increases in school-going population that would be

concentrated mainly in the 15-19 age group. In this manner Jaffna would be optimising the value of the educational system but doing so within the constraints inherent in the system. The constraints here concern the deficiencies inherent in the academically oriented system and the problems of employment that confront the school-leavers. In Jaffna the problems have been appreciably minimised by the high level of diversification and the participation in technical and scientific studies. But the language policies of government have to some extent nullified the benefits that could have accrued from the well-balanced educational structure in the Jaffna District, and consequently fairly high levels of unemployment prevail even among the outputs from the science streams. The Jaffna District with its high component of science and technical education provide the conditions for the effective implementation of the present educational reforms where job-oriented educational programmes are linked to the immediate socio-economic environment and potential work opportunities. A relatively modern and intensive agriculture and a growing small industrial sector in the District offer considerable scope for such linkages.

The other group of Districts where the retention rates are well above average and where the levels of participation¹ in the age group 15-19 indicate that enrolment in the secondary stages and above are comparatively high are **Colombo, Kalutara, Jaffna, Galle, Matara, Hambantota, Kegalle,** and **Kurunegala**, where over two-thirds of the 5-14 age group and a quarter of the 15-19 age group are in the school system. All these districts have over 80% and 20% in the two respective age groups attending school. Figures for Grades 10 and 12 participation confirm that, it is in these Districts that a substantial share of the school-going population is retained upto the terminal point. It is, therefore, in these Districts that the incentive to climb the educational ladder for academic qualification will be strongest and,

1. The rate of participation used for this analysis are those contained in Table X.

therefore, the need for structural changes and policy re-orientation to relate the content of academic education to occupational needs and manpower requirements will be most urgent.

The Districts which fall into this group with high retention rates have varying problems. The **Colombo District** approximates to Jaffna in terms of availability of services and quality of level of participation. The degree of diversification is also well above the average. The District falls into the same demographic group as Jaffna. The package of policies and programmes in Colombo will, therefore, not be significantly different from what has been suggested in the case of Jaffna.

In the case of the other Districts, both the diversification of curricula and the re-orientation of the system to vocational and job-oriented studies command high priorities if the continuation of current trends is to be avoided and the mismatching of knowledge and expectations with work opportunities is to be eliminated. In all these Districts the balance between junior and senior secondary school facilities, the classroom accommodation and the access to schooling facilities in terms of distance are relatively satisfactory in terms of national averages. It is the composition of teaching skills that present a major problem. The ratios of science students to science graduate teachers in the higher Grades is inordinately high. The worst affected Districts are Ratnapura, Kegalle and Hambantota. The ratio of uncertificated and pupil teachers to the total number of teachers which is also an indication of the quality of teaching services remain quite high for Kegalle, Ratnapura, Hambantota and Kurunegala which have ratios of 1:3 and 1:4 as against 1:8 in Colombo and 1:11 in Jaffna. When the low ratios of science graduates to science enrolments and the poor composition of teaching skills are seen in relation to comparatively high level of participation at the secondary level the problems which need attention clearly emerge. Educational structures in these districts call for greater diversification and a better balance between the science and non-science

streams; consequently, the composition of teaching skills has to be improved. All these Districts with the exception of Kurunegala, fall into the group where the position in the 5-14 age groups remain fairly stable and pressures mount in the 15-19 age group. Therefore, in these groups, the problems of quantity and quality are concentrated at the secondary level. In all the Districts, where the participation at the secondary level is high, the diversification programmes need to be matched with effective job-oriented pre-vocational studies to make school-leavers better adapted to available work opportunities and capable of seizing on new work opportunities in their environment.

At the other extreme, we come to a different set of situations where the problems are concentrated at the primary level. There are five districts where the levels of participation in Primary Education are well below the national average. These are Batticaloa, Trincomalee, Badulla/Nuwara Eliya, Moneragala and Kegalle. The educational profiles in these five districts, however, are not identical. Batticaloa and Trincomalee which are in the Tamil speaking regions have participation rates at the primary level which are approximately 69%. There is, thereafter, a very steep decline in participation. The share of the school-going population in the 10-14 age group is among the lowest in these two districts. In Trincomalee 51.8% and in Batticaloa it is 43.7%. The numbers reaching the terminal points in the system, Grades 10 and above, are also very few. Both districts, however, have a fairly well balanced diversification of the small educational stream at the higher levels. The science enrolment in Batticaloa is approximately 50% of the total enrolment and ranks next to Jaffna. In Trincomalee it is the region of 36%. The other districts which have educational profiles different from what has been discussed, Badulla/Nuwara Eliya and Moneragala, have the lowest rates of participation in the 6-9 age groups, 59.5% for Badulla/Nuwara Eliya and 61.1% for Moneragala. Starting on a narrow base at the primary level, the retention rates in these two districts are somewhat higher than Batticaloa and Trincomalee. But the educational stream which goes up to

Grade 10 and above are heavily biased to the Arts and the non-technical studies. The participation in the science stream is very limited. All four districts have a demographic structure which is somewhat pyramidal in shape for the young age cohorts. This would indicate that heavy investments would have to be made for the provision of educational facilities in order to absorb increasing numbers of school-going population at the different levels of the education system.

In Batticaloa and Trincomalee, the composition of teaching skills and the availability of school accommodation do not present major problems. The future programmes need mainly take account of the increasing levels of participation. In Moneragala, the problems of access to schooling facilities require closer attention as pointed out earlier. In both Badulla/Nuwara Eliya and Moneragala, the composition of teaching skills need to be improved in order to provide for adequate diversification at the higher levels. Problems of access arising out of a thin distribution of population over a large area may call for new approaches in regard to the size of school and class room, the deployment of teachers and the type of teaching skills. Of the districts where primary education is a problem, Kegalle presents an entirely different educational profile. It has a comparatively high retention rate with 26% of the age group 15-19 participating in the school system and a proportion which is relatively high compared to the national average proceeding beyond the secondary to the tertiary level. At the primary stage, too, the level of participation is above the national average, around 80%, and compares well with the other densely populated districts such as Kalutara, Galle and Hambantota. Mention has already been made of the deficiencies regarding the teaching skills in these districts.

It would, therefore, be observed from the foregoing comments that this group of districts with low participation in the primary level has different sets of problems branching out from the initial problem of primary education.

With the exclusion of Kegalle, all these districts will fall into the demographic group which have expanding numbers in each succeeding age group. In some of the districts-Batticaloa and Trincomalee - the participation at the secondary level registers a sharp drop, but the educational stream that continues seems to be adequately diversified, and the composition of teaching skills for the participating student population appears to be adequate. In contrast, Badulla /Nuwara Eliya and Moneragala with high retention rates, present a different set of problems, in regard to the diversification of the continuing stream. Given these problems, the educational strategy in these districts will have to be appropriately adjusted. High priority has to be given in all these districts to raise the level of participation for the age group 6-9, which corresponds to the primary level. Here, the problems are most acute in Badulla Nuwara Eliya and Moneragala. Where a substantial proportion of the population drops out of education during and immediately after the primary level, the primary curricula would have to aim at an educational programme which is terminal in character. This would require considerable work in the development of appropriate curricula with a strong emphasis on environmental and activity-based programmes. As in all these districts, the dropouts in the secondary stage are quite high, the pre-vocational programme would rank high in priority. With a major part of the student population leaving in the Grades 6 to 10, there would be an urgent need to impart a satisfactory assortment of skills which will equip them to both seize and improve on the work opportunities available to them. For the small component proceeding to Grade 10 and beyond, adequate diversification of curricula and expansion of teaching facilities would have to be provided.

Amparai (excluding Kalmunai) presents some exceptional features. It has a relatively high level of participation in the 6-9 age group with a very sharp drop in the 10-14 age group, which corresponds to the secondary level. Therefore, some of the strategies indicated for the group discussed in the preceding paragraph would apply in the case of Amparai

as well. Amparai, however, presents a satisfactory profile in regard to diversification in regard to which the share of science enrolment in the total is in the region of 36% and is higher than Colombo.

Anuradhapura, Polonnaruwa, Kandy and Matale have a comparable pattern of participation in the age group 15-19. The level of participation at the primary stages ranges between 59% and 85%; for the age group 10-14 from 52% to 63% and for the 15-19 age group from 18% to 21%. The share of science enrolment is between 18% and 24%. In all these districts, the diversification of the stream which goes up to Grades 10 and 12 assumes importance as we are dealing with an educational structure where the retention rate is fairly high. In such a situation, the changes in the proportion between science studies and arts become urgent if the school-leavers are to be equipped with skills which are needed in the economy. This has its implications for the composition of teaching skills. Of the four districts, Anuradhapura, Kandy and Matale are the worst affected in this regard. Polonnaruwa has been able to raise its standards above the national average both in regard to the availability of science graduates as well as trained and certified teachers. As pointed out earlier, access to schooling facilities in Polonnaruwa may need closer attention. In other respects, Polonnaruwa is relatively well served and offers conditions where the effort for improvement in participation and diversification can be undertaken without a major deployment of new teaching resources.

Finally, there are the districts of Manner and Vavuniya which have educational profiles different from most other districts. Both have a high participation rate in the 6-9 age group - 84.2% and 80.8% respectively, a sharp drop in the 10-14 age group - 56.8% and 61.6% and very low participation rate in the 15-19 age group - 14% and 65%. Mannar in fact has the lowest rate for this age group. In these districts the emphasis on pre-vocational studies with a view to provide a terminal education for the dropouts after the primary and during the secondary level, assumes great

importance. In both districts the distance to schools and the problems of location and access to schooling may need closer attention. The composition of teaching skills is, however, well above average in quality and possibilities of diversification into science and technical education are much better than in the average Sinhala districts. In contrast to the available facilities, science enrolment, however, remains surprisingly low for Mannar whereas in Vavuniya, it is still limited in comparison to other districts with the same ratio for science teachers. It is very likely that in Vavuniya which has a mix of Tamil medium and Sinhala medium, there are wide disparities in science enrolments in the two groups of schools and that this has affected the average. A characteristic feature of all Tamil speaking districts is the disparity between the participation level of the males and that of the females. At a higher level of participation this remains true for Jaffna as well. While the disparity is not so distinct in the 6-14 age groups it emerges in a pronounced manner in the 15-19 age group. In the context of the cultural factors which give rise to this situation, curricula for female education in this group of schools may have to take special note of this feature.

The comparative analysis of the district-wise data reveals a variety of situations with typical combinations of educational problems. Each combination calls for different patterns of investment and deployment of resources as well as different strategies for optimising the value of educational services and improving its quality. In subsequent discussions on health needs and non-formal education it will be seen how these different situations are limited to the health services for these age groups and the supporting role of non-formal education. As pointed out in the preceding chapter, the methodology for the integrated planning of services for the young age groups and the different strategies and packages of policies that are needed could be investigated in depth and demonstrated effectively by selecting one district from each typical group for the studies and for evolving model action programmes. For example, one of the Tamil speaking districts other than Jaffna - preferably

Batticaloa - will present a typical combination of problems and appropriate strategies for the Tamil speaking areas. These will include improvement of participation of the 5-9 age group, development of relevant primary stage curricula with a terminal content for early school-leavers, pre-vocational programmes linked to employment opportunities for the school-leavers in the secondary level programmes which deal with the female participation rate, policies to deal with problems of school location and access and so on. Moneragala will provide a model for the district with low participation rates, inadequate diversification and problems of access; Anuradhapura could present a different set of problems, with a high dropout after the primary level and inadequate diversification. Kurunegala or Kegalle with relatively high retention rates at the secondary level and its heavy bias in favour of a non-technical curriculum will have yet another combination of problems and solutions. Finally, Colombo with its relatively high performance on most of the criteria that have been applied will reflect the educational imbalances in an urban and "modern" setting and would call for different strategies in relation to the primary pre-vocational and diversified academic programmes. The programmes relating to the education sector will have to be integrated with the other sectoral programmes for these age groups. These aspects will be further elaborated in the concluding section of the report.

Attention should also be drawn to additional work that has to be done to improve the statistical base. The district-wise statistical information available on education although much in advance of most other sectors such as health contain substantial gaps. A detailed breakdown is needed on age-wise participation in the districts, the dropout and retention rates and access to schooling facilities. Studies in depth are needed to identify the causes for the variation in participation rates.

Conclusions

- Universal free education which was introduced in Sri Lanka in 1944 covered all stages of education from primary to the tertiary levels. The national languages became the media of instruction for the primary and secondary stages

and subsequently to the tertiary level as well. These measures helped to break down the dualism which had earlier prevailed in the education system in which one educational sector comprising the English medium schools provided all 3 levels of education to a well-to-do urban minority and another which consisted of Sinhala and Tamil media schools provided education in the primary and secondary levels in the rural sector.

- In 1971, 60% of the school going population between the ages 5-19 years were in attendance at the education institutions. In 1970 the rates of participation at the level in the age group 5-9 were in the region of 84.5%. In the age group 10-14 it was approximately 72.2 per cent. However, in the succeeding age group 15-19 it dropped sharply to 16.3 per cent. Adult literacy improved from an estimated 57.8 per cent in 1946 to 85 percent in 1970.
- Although there was a rapid expansion of educational facilities and increasing participation in the school system, the formal education which was imparted contained deficiencies of a fundamental nature-

Out of 100 pupils who enrolled in grade 1, on the average only 52 reached grade 5 and 34 grade 9. The pattern of education was designed to prepare students for academic tests at the terminal points of the system.

- Therefore the dropouts who left at the earlier stages received only a partial education. A school system which neglected to provide a "terminal education" to the majority of school-leavers was obviously ill-adapted to its social and economic environment.
- Even those who reached terminal points in the system found it extremely difficult to find productive employment. Of the 796,000 estimated as unemployed in the 1971 census approximately 250,000

had academic qualifications at 'O' level or above. Finally, even within the academic educational system that prevailed the heavy bias towards humanistic and non-technical studies had aggravated the problem.

- The availability of educational services such as the distribution of schools in relation to school population, class room accommodation, teacher-pupil ratios, facilities for the diversification of curricula, show wide regional disparities,
- The educational structure as reflected in the **balance between the different levels** of primary, secondary and pre-university education have been best developed in the districts with the major urban centres Colombo, Kalutara, Kandy, Galle, Nuwara Eliya, Jaffna, Kegalle. The districts with structures which are relatively poorly balanced are Anuradhapura, Puttalam, Vavuniya, Mannar, Batticaloa, Amparai and Kurunegala.
- In 17 out of 22 districts the **space in permanent buildings per child** is over 10 square feet. The allocation of space per pupil is well above the average in 4 districts where they ranged from 15.5 square feet in Vavuniya to 12.3 in Galle. In three districts the floor space per child is less than 10 square feet - Nuwara Eliya, Moneragala and Ratnapura. In the remaining districts the average allocation of space is above but close to the norm of 10 square feet per pupil. These data should be matched with the conclusions that are derived from the analysis of the demographic structures in the districts.
- It will be seen in many districts which have age cohorts of equal size in the age group 0-14, the space allocation would continue to be adequate at current levels of participation.
- The data have also been matched against estimated requirements at higher levels of participation. This indicates that inadequacies have emerged in several districts

where participation rates could be improved to approximately 60% which is the current rate of participation for districts at a higher educational level.

- The **physical location of schools** in relation to the lay-out of settlements may be creating problems of access in Anuradhapura, Polonnaruwa, Amparai, Trincomalee, Mannar, Vavuniya and Moneragala.
- The average **pupil-teacher ratio** was higher than the national average in 14 districts. The highest averages were recorded in Trincomalee and Moneragala.
- In regard to the **composition of teaching skills**, that is the availability of teachers with 3rd level attainments and trained skills, districts which were below the national average standard were Anuradhapura, Moneragala, Ratnapura, Matale, Trincomalee and Hambantota.
- There were wide disparities in the distribution of graduate teachers both in the Arts as well as Science. The disparities are widest in regard to science teaching. The best served districts are the Tamil medium districts Jaffna, Mannar, Trincomalee, Vavuniya and Batticaloa with ratios ranging from 24.2 to 56.4 pupils per science teacher. At the other end there were Anuradhapura, Badulla, Matara, Hambantota, Kegalle and Ratnapura; with ratios from 157 to 269. The low ratio in the Tamil speaking districts are the result of a large supply of science graduates in the Tamil medium. The disparities in other districts would reflect the absence of well defined policies in regard to the deployment of science cadres.
- **Pre-school** educational facilities broadly fall into two categories. A fairly well organised segment of pre-school caters for the well-to-do urban minority on a fee levying basis and a relatively thinly distributed and inadequate pre-school programme run by voluntary agencies such as the Lanka Mahila Samiti and Sarvodaya on a non-fee levying basis.

- The average rate of participation of the school-age population in general education for the 3 years 1970 to 1973 is about 57%.
- There are, however, wide regional variations within this average rate. Participation rates for both the primary level and secondary level are highest in Jaffna, Colombo, Kalutara, Nuwara Eliya, Galle, Matara, Hambantota, Kegalle and Kurunegala. The rates range from 89% for the 5-9 age group and 40% for the 15-19 year age group in Jaffna to 70% and 22.3% for the 5-9 year group in Colombo District and Nuwara Eliya,
- The lowest participation rates are to be found in Mannar, Batticaloa, Trincomalee, Moneragala and Badulla. Participation rates drop sharply in the 10-14 year age group in these Districts. These figures point to the conclusion that in these Districts there is a high proportion of school-leavers who leave at the primary level with minimal standards of numeracy and literacy.
- The other Districts fall between these two groups in levels of participation. Primary level participation is relatively satisfactory. Progressively high drop-out rates are indicated at the secondary level before students reach the terminal point at Grade 10.
- These figures show that retention rates are highest in the first group of Districts which include Colombo, Jaffna, Galle etc. The educational profiles in these districts show a relatively high proportion of the students reaching the terminal points. The need for structural change and policy re-orientation to relate the academic content of education to occupational needs and manpower requirements will be urgent in these Districts.
- Of these Districts, Colombo and Jaffna have achieved a fairly high level of diversification with a comparatively satisfactory balance between non-technical and science enrolments. The position is distinctly superior in Jaffna. In other Districts the heavy bias towards Arts and Humanities persists in varying degrees and needs to be corrected rapidly.

- When the distribution of facilities and the levels of participation are taken together, it is possible to identify five groups of Districts, each of which represents a typical combination of educational problems and needs.
- One group presents a situation in which participation rates are lower than the national average from the primary level onwards; the drop-out in the first five grades is exceptionally high; the diversification of education in the small secondary stream is restricted and negligible; the composition of teaching skills is poor in comparison to other Districts; physical facilities in regard to classroom accommodation and access to school in terms of distance and location, poor. Moneragala is a typical District in this category. In Districts of this type together with efforts directed at raising participation, there has to be special effort at adapting primary level programmes to impart to them a 'terminal' character so as to equip early school-leavers with a well integrated though basic stock of knowledge and assortment of skills which are relevant to their work environment. In these Districts, the pre-vocational programmes at the secondary level again need to be closely linked with available work opportunities and would have a different character from programmes in an urban work environment. The composition of teaching skills and physical facilities would need to be upgraded. The problem of distance to schools, size of school and class room, and even the type of teacher may all need to be re-examined so that a more appropriate package could be made available.
- The second group of Districts with another set of problems are the Tamil Districts with the exception of Jaffna. Here, while the physical facilities, composition of teaching skills and diversification of education are relatively satisfactory, problems relating to low participation from the primary level upwards and high drop-out in the first five grades are again pronounced features of the prevailing situation. In addition, there is an exceptionally low level of female participation. What has been said of the adaptation of primary level and pre-vocational programmes

for the first group of Districts apply to this group as well. Improvement in the rates of female participation would require a broad-based strategy which changes attitudes and provides adequate motivation. In such a programme the services of voluntary agencies such as women's organisations would have to be mobilised. However, the organisation of women in voluntary institutions is inadequate in these very districts and calls for a special effort.

- In the third group of Districts, the participation at the primary level is satisfactory; the drop-out rate rises sharply in the secondary level. The diversification of the education structure is low. The composition of teaching skills is poor.
- In the fourth group of Districts retentions are comparatively high upto the terminal point, but the system of education is heavily biased towards non-technical studies and hence the diversification of studies is limited. The composition of teaching skills at the secondary level is correspondingly poor in relation to science teaching skills. The effort in these districts has to concentrate, among other things, on employment-oriented programmes for school-leavers with comparatively higher educational attainments and consequently a different pattern of job expectations. Along with the diversification of the academic streams, the prevocational curricula have to be developed to cater to the special characteristics of the school population in these Districts.
- Finally, Jaffna and Colombo are examples of educational structures which are fairly well balanced and at a higher level of diversification. Participation rates are high, and drop-out in the primary and secondary streams are the lowest. Jaffna possesses the best performance in terms of the expectations and demands of the academic educational system. In regard to the availability of services it has reached relatively high standards on all indicators—distribution of junior and senior schools, distance from schools, balance between 1st level and 2nd level education,

class room accommodation, composition of teaching skills. This is reflected in a correspondingly higher level of efficiency—a comparatively high rate of participation for all three five year age groups from 5-19, a high proportion of enrolments in the non-arts and technical streams to relatively high retention rates. These two Districts—and of them Colombo in particular—will, however, reflect the educational imbalances in an urban and modern setting. Strategies in the primary, prevocational and diversified academic streams in these situations will have to be different from other districts.

- The planning of educational services for the young age groups and the different strategies and packages of policies that are needed could be investigated in depth and demonstrated effectively by selecting one district from each typical group for further studies and for evolving model action programmes. These programmes could be developed within the demographic frames described earlier.

CHAPTER III

NON-FORMAL EDUCATION

I

The role of non-formal education

The last chapter attempted to present a description and analysis of the formal educational system with special reference to regional variations in the delivery of educational services and the levels of participation that have been reached. Non-formal educational programmes can best be examined within the context of the formal system and its role identified in relation to the needs of the young population who have ceased to participate in formal education and are at present outside the school system. The clientele which is served through non-formal programmes would principally consist of this group.

The first component in this group will be the pre-school population in the 3-5 year age group - approximately one million children. In the 5-9 age group the population who are outside the school system as at 1971 can be estimated at approximately 261,000. This number will include children who are not yet in attendance at school but who would enter the school system at an age past the normal age of admission. Other children in this group would be those who have left the school system at the primary level as well as the small minority who may not have participated in formal education at all. In the 10-14 age group which broadly corresponds to the school-going population at the secondary level, approximately 467,000 or 28.8% do not participate in formal education. Of the 15-19 age group the corresponding figures are 142,420 and 83.7%. The age-specific participation rates of the school-going population is given

in Table VII of Chapter II. It would be observed that the proportion of the young population who are not participating in the school system is highest in the districts of Batticaloa, Moneragala, Trincomalee, Mannar, Amparai, Kandy and Vavuniya.

The data on unemployment which is available for the country as a whole help us to identify some of the broad characteristics of the out-of-school population in these age groups. In the 10-14 age group approximately 31,000 are unemployed, but of them only 6,000 are actively in search of employment. The balance are classified as unemployed persons who are not actively seeking work. In the 15-19 age group the unemployed population is estimated at 202,000. Of these, 130,000 fall into the category of persons actively in search of employment while 88,000 are not actively seeking employment. When the student population and the unemployed have been accounted for, there are approximately 1.7 million in the 5-19 age group who are either in the employed workforce or are engaged in household work and are voluntarily unemployed. The available data on the age composition of the employed workforce indicate that in the 10-19 age group approximately 364,300 are already in employment, and of this number 53,980 are in the 10-14 age group while 310,316 are in the 15-19 age group. We are not in a position to construct a similar profile of the out-of-school young population for each of the districts as the corresponding district data on employment and unemployment are not readily available. More comprehensive and detailed information on the participation of the young population in the workforce and the levels of youth unemployment for each district would be of great value in formulating appropriate programmes of non-formal education which are adapted to the specific characteristics and needs of the young age groups in the various districts. It is evident from the data on formal education that there would be wide regional variations in the educational attainments of the young who are out of school, in their participation in the workforce, and in the levels of youth unemployment.

The scope of non-formal education among the young age groups would therefore have to be defined in relation to the highly differentiated character of the various age groups, their different levels of achievement, and different absorptive capacities.

The pre-school age group, for example, would require an approach and a set of programmes which are distinctly different from those needed in the older age groups. Non-formal programmes for the pre-school age group would be mainly designed to prepare the children in this group for their entry into the school system. This would include the initial process of socialisation and the development of attitudes and basic cognitive and other skills which make the children receptive to the content of formal education. The programmes for preparation of pre-school children for formal education are discussed in Chapter II. In regard to the 5-9 age group who have dropped out of the school system, we have to deal with a young population which has not succeeded in reaching minimal levels of literacy and numeracy. The 10-14 age group by and large fall into a category which has acquired a primary education and have dropped out of the system in the course of their secondary schooling. Not enough information is available to support any firm conclusions regarding the patterns of activity of the population between 5-14 years of age which is not participating in the formal educational system. What is most likely is that these young persons have been absorbed as part of family labour to share in the work load of the family and are engaged in all types of activity ranging from work in the family farm or other family enterprise to assistance in household work. The generally accepted approach to the problem of early school leavers in this age group would be to devise ways and means of increasing their participation in the formal school system so as to ensure that they achieve the basic norms of literacy and numeracy. It is therefore not surprising that there are hardly any well-conceived programmes of non-formal education which are specially directed at this group of school leavers. However, in the prevailing socio-economic conditions it would be unrealistic to expect

a sharp decline in the high rates of school drop-out in the age group 5-14 which are recorded in a number of districts. While undoubtedly future strategies will have to be aimed at increasing the level of participation in the school system, it would still be necessary to consider the feasibility of implementing out-of-school programmes which are capable of reaching this age group in a relevant form and improving their skills and aptitudes to enable them to become productive members of the workforce in their community. The 15-19 age group presents an entirely different set of problems. While this age group would consist of a fair proportion of young persons who had dropped out of the system at an early age, the larger component would contain persons who have reached the higher grades in the secondary level or have left school after reaching the terminal points in the system at grades 10 and above. It would be incorrect to regard the young persons in each of these age groups as belonging to an educationally homogeneous population. Each group would contain different levels of skill and attainment. Therefore if the programmes of non-formal education are to be relevant and effective they must cater not only to different sets of needs arising out of the differentiation in age, but would also need to take account of the heterogeneous pattern of achievement in each age cohort and be adequately responsive to the diversity of the various groups that are served.

II

The existing framework of non-formal education - Government agencies

This account of the young age groups who are outside the formal education system could now be related to the existing framework of non-formal education in the country. There are a wide variety of organisations both governmental and non-governmental which are engaged in activities which wholly or in part fall within the ambit of non-formal education. Table II attempts to classify the better known organisations which have undertaken programmes which cater to the needs of the young people. Their activities have been

classified under six basic headings. The agencies which are undertaking activities in the religious, cultural, moral, vocational and social fields would broadly fall within the definition of organisations engaged in non-formal education as some part of their activities would contain an educational content.

It would be observed that a number of government departments are active in the field of non-formal education. The main programmes of the government agencies are in the agricultural sector, the field of vocational training and cultural affairs. The government and government-sponsored programmes have access to financial and organisational resources of sufficient magnitude to enable them to reach a fairly large segment of the population. Designed as they are at present, these programmes are directed primarily to serve the school-leavers at the secondary level, and they cater to the 15-24 age group.

In the agricultural sector the **Young Farmers Clubs** cover the young people who are out of school and are between 15-25 years of age. The present membership of the movement is estimated at approximately 100,000 in 3,000 clubs. Among other activities, the programmes of the clubs are designed to orient young farmers to scientific agriculture and promote the application of modern knowledge and techniques to small scale farming. However the performance and the level of participation and activity in these clubs have varied widely and the proportion which is at present functioning efficiently is reported to be less than half the number of the clubs that have been established. An effort has recently been made to activate these clubs to perform more effectively. Five Agricultural Instructors trained in youth work have been appointed as full-time co-ordinators for young farmer clubs in five districts. The Department expects to evaluate the results of this experiment, and with the experience gained extend similar administrative support to other districts. Eventually every district will be provided with an agricultural instructor who will be responsible for rural youth work.

The **Practical farm schools** were set up in 1942 to impart training in agricultural practices to young men and young women who wish to engage themselves in agriculture, after leaving school, on their own lands or on lands alienated to them by government. By 1958 there were 15 boys' schools and 4 girls' schools. The objectives were not realised as most students who passed out became applicants for government employment, particularly in the Department of Agriculture. Only a few could be employed by government. The one-year course was of such limited scope that it was inadequate for persons who were to be entrusted with the responsibility of instructing practical farmers. Most of these schools have now been taken over by the Education Department to serve as training institutions for agricultural teachers in schools.

The **farmer education and training programme** organised by the Agriculture Department is directed principally at the adult farming population. These courses are each of one day's duration and are conducted in different parts of the Island. The programmes are organised round one or two practical farming problems which are of immediate concern to the farmers of a given locality. The classes are supported with practical demonstrations in the field. The programmes have proved effective as a means of combining theoretical knowledge with practice on a scale and at a level both appropriate and relevant to the farming population. These programmes could be adapted to serve the young out-of-school population who are working in family farms and serving what might be described as "an informal apprenticeship" with their elders.

The **Youth Settlement Schemes** implemented by Government are agricultural projects designed specially for the settlement of youths. There were 41 schemes as at the beginning of 1973 with 2,783 young settlers (vide Table III). Although these projects are primarily concerned with providing young people with opportunities for farming at a reasonably remunerative level, they are not devoid of a training and educational content. In fact one of the reasons for the poor performance in a number of these schemes has been

the neglect of the training aspects and the failure to provide adequate pre-settlement training and orientation for the young farmers. The programme of youth settlement could be integrated in a scheme of non-formal education both for the pre-settlement training of the young settlers themselves as well as for demonstration and training for other young farmers.

The projects of the **Divisional Development Councils** could be similarly incorporated into programme of non-formal education. In all, 588 Divisional Development Councils have been established, each covering the area served by the local government authority – the Village or Town Council. The Divisional Councils have started approximately 341 small-scale agricultural projects and 559 industrial and other projects. These are mainly organised as co-operative ventures (vide Table IV). They are expected to create employment for unemployed rural youth. It is estimated that the 610 projects under way will provide employment to approximately 8000 persons.

In industry and craft the **Department of Labour** and the Department of Small Industries implement a number of programmes for the training of school-leavers. The Labour Department runs two permanent vocational training centres in Colombo which together account for an annual output of approximately 400 craftsmen. These trainees are instructed in radio servicing and repairs, electrical wiring, welding, fitting and a number of other similar trades. In addition to these, the Labour Department has organised 114 mobile training centres offering courses of approximately six months' duration to groups of about 15 trainees per centre in different parts of the Island. A mobile unit conducts two courses in an electorate and then moves to another electorate. The training courses include hairdressing, carpentry, masonry, tailoring, tractor training and a variety of mechanical skills.

The programmes of the Small Industries Department reach a larger clientele. The majority of these programmes are designed to cater to the needs of young people in the

rural sector in the age group 15-24. Annually about 10,000 out-of-school youths are enrolled in textile production societies as apprentices for on-the-job training in handloom weaving. Similar training is given in power loom weaving. The Department runs approximately 250 workshops and training centres in a wide range of trades and crafts which include net-weaving, pulp and rag toys, reed products, rattan products, clay products, coir products, brass and silver ware, gem cutting and pottery. The period of training in these centres is approximately six months and the annual output is in the region of 2,500. Training courses of longer duration and higher levels of instruction are imparted in 68 industrial schools managed by the Department and 95 institutions in the private sector which are assisted by the Government. The annual output of these institutions is in the region of 1,250 trained craftsmen. The training courses include woodworking, textile weaving, needlework, metalwork and batik printing. The network of governmental and government assisted non-formal training institutions in crafts, industries and other non-agricultural occupations is estimated to serve approximately 25,000 young participants.

III

Non-Governmental Programmes of Non-Formal Education

The numerous non-governmental agencies which are active in the field of non-formal education have also made a significant contribution. The distribution of the activities undertaken by these agencies in the different parts of the Island are contained in Tables VIII-XIX. It would be observed that these organisations cover a wide range of activities relating to non-formal education. The programmes that are organised by many of these agencies already function or contain the potential for functioning as effective centres of non-formal education for different age groups.

The major religious institutions in the country undertake a number of diversified programmes in which the component of non-formal education figures prominently. As is to be expected, they continue to bear a major part of the

responsibility for dissemination of religious education. These include the Sunday schools conducted by the Christian churches, the Poya-day classes organised by the Y. M. B. A., the Dhamma schools sponsored by the Cultural Affairs Department and the Muslim Ahadiya schools. Accurate information relating to participation in religious education is not available. The participation of the Dhamma schools which cater to the majority religion is estimated at 450,000. The religious institutions are also responsible for some of the well-organised vocational training programmes such as the **Diyagala Boys' Town**, the **Yahapath Endera Farm**, the **Radio & Electronics Laboratory** and the **Trinity College Farm**. These projects offer intensive training in a wide variety of occupations ranging from light engineering, radio repairs, agriculture to animal husbandry. They are excellent prototypes of job-oriented non-formal education which can be appropriately adapted to the different socio-economic conditions and occupational needs of the different districts. The initiative for projects of this type has as yet come mainly from the Christian institutions which enjoy recognizable advantages both in regard to resources and organisational experience. Access to external aid from Christian communities in affluent countries is understandably much easier for the Christian organisations. Several Hindu organisations have recently formulated proposals for similar vocational training projects. Two examples are the Agricultural Training Centre for Kilinochchi in the North of Sri Lanka, sponsored by the All Ceylon Gandhi Seva Sangam, and the Agriculture Farm and Agricultural Training Centre project proposed by the Ramakrishna Mission for Batticaloa. The National Youth Organisation of the Buddhist Congress has recently attempted to launch a programme of youth education and community development and to activate the Buddhist community to emulate some of the development-oriented activities of the Christian churches.

Non-formal education is also undertaken by the various voluntary organisations with affiliations to the major religions of the country. These are the **Young Men's Buddhist Association**, the **Young Men's Christian Association**, the

Young Women's Christian Association and the Young Men's Muslim Association. These voluntary agencies cater primarily to the adolescent age groups and provide opportunities for the pursuit of a wide range of cultural, intellectual and literary interests as well as sports and recreation. They serve the function of developing youth leadership and promoting social awareness and civic responsibility in preparation for adult participation in the life of the community. In the recent past, however, many of these organisations have extended their activities into the development field and have undertaken various programmes which have elements of community development. The Y. M. C. A. has commenced work on a private self-employment project involving 50 rural educated youth. The Y. W. C. A. has long been active in the field of community development. It has organised programmes in a number of towns for the training of young women in various skills including sewing, cookery, block printing, leather work, toy making. It runs a career guidance and training centre. The Y. M. B. A. has planned a vocational training institute in carpentry, masonry, light engineering and metalwork. The current programme includes classes in music, drama, folk dancing and literary activities. The Y. M. M. A. has made plans for a vocational centre. It has organised classes in typewriting, book-keeping, lace-making, embroidery and dressmaking. It also runs a career guidance centre. The Y. M. C. A. has approximately 19 branches, the Y. M. B. A. 52, Y. W. C. A. 17 and the Y. M. M. A. 101 branches. A considerable number of these branches though formally established are reported to be inactive. The enrolment in these institutions is estimated to be in the region of 17,000.

The important secular voluntary organisations which are part of the system of non-formal education in the country are the network of clubs such as the Rotary Clubs operating from urban centres, Jaycees, Lions Clubs, the rural based movements such as the Lanka Mahila Samitis or women's societies, the government sponsored Rural Development Societies, the Sarvodaya Movement, and the two organisations which provide programmes of extra-curricular activities for the schoolgoing population - the Boy Scout Movement and the Girl Guides Association.

A unique feature of the **Sarvodaya Movement** is the way in which it designs its programmes with an age - specific orientation so as to cater to the needs of the different age groups in its clientele. At one end of the Sarvodaya programmes, services are provided for the children between 4 and 7 years of age including the pre-school age group. This group is given an organisational form within the movement and is designated the Singiti Havula. The age group 7-14 years is organised in the Singiti Havula. Similarly the adolescent age group is separately organised as the Yovun Havula. In this way the needs which are specific to each age group are articulated and served. The activities of the Sarvodaya Movement which are related to young persons extend from the training of pre-school teachers who are motivated to organise pre-school units in their villages to programmes for the training and development of skills in youth leadership, various trades and crafts and farming activity. The movement conducts training courses in woodwork, metalwork, batik printing, and rattan work. It has recently established a multipurpose project in Tanamalwila which combines a practical farm school with a number of farm enterprises designed to develop and demonstrate suitable patterns of diversified agriculture for the region. This project also aims at having a non-farming component based on processing of agricultural produce. The project if developed and elaborated could serve as a useful prototype of non-formal education for the Moneragala region in which it is located.

The Sarvodaya Movement is active in approximately 400 villages. There are wide variations in the intensity of participation in the movement among the different Sarvodaya villages. The Sarvodaya organisation itself has classified its villages into different groups ranging from those in which the movement is in an incipient stage to those where the movement is firmly grounded and where the essential objectives of Sarvodaya are being realised. The approach adopted by the Movement is to concentrate initially on a communal project such as a village road which can activate a community effort at the village level. Through such a project the Movement seeks to inaugurate a process of education for development which

will encompass other economic and social aspects of village life and will steadily raise the level of village co-operation, self-reliance and self-management.

The **Lanka Mahila Samiti** which is a nationwide voluntary organisation for women has approximately 2,301 branches with an estimated membership of 200,000. The organisation is avowedly established for the purpose of fostering concerted and organised action among women for their educational, social, economic and physical improvement. Its aims and objectives include the promotion of agricultural pursuits, homecraft and mothercraft, cottage industries, co-operative enterprise and mutual help, thrift and social hygiene. The Association runs a residential institute for training their paid and voluntary workers. The village samitis function on democratic lines with office-bearers elected annually. Programmes of education, training and village development are planned and implemented under the guidance of the trained sevikas (paid workers). The Samiti is usually confined to women in the age group 15-50 years with predominant emphasis on the age group 15 to 25 years. There are 24 model centres throughout the Island. The activities organised by these centres include agriculture, needlework and sewing, food preservation and canning and creche services. A trained supervisory worker (parikshana sevika) is based at each model village and supervises the work of the District.

The Boy Scout Movement has a membership of 18,205 and has branches in all the districts, 40% of its membership is estimated to come from the urban sector. The Girl Guides Movement has a membership of 14,420. The Movement does not as yet include Moneragala, Amparai and Polonnaruwa. Both movements cover the age groups 7-26 and are structured in four tiers to serve four age groups.

The **Rural Development Societies** which are voluntary village level organisations sponsored by the Government cover the entire country. Approximately 8,176 societies have been organised, of which 1,500 are women's societies. The Rural Development Societies are primarily set up for the purpose

of motivating the rural population to development and harnessing their voluntary effort for village works such as roads, community wells, self-help housing schemes and buildings for community services such as dispensaries, schools and libraries. The movement however contains programmes which have elements of non-formal education. A pilot project to develop 533 villages on an intensive scale has been initiated recently on the basis of 3 villages from each electorate. Under this programme each of the selected societies arranges a 3-year programme. The Department runs 10 training centres for a two-week training for 30-35 trainees. Attached to each training centre are 4 villages in the vicinity which serve as demonstration villages for those training at the centre.

The administrative framework for co-ordination of non-formal education for the young is still at an incipient and exploratory stage. At the apex, the Government has established the **National Youth Service Council** which is expected to function as the national level policy-making, planning and co-ordinating body for the youth services. The non-formal education programmes for the young age group would come within the ambit of this body. At the District level the co-ordinating administrative institutions are those established by the Government for the co-ordination of all Government activity. Radical innovations have been recently made in administrative structures at the District level, and politicians have been given a decision-making function in the executive. These changes are as yet in an experimental stage and it is difficult to predict the organisational structures and co-ordinating machinery that will eventually evolve at the District level. At the village level the Government has set up the Divisional Development Councils. These institutions while they are expected to function as village level planning bodies initiating the process of development planning from below are also expected to give special attention to the problem of unemployment among the young. These Councils could assume a co-ordinating role in the planning and implementation of programmes of non-formal education at the village level. For the co-ordination of voluntary activities undertaken by non-governmental institutions the Government has established the Sri Lanka Freedom From Hunger Campaign. This

body has been incorporated by statute and is expected to mobilise non-commercial resources in the form of voluntary services, self-help and private external aid for development activities in the country. The F. F. H. C. could therefore function as a focal point for the co-ordination of the activities of non-governmental institutions in the field of non-formal education.

At present it is difficult to perceive any clearly conceived and effective programme of co-ordination in regard to the various activities in the field of non-formal education, both in the governmental and non-governmental sector. Although small-scale voluntary initiatives in this field can develop best when they are free of close centralisation, supervision and control, such efforts could be better directed and more fruitful if each agency were able to see its role and the effect of its contribution within a well defined national framework. Such a framework would take into account the capacity and special orientation of the different agencies and make possible a greater complementarity and mutual reinforcement of effort. This applies to the government agencies as well. The programmes of the Rural Development Societies, the Small Industries Department and the Young Farmers Clubs could, for example, be better integrated than at present within the programmes of the Divisional Development Council. It will be seen that at the national level the National Youth Service Council and the Freedom from Hunger Campaign could be linked to provide the administrative machinery for developing a framework for a co-ordinated programme of non-formal education. At the village level the D.D.C. could serve as an appropriate instrument for such co-ordination. It is at the District level that it is difficult to identify an effective co-ordinating centre for such a programme, within the existing structures. These aspects will be examined in further detail in the later sections of this chapter.

IV

Matching existing programmes with needs

The prevailing system of non-formal education in the country could be now matched with the needs of the young age groups who are outside the school system.

The present programmes of non-formal education, with a few exceptions, do not have the capacity to reach out directly to the larger segment of the young population between the ages 6-14 who are outside the formal education system. It was seen that the one rural organisation which makes an attempt to design age specific programmes is the Sarvodaya Movement. The underlying assumption in most of the other programmes is that the need is most urgent in the 15-24 age group. It could be argued of course that the effort in the 6-14 age group should be concentrated on drawing this age group into the formal education system. However, as stated earlier, although such an effort has to be accorded high priority, the large mass of children in the 6-14 age group who will continue to remain outside the formal system would require programmes which would develop and improve their aptitudes, skills and knowledge. There are several points at which programmes of non-formal education could reach this group. The classes for religious instruction held by the various religious organisations could be expanded to provide some basic services for this group of children. The Young Farmers Clubs could also be used as a means to reach the drop-outs in the lower age groups. The Boy Scouts and Girl Guides Movement could examine the possibility of engaging in programmes which could be linked with the school drop-outs. The school drop-outs in the age group 6-14 would in the majority of cases be serving what might be described as traditional forms of "apprenticeship" under their parents or elders in various occupations as well as household activities. Therefore it would be a difficult task to design programmes which would directly communicate with the age groups. In the normal course they would have to be reached through their elders. The improvement of the skills and aptitudes of this young age group would depend on the quality of the skills and knowledge transmitted to them by the elders under whom they served. Programmes directed at adults such as farmer training programmes would have to take account of this fact and would need to include a training component which helps to improve the communication and transmittal of knowledge from elders to their "apprentices". But even when these aspects are taken into

account there is still a possibility of reaching these age-groups directly through programmes in which their participation is mobilised for particular activities at regular intervals. The Sarvodaya Movement has found one way of achieving this through their work camps, shramadana projects and the activities of the different havulas. Similar programmes could be developed by the Rural Development Societies and Lanka Mahila Samitis as well as the religious organisations.

In regard to the **school-going population**, non-formal education would need to develop the aptitudes and orientations which are complementary to the formal educational system and enhance its relevance to the socio-economic environment of school-leavers. These would be provided through the extra-curricular activities organised through various institutions such as the Boy Scouts Movement and the Girl Guides Association and various types of student associations and groups. The movements such as those of the Boy Scouts and Girl Guides in their original form were ill adapted to the local environment. Their activities and orientation even within the local setting reflected their alien origin. Much has been accomplished in the recent past to indigenise these movements and impart to them a content which links their membership with the local community and its work environment. There is further scope for the innovative adaptation of these movements to include work experience in agricultural operation, selective social service programmes, assistance to the disabled, organised participation in development projects in the vicinity, and activities which link them with the development of the community. The non-formal component in the education of the school-going population would have to complement and become an extension of the pre-vocational programmes, stimulating the students to incorporate their home environment and the occupation of their elders into their learning and conceptual framework. The various voluntary agencies which are active in the field could be mobilised to establish closer links between the school and the community in which it is located through activities in which the school-going population assist these agencies in the implementation of their programmes.

This type of activity is already organised by the Sarvodaya as well as a few other agencies. What is necessary is to see that these elements are further developed and more closely articulated in regular programmes in which the interaction between the school and its environment is intensified.

In the case of the 15-19 age group which is out of school the objectives of non-formal education and the means of achieving them are comparatively clear. Non-formal activities presently organised in this field provide a rich diversity of programmes. From these it is possible to select appropriate combinations of programmes which suit the regional variations reflected in different educational levels, varying socio-economic conditions and occupational orientations of the various sub-groups in the young population. The young farmers programmes which cater to the needs of young people in the rural sector who will continue in agriculture serves as an effective means of non-formal education for the out-of-school population in the young age group. Present programmes could be further elaborated taking into account the skills and educational levels of the young people in different districts as well as the agricultural resources and potential in those districts. The programmes of the Small Industries Department and the mobile training centres of the Labour Department cater to the needs of the rural non-farming youth with relatively low educational attainments. The Small Industries Department attempts to adapt its programmes to the skill potential as well as the natural resources in the different localities. These programmes however can succeed only to the extent that they provide remunerative work opportunities for the trainees. At present adequate information on the employment aspects of the ongoing programmes is not available. Many of the crafts such as basket weaving, toy manufacture, lace making, woodwork and handicraft of various types could be further expanded only if efficient and ready marketing outlets are available for the products. The non-formal training programmes have therefore to be organised in relation to a sound production and marketing programme. Such a programme could be profitably linked to tourist demand as well as to export markets.

The non-formal institutions at a higher level, such as the Diyagala Training Centre, Yahapath Endera Farm, the industrial schools, the Trinity College Farm, the Labour Department vocational training centres all offer programmes at a higher and more intensive level and cater to a group with comparatively higher educational attainments. Many of these centres with a few exceptions are urban-oriented and train for technical jobs in the urban sector. Centres of village technology adapted to the rural sector able to impart an assortment of skills applicable to the rural environment could serve a useful function in a programme of rural non-formal education. The curricula of these centres would have to be imaginatively designed to suit the technical needs and occupational demand of the changing rural environment. They would need to avoid the type of specialisation in skills and crafts appropriate to the urban sector which are part of the training imparted by the vocational training centres already in operation. In place of specialised training in particular occupations such as those of electrician, welder, fitter, what may be needed is more generalised training in a combination of skills at a less specialised level that can cater to the needs of the rural society and can find adequate employment for a "general" technician of this type within a rural environment.

Finally we have the non-governmental programmes of Rural Development Societies, Sarvodaya, Lanka Mahila Samitis and religious associations of young men and women. The intensive development programme undertaken by Rural Development Societies offer focal points through which programmes of non-formal education could be launched. The training programmes of Sarvodaya as well as of the multi-purpose project in Tanamalwila would be another significant component in any plan which seeks to co-ordinate the programmes of non-formal education in the country. The Lanka Mahila Samiti programmes which are directed at the female population offer a wide range of activities which can incorporate the young female population in an integrated effort at non-formal education.

The different programmes that have been outlined offer scope for developing a system of non-formal education in the country which can effectively complement the system of formal education and acquire the capacity to reach progressively larger groups of young persons, particularly those categories which are out of the school system and who are most in need of such services. Different components in the prevailing programmes could be selected and suitably elaborated both to serve the needs of different age groups at different levels of educational attainment as well as cater to the specific requirements in different socio-economic settings in the different districts.

The available information on the district distribution of non-formal educational programmes is analysed in Table XX. In almost all Districts the main agencies responsible for non-formal education are active. Every District includes a programme of young farmer clubs, a special project of the Rural Development Societies, programmes of the Lanka Mahila Samiti, projects of the Divisional Development Councils, membership in the Boy Scouts Movement, programmes of the Small Industries Department, the Sarvodaya Movement. The young men's and women's religious organisations do not cover all Districts. The vocational training centres which offer intensive courses are largely concentrated in the urban sector. Although ostensibly the coverage of non-formal education is extensive, the performance in the various districts is very uneven and the concentration of effort is not uniformly distributed. This is to be expected in the case of non-governmental agencies. With their limited resources they have to be selective in the location of their projects and concentrate on the successful implementation of a few programmes. The government programmes on the other hand can suffer from the lack of effective regional planning. The effort in these programmes is often too thinly spread, and available resources distributed without regard for the varying capabilities and requirements of the different districts.

The non-formal programmes are weak and relatively scarce in the very districts where large cohorts of young people leave the formal educational system at an early stage.

Such districts include Mannar, Vavuniya, Anuradhapura, Polonnaruwa, Moneragala and Batticaloa. The effort in non-formal education in the districts with a high drop-out in the primary and secondary educational levels will be different from the districts with an educational profile such as that of Jaffna, Colombo and Galle which have a higher proportion of the schoolgoing population reaching the secondary level and the terminal points of the system. Whereas the non-formal programme of Sarvodaya, the Small Industries Department, the Young Farmers Clubs would have greater relevance for the former group of districts, the districts such as Jaffna, Colombo and Galle could effectively absorb programmes on the lines of Diyagala Boys' Town and vocational training centres which offer training for urban-oriented jobs. These features are already evident in the growth of non-formal educational institutions and the pattern of their distribution in the country. What is required is a well-conceived programme which will further develop those elements in the system which have proved their relevance and effectiveness. It might be argued that such an approach could well consolidate the occupational and technological disparities among the different regions. This however would not be the objective or outcome of a strategy of the kind proposed. The adaptation of programmes to suit the prevailing educational levels and absorptive capacities is to ensure that the content of the programmes are readily absorbed and applied and that the improvement of skill and know-how is as widely dispersed as possible.

The concluding section of the last chapter pointed towards a feasible approach to regional planning in relation to the needs of children and adolescents. It was suggested that typical programmes could be developed for a few selected districts, each of which presents a different combination of problems and needs. Each District would be broadly representative of a group of districts with similar socio-economic conditions and at similar levels of development. The non-formal education programme could form part of such integrated district plans for children and adolescents. In these plans the complementarities between the formal and

non-formal system as well as the links between learning and work opportunities could be elaborated in the different situations prevailing in the different districts that are selected. The strategy for non-formal education would then include a set of model programmes -

- (a) for the pre-school age group related to mobilisation of voluntary agencies for pre-school work and the training of pre-school teaching cadres;
- (b) for the 6-14 age group which would again mobilise movements such as Sarvodaya, the Young Farmers Clubs, the Lanka Mahila Samiti, the religious institutions and the Boy Scouts and Girl Guides Movement;
- (c) for the 15-19 age group. These programmes will take account of the different educational levels and employment status of these groups. Such programmes will on the one hand draw appropriately on components in the prevailing non-formal education suited to persons with relatively low educational attainments, i. e. programmes such as the Young Farmers Clubs, the Labour Department mobile units, the Small Industries Department programmes. On the other, they will select components which are better adapted for young persons with higher educational attainment such as the Diyagala Boys' Town and similar institutions. It is here that the adaptation of vocational technology would have to be considered. In developing the District programmes the special projects and areas of concentration in the various non-formal programmes could be taken into account and brought together to result in a concerted and mutually reinforcing effort. Here the special projects of the Rural Development Societies, the projects of the Divisional Development Councils, the model centres of the Lanka Mahila Samiti, the five demonstration Districts for the young Farmers Clubs, the special projects of the voluntary agencies such as the Tanamalwila project of the Sarvodaya could

serve as central components in the District programmes and non-formal educational programmes could be elaborated and organised around them. Thereby, the non-formal programmes for the 14-19 age group could be oriented to employment and closely linked to work opportunities.

Conclusions

- The programmes of non-formal education are directed principally at the young population in the age groups 05-24 who are out of the formal schooling system.
- Available data indicate that 1,981,000 young people between the ages 05-19 and 1,175,500 in the age group 20-24 are outside the schooling system. Of this population in the 05-19, 364,300 are employed, 233,000 unemployed and the rest engaged in household work are voluntarily unemployed. Of the 20-24 age group who are out of school, the corresponding figures are 534,500 employed, 277,990 unemployed and 362,000 in other activities or voluntarily unemployed. It is estimated that there are approximately 1,083,929 in the 5-14 age group who are not in the school stream and whose educational attainments are relatively low.
- The young people in these age groups outside the schooling system are a heterogeneous population with different levels of educational attainment and non-formal education programmes have to be tailored to cater to their heterogeneity.
- The non-formal educational programmes are organised by the government as well as by non-governmental institutions. The programmes cover religious, cultural, moral, social, and vocational education.
- The government programmes are active in the agricultural and industrial sector. In agriculture the programmes include young farmer clubs, youth settlement schemes, practical farm schools, farmer training. In industries they

include training schemes in handloom weaving, industrial workshops and centres with courses of six months duration, Industrial Schools with longer and more intensive training, vocational training centres for electricians, fitters, machinists, welders etc., and mobile vocational centres at a lower level of skill for training of hair-dressers, tailors, masons, carpenters etc.

- The non-government programmes cover a wide range of activities. Religious institutions have established a number of vocational training centres in industrial and agricultural occupations, e.g. Diyagala Boys' Town, Trinity College Farm. The religious associations of young people, such as the Y. M. C. A., Y. W. C. A., Y. M. B. A., Y. M. M. A., have organised cultural activities as well as training schemes. The secular organisations include Sarvodaya which is active in the rural sector, Lanka Mahila Samitis or women's organisations, the Rural Development Movement, the Boy Scouts and Girl Guides Movements.
- The non-formal programmes insofar as they concern the young are mainly aimed at the 15-24 age group. With the exception of Sarvodaya, there are no programmes which directly reach the large out-of-school group in the 5-14 age cohort.
- Components of most of the important non-formal education programmes are found in almost every District in the country. But intensity of effort and the levels of participation and performance vary widely from District to District. The better organised non-formal institutions such as the Diyagala Boys' Town are mainly concentrated in the urban sector; and of the urban, the western region in and around Colombo is best served. At present non-formal programmes whether in the governmental or non-governmental sector are not co-ordinated. There is no conscious and planned effort to develop and build on the complementary and mutually supportive roles which the different non-formal educational programmes could play. The National Youth Council and the Freedom

From Hunger Campaign are national-level organisations for co-ordination of these activities. At the village level the Divisional Development Council could undertake this role. There is no well-defined co-ordinating authority for these activities at the District level. At present the Government Agent and his staff would attend to this function as and when problems need attention.

- The existing programmes of non-formal education contain a large number of elements which could be selected and elaborated into well-coordinated age-specific programmes for the different age groups.
- The out-of-school population in the age group 5-14 is not being adequately served at present by programmes of non-formal education. The programmes for the 5-14 age group would have to combine elements of continuing education with upgrading of skills and aptitudes. The farmer training programmes for adults should contain a training component which improves the communication of knowledge and skills from the elders to their children working in family farms and enterprises. The 5-14 age group could be reached through a number of existing programmes which could be extended and modified appropriately. These are the religious institutions, the Young Farmers Clubs, the Sarvodaya Movement, the Lanka Mahila Samitis and Farmer Training Programmes, the Boy Scouts and Girl Guides Movement.
- For the 15-19 and 19-24 age groups out of school, programmes which are adapted to different educational levels are available. The Sarvodaya, the workshops and some of the training schemes run by the Small Industries Department, the Labour Department mobile training units will cater to the early school-leavers. The vocational training centres run by the religious institutions, e.g. Diyagala Boys' Town, the Industrial schools by the Small Industries Department, the vocational training centres of the Labour Department will cater to youths with better educational attainments.

- From these elements it would be possible to formulate integrated and age-specific programmes of non-formal education catering to the different groups of the young population. This could best be done by developing programmes for a selection of districts with different sets of needs. The districts suggested for a similar exercise on formal education could be taken for non-formal education as well. The complementarities between the formal and non-formal systems and the close links between learning and work opportunities could be elaborated in the different situations prevailing in the different districts.
- Special vocational training projects such as the Tanamalwila project of Sarvodaya, or Diyagala Boys' Town, the special projects of the Rural Development Societies, the model centre of the Lanka Mahila Samiti, the Five Districts of concentration for the Young Farmer Clubs could be used as focal points for these integrated programmes and the activities developed and organised around them.
- These integrated programmes would have to be employment-oriented and closely linked to work opportunities. For this purpose the non-formal education programmes should as far as possible be co-ordinated with the projects of the Divisional Development Councils, Youth Settlement Schemes, and other Youth Schemes commenced under the Land Reform.
- The administrative framework for the co-ordination of non-formal education programmes has to be developed through the National Youth Council and the Freedom From Hunger Campaign at the national level, and the Divisional Development Council at the village level. Effective machinery for co-ordination at the District level has to be established.

CHAPTER IV

HEALTH AND NUTRITION OF CHILDREN AND ADOLESCENTS

I

Introduction:

The needs related to the physical well-being of the age group under study cannot be discussed entirely independently of the needs of the total population and the system of preventive care and curative services which safeguard and improve the health of the entire nation. The development of health services has been one of Sri Lanka's major achievements. The steady expansion of the health services, the provision of free medical care to all age groups, the establishment of a wide network of medical institutions throughout the country have resulted in increasing the average life span from 43.9 (males) and 41.6 (females) in 1946 to 64.6 (males) and 66.9 (females) in 1967 within a period of about 20 years. The mortality rate has declined to levels comparable to those of the most advanced countries and stood at 7.5 per 1000 in 1970. Programmes of immunisation and special health "campaigns" have either effectively controlled or eradicated many of the major diseases such as malaria, small pox, polio, cholera and tuberculosis. The national health system, which has achieved for Sri Lanka a relatively high standard of health among developing countries, safeguards and upgrades the general standards of health of all age groups. In many of its services and campaigns it includes the age group under study as a part of its total effort without any clearly identifiable differentiation in the intensity or quality of its services.

But within the total system it is still possible to identify the needs which are specific to the age groups under study which assume a relatively more urgent character for them.

Thereafter, one could examine how the available services reach these age groups and cater to these needs. The age group under study, particularly the pre-school groups and groups immediately after them, are among the more vulnerable sections of the population in regard to health. The foundation for physical well-being in later life resulting in high physical and mental productivity is laid during the period of physical growth, and therefore in designing the preventive and curative services the national health system has to pay special attention to this factor. Finally, the investment on medical care for these age groups brings higher long-term social returns by reducing the rate of morbidity in later life and producing a healthy, active adult population.

This chapter attempts to present from available data and indicators of health, the state of health of the age groups under study and will describe this condition firstly at the national level and thereafter indicate significant regional variations which show regional imbalances in the distribution of the services and the access to them. It will also identify areas where existing knowledge and data are inadequate and where further study and research are needed for the effective formulation of national health policies; and elicit in a tentative manner the significant elements of a health programme catering to the specific needs of these age groups which would receive the attention of policy-makers.

II

The State of Health of the Young Age Groups

Tables 1-8 present the available data relating to the health of the age groups under study and the services which cater to the health needs of the population. The first set of tables have assembled a selected range of information which provides an overview of the national situation in regard to this age group. They present available data on the mortality and morbidity rates of this age group, the incidence of selected diseases and levels of nutrition. They also indicate the national network of services available within the preventive and curative medical system in the country including ante-natal and post-natal services, the immunisation

programmes, the school health services and the paediatric indoor medical facilities. These tables also elaborate the data on a regional basis and identify the disparities in the conditions of health and the availability of services in different parts of the country.

At the outset it has to be pointed out that the data that is available has not been adequate for the analysis of the health needs of these age groups on as detailed and comprehensive a basis as would have been desirable for the purpose of the study. Nor has it been sufficient for a complete regional comparison of the health conditions, the health needs and the supply of these services. Therefore, what has been presented is an initial attempt to assemble and analyse available data in relation to the specific needs of the study, and at the same time, to identify critical gaps in information which would have to be subsequently filled by further investigations and research. The chapter has also attempted to provide some information in regard to the levels of nutrition in the age groups which have been selected for the study. The information available in this area has been fragmentary. The data which has been tabulated has been put together from information available in different surveys in the Administration reports of the Director of Health Services as well as other unpublished sources.

Data pertaining to the **age specific mortality** rates for the age groups 0-24 are contained in the set of Tables 1 to 14. The infant mortality rate registered a steep decline during the period 1946-1955. The average for the period 1946-50 was approximately 101 per thousand live births. The average for the succeeding five-year period dropped to 75 and at the end of the 'fifties' it had dropped below 60; an increasing downward trend is observed - the rate for 1970 being 50 and for 1972 48.4. The comparable rates for selected developed and developing countries are shown in Tables 1 and 2. Although the infant mortality rate in Sri Lanka compares favourably with those of the selected developing countries, the survival prospects of the infant population in Sri Lanka are still considerably below those in the developed

countries. It has not been possible to obtain more detailed information on infant mortality and morbidity in the 1-9 age group which would have thrown light on such aspects as the variations in these mortality rates in low-income households and families of large size. It might be argued that the weight of specific evidence is not required to conclude that infants would be most 'vulnerable' in low income households where conditions of housing and sanitation are most often substandard and nutritional levels low or in the large families, where the burden of child-bearing and the workload of child-care and upbringing are excessive. But accurate and well-documented information on these aspects of infant mortality are of value in ascertaining the dimensions of the problem, as low income and large family size are characteristic of the majority of households in the country. While such data are also essential for evaluating the effectiveness of the free medical services in reaching out to the most vulnerable social groups, they could also provide guidance for family planning and maternal and child care programmes.

As is to be expected, the next highest age specific mortality rate is in the 1-4 age group with a rate of approximately 5.0 per thousand. The mortality rates for the other three age groups are below 1.8 per thousand. The mortality rate is lowest for the age group 10-14, and thereafter gradually rises to 2.4 for the age group 20-24. The mortality rate again follows the expected curve in which the young age groups with the highest natural resistance to illness are at the lowest points of the curve. The pattern of mortality rates is comparable to that of several developed countries for the 10-24 age group.

The socio-economic survey of 1969/70 contains some data relating to the **incidence of morbidity** in the urban, rural and estate sectors. The data are based on estimates prepared from information recorded by investigators for a period of two weeks prior to the interview and would, therefore, have to be treated with some caution. The available information has been tabulated in Table 2. This table shows the age distribution of the persons reporting sick during the period of

survey. The morbidity indicators show that the rural sector is the most vulnerable in regard to the 0 - 14 age group, with the urban sector following closely behind it. The morbidity rate for the 0 - 14 age group in the estate sector is considerably below the other two sectors. In the 15 - 24 age group, the ranking has altered. The rural sector still registers the highest rate with 5.5%. The estate sector is next with 4.7%. The urban sector has the lowest rate for this age group. It is difficult to elaborate on these data and draw any firm conclusions about the general standards of health and services in these three sectors; it is possible that the differences in morbidity reflect differences in nutritional levels and the package of services available in the estate sector as well as the patterns of residential living and the ease of access to the population in providing regular health services. As will be seen later, data on nutrition also appear to reveal a more favourable situation in the estate sector in spite of household incomes which are lower than those of other sectors. These again may be related to special conditions relating to food supplies in the estate sector or perhaps on the choice of the sample itself. The differences revealed in the statistics that are presented in Table 2 are, however, significant and deserve closer investigation if the elements contributing to these differences are to be identified and examined in relation to any national health and nutrition programme for these age groups. The situation in the plantation sector, particularly in the estates employing resident Indian labour, have changed for the worse over the last 2 years. The estate population has been the segment which has been worst exposed to the recent food shortages and most seriously affected by them. The State acquisition of estates combined with the Land Reform, have increased the unemployment among Indian workers and have further depressed their economic conditions.

In general, the morbidity rates for the different age groups below 24 follow the expected pattern in the urban and rural sectors. One can observe some correspondence between the age-specific mortality rates and age-specific morbidity rates. The 10-19 group has the lowest rates for both morbidity and mortality. The rates rise for the age group 20-24 and these higher rates persist in the next age group 25-29.

It is possible to obtain better information on the age-specific incidence of morbidity from an analysis of data available on patients making use of the public health services. Such an analysis would yield more reliable information regarding the rate of morbidity, the incidence of different diseases, current expenditures and a host of other aspects that would be of value to health planners and policy-makers in improving the health services for this age group. Available data, however, are not collected in a manner which lends itself easily to such analysis. A few empirical studies in selected medical institutions over a period of time would be necessary if such an analysis is to be undertaken.

From the available data, however, it is possible to obtain some idea of the incidence of **children's diseases** and other illnesses to which the young age group appear particularly vulnerable. Tables 3-3.5 present selected data for Poliomyelitis, Diphtheria, Whooping Cough, Tetanus, Tuberculosis, Infective Hepatitis and Typhoid. According to the data available, the incidence of most of these diseases is highest in the age group below 25. The incidence of polio in Sri Lanka has fluctuated from 15.9 per 100,000 in 1961/62 to 2.3 in 1964/65, 1.7 in 1966/67 and 8.5 in 1967/68. The latest age specific data available was for 1966/67. These indicate that 90.3% of the cases were children under 6 years of age. In the outbreak of polio in 1968, the incidence rates were highest in the Colombo Municipality, Batticaloa, Matale, Jaffna and Puttalam. In 1972, the incidence of polio dropped to 301 cases or 2.3 per 100,000. The incidence was highest in Colombo (17%), Jaffna (15%), Kurunegala (14%) and Kandy (10%). The health authorities reporting on the outbreak of polio in 1968 commented that "an epidemic in a country with an immunisation programme is rather disturbing. The situation is due to the fact that the immunisation of the oncoming infant population is still very incomplete". For the year 1970/71, Diphtheria showed an incidence of 8.6 per 100,000. Of the Diphtheria cases 65% were under 5 years of age with a fatality rate of about 10%. The incidence of Hepatitis was much higher at 49.2 per 100,000. 46% of the cases of Hepatitis were under 10 years and 74% under 20. The incidence of Typhoid stood at about 34.8 per 100,000.

Tetanus has been on the increase with a high mortality rate of 20-25%. In the case of Tuberculosis, the number of new cases registered indicate that there has been a decline in the incidence among the age groups under study. It would be seen that the diseases that have been mentioned, with exception of Tuberculosis, have a high incidence among the young population. Of these, Diphtheria, Whooping Cough and Polio are diseases to which the population under 5 years of age have been particularly vulnerable. In the case of most of the diseases mentioned, there has been a drop in incidence although the rates have shown fluctuations, e. g. Diphtheria cases have dropped from 1,453 in 1967 to 715 in 1971, Polio from 345 in 1965/66 to 301 in 1970/71. In the case of Diphtheria, Polio, Whooping Cough, Tetanus and Tuberculosis, major immunisation programmes which will be described later have helped to control the incidence.

The available data on **nutrition** in relation to the age groups under study are scanty. It is possible, however, to assemble and analyse whatever is available in order to gain some general idea of the prevailing standards of nutrition. There is first the data available from the socio-economic survey which, while they provide information for the whole population and are not reducible to age-specific components, indicate the national and regional levels for different income groups and enable us to place the problem of nutrition for the young age groups in perspective. Information of a more age specific character is available from the school health examinations. The incidence of diseases which have nutritional causes as derived from Health Department records provides further information.

A recent analysis of the socio-economic survey data concluded that there was no major nutritional problem¹ since the marginally adequate average picture of the Food Balance Sheet taken as a standard does not break down completely among the poorer sections of the population.

1. "The effect of Income on Food Habits in Ceylon" - L. N. Perera, W. S. M. Fernando, Beatrice V. de Mel and T. T. Poleman - *Marga Quarterly Journal*, Vol. 2, No. 1, 1973.

Table 4.3 sets out the position regarding the nutritional intake of different income groups. Nevertheless, among the under Rs. 200 group, except in the estates, there is clearly a considerable degree of under-nourishment, the worst affected being the urban poor and groups with household incomes below Rs. 100. Even in the Rs. 200 - 400 group, there would appear to be only a marginal adequacy. Other nutritional studies undertaken by the Medical Research Institute (Sri Lanka) confirm a protein-calorie deficiency particularly in the vulnerable sector of the lowest income group and this was often found to be associated with a high prevalence of nutritional anaemia consequent chiefly on iron, foliate and calcium deficiencies.

Nutritionists have referred to special factors such as dietary habits and the precedence with the family which affect the distribution of food within the household and the nutrition intake by the young. The per capita figures of nutritional intake may, therefore, not reflect the real situation, and although, in average terms, the nutritional problem may not appear serious, the arrangements within the household may affect the vulnerable groups in different ways. This is again an area where more empirical evidence is needed.

Although the analysis referred to above indicates that the estate sector is relatively better off in terms of nutritional intake, evidence from other studies points to the contrary conclusion that there is in fact, a high prevalence of nutritional anaemia among the estate population². In a study titled "Some problems on the management of Anaemia among tea estate workers in Ceylon", investigations were undertaken to determine the 'incidence' type and severity of anaemia amongst the workers and how it could be corrected. 347 Workers of whom 212 were females were investigated and it was found that 50% of the females were anaemic and 14.1% of the males were in a similar condition.

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2. "Some problems in the management of Anaemia in the tea estate workers in Ceylon". B. Seneviratne, J. Hettiaratchie and Kamalini Seneviratne.

This group of anaemic workers had a per capita income of less than Rs. 20 a month. Of those identified as anaemic, 125 were severely affected and a further study of their food intake was undertaken. 75% of them ate a diet which was "inadequate in dietary protein" and in 20% the diet was "grossly inadequate". 6 of the 125 persons ate no animal protein at all; milk, although it was taken by 65.6% was taken in small quantities in their tea.

In a further study comparing the incidence and degree of anaemia in two economically important communities namely the rice farmers in a colonisation scheme in the North Central Province and the Hantane Tea Estate labourers, 222 workers in the colonisation scheme were investigated.³ The protein consumption of the estate workers was significantly less than that of the rice farmers, while among the farmers themselves 71.2% had an inadequate protein intake. The position cannot have improved since this investigation as shortages in food supply is felt most acutely in the estate sector coupled with the reduced number of days of work available on the estates which further reduces their income levels.

Further information on nutritional levels is available from investigations of children admitted to the Lady Ridgeway Hospital (children's hospital). This study was directed at assessing the prevalence of third degree protein calorie malnutrition.⁴

Admissions to the University Unit - Lady Ridgeway Hospital

Percentage of Protein Calorie Malnutrition (third degree)					
Year	Total	Kwashiorkor	Marasmus	PCM III	
1967	3748	40 (1.1%)	168 (4.4%)	208	(5.5%)
1972	4138	18 (0.4%)	121 (3.4%)	139	(3.4%)

3/ "Anaemia in two economically important communities in Ceylon."
B. Seneviratne, J. Hettiaratchi, Kamalini Seneviratne.

4/ Unpublished data.

On the basis of this study, there is a fall in the incidence of Kwashiorkor, Marasmus, and PCM III between the years 1967 and 1972. This is, of course, not a selected sample. Nevertheless, it is an indication that in Sri Lanka severe cases of malnutrition are very much lower than in many of the other developing countries.

Examination of 410 children between the years 0-3 in a Community Health Project in Pitakotte over the years 1968-73 revealed that 35.3% of the children were normal, 46.0% suffered from first degree nutrition deficiency; 16.2% from second degree and only 1.7% from third degree deficiency.⁵

Another study done by the Colombo Municipality in April 1974 on 871 children attending Child Welfare Clinics 0-5 years, 58.1% were normal, 27.9% showed first degree, 12.8% second degree and 1.2% third degree malnutrition.

The data available from the school health examinations are given in Table 5 and 5.1. The numbers of students examined during each year, show considerable variation. In 1970/71, 2,517 schools out of a total of 8,585 participated in the examination and 204,147 students or 8% of the schoolgoing population were examined. The school health system, if properly maintained, would provide a very valuable record of the health of a major component of the younger generation. The data that have been collected for the study, however, are limited in their coverage and provide only a few indications of the state of health of the schoolgoing population. The 1971 figures showed that 55% of the children examined suffered from some type of health deficiency. The majority of these deficiencies were dental. More detailed figures were obtained for the students examined in the fourth quarter. Cases of vitamin deficiency amounted to approximately 12,000. On the assumption that the numbers examined during each quarter were roughly the same, it could be estimated that approximately 24% to 25% of students examined suffered from vitamin deficiency. The

5. Unpublished data

figures give some idea of the prevalence of nutritional deficiency in the schoolgoing group in the population. The picture that emerges, while not being one of grave nutritional deficiency, underscores the need for a major effort at the systematic upgrading of health of the younger generation. The information available through the school health system at present does not lend itself to reliable comparative analysis across the years or across regions. It is doubtful whether norms are uniformly applied and deficiencies are recorded accurately and in sufficient detail in terms of these norms. It also does not appear that the follow-up on detections of defects and the maintenance of medical records for the school children over a period of time is adequate.

The surveys that have been carried out cannot, however, be regarded as representative of conditions prevailing in the low income groups as a whole. But even if we accept the relatively optimistic conclusions derived from the socio-economic survey, it is obvious from the scattered pieces of evidence available in the small surveys that have been conducted in different social groups that the problems of malnutrition can assume acute forms in the pockets of poverty that occur in the urban, rural and estate sectors. The most vulnerable sections are evidently the young age groups among the resident estate population and the urban poor in slums and shanties. More systematic and representative surveys of the nutritional levels in the country with special reference to the depressed segment need to be undertaken before reliable analysis of the prevailing situation in regard to nutrition could be made.

The prevailing rates of morbidity and the high incidence of certain diseases are closely associated with poor **environmental sanitation** – polluted or unprotected sources of water supply, lack of toilet facilities, and unsatisfactory disposal of human and other wastes. Water-borne diseases of the Gastro intestinal system rank very high among the diseases for which patients receive institutionalised treatment. Enteritis and Helminthiasis come fourth and eighth among

the diseases for which treatment was received. Worm infestation among children is a very common condition. Children succumb to it as early as in the second year of their life, and the proportion of victims progressively increases upto 50%, for children under 10 years of age.

According to data from the socio-economic survey of 1969/70, (vide Table 6.) two zones had over 10% of their population dependent on rivers, streams and tanks for their drinking water. These zones include Moneragala, Amparai, Polonnaruwa, Anuradhapura, Puttalam, (Zone 2 in the survey) Kandy, Matale, Nuwara Eliya, Badulla, Ratnapura, Kegalle and Kurunegala (Zone 4 in the survey), in all 12 of the 22 districts in the country. In regard to toilet facilities, districts in Zones 2 & 3 had 60.9% and 63.4% of the households possessing no toilet facilities. Zone 3 included Jaffna, Mannar, Vavuniya, Batticaloa and Trincomalee. In Zone 4, the number of such households amount to 29%. The data available is still at a level of aggregation which makes it difficult to locate the districts and areas where problems of environmental sanitation are most acute. The lack of toilet facilities, or protected sources of water will have consequences for environmental sanitation which will vary with agro-climatic conditions, population densities in the human settlements, the availability of forest and other land in the vicinity of the settlement, the spatial spread of the households and so on. The aggregate data however, point to the widespread prevalence of poor conditions of environmental sanitation in the majority of the districts.

Rate of Fertility and the size of the family are important factors in the maintenance and care of the young population. The patterns of reproduction, the number of children in the family and the interval between births will all have some bearing on the attention and care given to the children as well as the resources spent on their upbringing. There is insufficient data on family size and the variations in size as among income groups, regions and ethnic groups. Data on household size, as distinct from family size, is available in the Socio-Economic Survey. These

may assist us in coming to some tentative conclusions. Household size is largest in the Districts which are predominantly rural. These are Zone IV, which includes Kandy, Nuwara Eliya, Matale, Badulla, Ratnapura, Kegalle and Kurunegala and Zone 2 - Moneragala, Amparai, Polonnaruwa, Anuradhapura and Puttalam. (vide Table 7). Zone IV has a household with an average 6.7 occupants and Zone II, 6 occupants. Zone I & III have 5.8, and 5.4 respectively. Data on the order of live births show that 25% were of the order more than five, which is a reliable pointer to the high proportion of large size families. There has been no survey which has examined the influence of income, ethnic and other factors on family size. Of course, random observation tends to support the view that population at lower income levels, and of this the rural population, have the highest propensity for producing large sized families.

In Sri Lanka, age specific fertility rates of age groups are not available prior to 1952. Table 8 gives the age specific fertility rate from 1952 to 1968. These rates show that during the 3 years 1961-1963, the highest fertility rate has occurred among women in the age group 25-30 years. The second highest rate was experienced by women aged 30-34 during the years 1956-1966 and by those aged 20-24 during the other years in this period. It will be observed that except for slight variations there has been generally a fall in the fertility rates of the young age groups and a rise in those of the older age groups. This decline in the fertility rates of the younger age groups is largely attributable to the rise in the age of marriage. The recent studies of trends in fertility show that there has been an average decline in Sri Lanka's birth rate of approximately 1.2% per annum between 1953 and 1963 and approximately 1.7% between 1963 and 1968. Since 1963, the continuing trend in the postponement of marriage and decrease in marital fertility among women over 25 years of age, appears to have sustained the decline in the birth rate. A more detailed breakdown of fertility, however, is not available to identify significant variations in regard to income, region or ethnic group.

The National Health System and the Young Age Groups.

The foregoing account was a broad analysis of the state of health of the young age groups under study in terms of a few selected indicators of health—age specific mortality rates, rate of morbidity, incidence of selected illnesses, and nutritional standards and deficiencies. The sections which follow give an account of the national health system which provides the services to this age group.

The components of the national health system which have an age-specific character and serve the particular needs of the age group under study are —

- (a) the maternal and child health centres,
- (b) the institutionalised paediatric medical services,
- (c) the immunisation programmes,
- (d) the school health services,
- (e) the feeding programmes, and
- (f) family planning services.

Programmes (a) & (d) are both preventive, and curative, Programmes (c), (e) & (f) could be described as “preventive” in orientation. Tables 9-11.2 present the data for each of these programmes.

Before the programmes are examined it would be useful to place these age-specific services within the context of the **general health services** in the country. Tables 9-9.2 present information on the availability and distribution of medical institutions in the country, the level and extent of the facilities available for indoor medical care, and the ratios of doctors and other medical and paramedical personnel to the population. In comparison with other developing countries in the region, Sri Lanka's medical system is above average in relation to its national income and is designed to reach as wide a section of the population as possible within the limited resources available. The government expenditures on health constitute 6.8% of the national budget and 2.5% of the national income (1969/70). As stated at the commencement of this chapter, the national health system has been

able to effect a steady improvement in the health of the population. Apart from the dramatic increase in life expectancy, there has been a substantial measure of success in the elimination or control of the debilitating diseases and scourges which resulted in high mortality rates in the past. These include Malaria, Yaws (diseases resulting from acute nutritional deficiency such as Kwashiorkor), small pox, cholera, tuberculosis, filariasis, leprosy and so on. It is in the context of the allround improvement in the health of the population that the age-specific services and their performance should be evaluated.

In 1971, for the country as a whole, there were 37.7 maternity beds per 1,000 mothers or 1,000 births per year, a level of services which could be considered adequate to meet the demand. The rate of participation in the maternity services at the time of delivery was quite high. About 75% of births were institutionalised. The number of **maternity and child health centres** in 1972 was 1,369. While the quality and intensity of services varied from region to region, on an average, a centre served 176 mothers per year. The paramedical staff specially servicing mothers and infants and pre-school children are the public health nurses and midwives. Their cadres and distribution are given in Table 9.2. On the present ratio the average clientele of a public health midwife will be approximately 50-60 mothers for ante-natal and post natal care. A public health nurse will serve approximately 400-500 infants and pre-school children along with the supervision of the work of midwives. On the data as collected by the Health Department it is difficult to assess the effectiveness of these services in reaching its clientele. The number of home visits recorded, the number of visits to clinics or the number of patients examined cannot be accurately determined as the same visit and same examination are frequently included in the reports submitted by the different medical personnel and included in the totals. The collection of the data would have to be further systematised to make possible, the more relevant and more meaningful evaluation of the performances of these services. It is also difficult to estimate the role played by these

cadres as health educators. They in part constitute part of the front line of the medical corps both in that they reach out to the homes of the people as well as deal with the most vulnerable sections of the population including the section at the earliest formative stages. On the one hand, the availability of these cadres in the right proportion so as to provide the necessary access, and on the other, their training to produce the quality of services needed will be crucial factors in maintaining an effective medical system in the young age groups.

The paediatric medical services catering to the children in the age groups below are organized on lines similar to the general medical services. In the medical system as a whole, there is a marked concentration of the specialised services in the capital city and its immediate environs. The major paediatric institution is located in Colombo. It contains 853 beds which constitute approximately 40% of the total paediatric bed strength in the country. Apart from the children's hospital in Colombo, paediatric wards are available in the base hospitals and district hospitals. The paediatric bed strength for the entire country is approximately 2,150 out of a total hospital bed strength of 47,977, i. e. approximately 4%. There are on an average 4.2 paediatric beds per thousand of population as against 37.7 per thousand for the total number of beds (1971). Considering the fact that morbidity rates are highest in the age groups 0-14 and that this segment of the population constitutes 39% of the total population, the paediatric services available appear to be inadequate. It has to be noted, however, that the general medical services will provide the curative care in respect of a large proportion of the health needs of the young age groups and, therefore, the paediatric services should be considered as complementary to the main system. A more detailed study of the pattern of age specific morbidity or the incidence of illnesses in different age groups is required before any firm or reliable conclusions can be drawn regarding the balance as between the different parts of the existing medical system insofar as they cater to the age specific needs of the population.

The data on the immunisation programme are set out in Table 10-10. They cover the immunisation programmes relating to diphtheria, whooping cough, tetanus, polio, small-pox and tuberculosis. These programmes concentrate primarily on the pre-school population and the protection of the population in early childhood. A considerable improvement can be seen in the participation rates over the years in these immunisation programmes. Diphtheria, whooping cough and tetanus are covered by an immunisation programme which administers a single immunising agent—the triple vaccine. While marked increase in the numbers immunised can be seen—an increase from 4,062 in 1964/65 to 71,564 in 1970/71—this increase, however, represents a mere 30% of the infants and that too only in respect of one dose; these children are, therefore, only partially immunised. The rate of return for the 2nd and 3rd doses drops considerably—a little over 50% for the 2nd dose and less than 50% for the 3rd dose. This demonstrates a wilful neglect and indifference to take the 2nd and 3rd doses which make the immunising agent effective. Steps are being taken to make the triple and polio vaccine compulsory in the near future; the authorities believe that when this is done these diseases also like small-pox, can be completely eradicated.

Small-pox vaccination is compulsory by law and no child can be admitted to school without the small pox vaccination certificate. This has been relatively one of the most successful of the immunisation programmes. Yet the school Health examination of 1970/71 reveals that about 8% of children examined (8% of total school enrolments were taken for examination) have been found to be unvaccinated. On the basis of this, it can be estimated that 8-10% of the school-going population remain unvaccinated. This, however, excludes the sections within the young age group who are outside the school stream. Thus, a not too insignificant proportion of the child population remain unvaccinated despite the legal compulsion imposed.

The epidemiological pattern of polio cases has remained the same for the last few years. Over 90% of the cases are children under 6 years. Table 10.4 gives the numbers

immunised. It does not seem to have been possible to cover more than one-third of the susceptible population. At least 80% of the children should receive at least 3 doses of the vaccine to prevent epidemic outbreaks. An estimated 50% of the infants born during the year in 1966/67 have been immunised with the test dose. Only 30% of the infants received 2 doses in the 1st year of life.

Tables 3.5 and 10 give the relevant information about Tuberculosis incidence as well as the preventive measures taken. Tuberculosis still remains a major public health menace with a susceptibility of about 77 per 10,000 population. A survey done in 1970/71 to investigate the immunisation position of B. C. G. vaccination revealed a coverage of 40% of the children in the ages 1-14 years and 46.7% in the 15-29 years age group. All schools were visited and about 1.1 million children were vaccinated. Another effective way of immunisation was to vaccinate infants at birth and this was instituted in 1963 and gradually extended to cover the Island. In 1966/67 approximately 53% of children born in institutions have been immunised. This service has also been extended through the **infant clinics** in the Maternal and Child Health Centres to reach babies born in the homes. The 1970/71 B. C. G. immunisation coverage of infants under 1 year was 33,660.

Of the immunisation programmes in its totality, it could be said that they have been sufficiently effective in drawing an initial response. Even the regional average for the 1st dose has been reasonably symmetrical. The variance sets in with the follow-up visits for the subsequent doses due to unsatisfactory response. This is not a pattern peculiar to Sri Lanka and occurs even in the developed countries. A greater consciousness of Health education will have to be diffused among the people emphasising the need for the adoption of preventive measures. In the absence of a high degree of motivation and an immediate threat of the incidence of the disease, the inevitable lapses in the follow-up visits to complete the process of immunisation will continue to prevail.

While Maternal and Child Health Programmes take care of the infant and pre-school child, the **school health programme** is aimed at maintaining health levels among the school children in early childhood and adolescence. Health education given in the impressionable childhood and later adolescence as part of school discipline itself should be most rewarding in strengthening the health consciousness of the youth. This is also perhaps the easiest method by which groups of children are reached for medical examinations and instructions with no extra cost involved in organising them at any one point of time and place. The scope of the school medical services include, in the main, aspects of sanitation, health education, medical examination and correction of defects. The school service is given emphasis in order to instil in the mind of the child the importance of observing sanitary conditions. It is hoped that the school will serve as a model as far as sanitation and hygiene are concerned. The sanitary facilities available vary from school to school and from urban to rural areas. In most rural schools, sanitary facilities are inadequate, extending to the whole range of sanitation from drinking water to toilet facilities. This turns out to be a matter of limited finances. Within the available funds, attempts are made to maintain basic and elementary standards with the co-operation of Joint School Health Committees, the Parent-Teacher Association and voluntary organisations.

Despite the awareness of the importance of school health work, the present organisational set-up tends to by-pass a number of schools in the rural and urban areas without any examination. The significance of this omission can be realised when one considers the number found with defects out of those (children) already examined. The staff available for school health examinations is inadequate—with the exception of a few areas—where 6 School Medical Officers, 21 school health registered Medical Practitioners and assistants medical practioners operate activities. In most other areas, the already overworked Medical Officers of Health, registered Medical Practitioners and paediatricians attend to school examinations.

In schools selected for examinations there is some continuity in maintaining health records for children. The examination is conducted so as to cover a child thrice in his or her school career in the first, fourth and seventh grades. There is no basis or uniformity in the selections of schools nor in the number of children taken up. This depends entirely on the medical personnel available, the morbidity level prevailing in the area and the proximity of schools to medical institutions. These differences can be seen from Table 11-11.2, the latest available figures for 1970/71 which reflect a coverage of approximately 29% of schools and 8% of total school enrolments. Perhaps the more illuminating fact is that the examination does not extend even to a tenth of the children in schools; when extended to include all children in the 5-19 school age group, whether in the school stream or outside, this would amount to a mere 4%.

The school health programme provides a system which can bring school children under systematic and regular medical examination. Such a system could elicit information on the prevailing health conditions of the young population and factors contributing to it. Such information would be indispensable for the formulation and implementation of age specific health plans. In its present form, the school health examination is not structured and implemented in a systematic manner to provide adequate coverage of the school population or maintain a system of continuous monitoring of the health of the school going population. Neither is there evidence that the information obtained from these investigations enter into the process of decision making and the formulation of health plans by the national and regional health authorities.

Health education has a long history in Ceylon, going as far back as 1935. All health personnel; Medical Officers of Health, Public Health Nurses, Public Health Midwives and Public Health Inspectors are engaged in health educational activities as part of their routine work. Apart from the staff mentioned above, there is a special cadre of Health educators distributed in the ratio of one for each Superintendent of Health Services district, apart from Colombo and

Kandy which are provided with two. It is hoped to increase these numbers of Health educators and assign one for every five Health units and improve on it further by having one for every unit.

Health Education in general, and school health education in particular, are expected to have an increasing impact on the community. School health education planning is undertaken by the National Health Education Committee with representation from the Education and Health Ministries. This joint work helps co-ordinate and organise the overall health education programme. The committee has been instrumental in including Health as a subject in the school curriculum where hygiene and physical education are stressed. This is introduced in the sixth grade with three hours per week devoted to the subject. A marked increase in the number of students choosing Health as a subject for the G. C. E. Examination has been observed since its introduction. The syllabus covers the various aspects of Family health, Environmental Sanitation, Immunisation and Nutrition. Lectures and discussions by trained medical personnel, practical outdoor classes and visits to institutions also form a part of the integrated health education scheme. The school medical examination is also an important factor that indirectly contributes towards the imparting of health standards to the children.

The Maternal and Child Health Centre is another means of disseminating health educational instruction. Both at the ante-natal and post-natal clinics, infant welfare clinics and pre-school clinics, instruction is given to mothers in all aspects of family health. Emphasis is placed on the planning, spacing and limiting of families; on intelligent and balanced dietary habits with particular attention on nutrient components of locally available food in each area; on control and prevention of communicable diseases through timely immunisation and environmental sanitation.

There are also publicity campaigns during period of epidemic outbreaks. Regular and special publicity drives are conducted by centres for the control and eradication of Tuberculosis, Malaria, Filariasis, Leprosy and Venereal diseases.

The organisation of a health education scheme in hospitals was felt by the hospital authorities as an effective method of reaching a section of the public, in view of the large numbers of indoor and outdoor patients and the visitors that pass through the hospitals. The outpatients departments, the clinics and wards were chosen as areas where such activity could be undertaken. The method of education consists of a course of instruction containing the following topics:-

- (a) Information about hospital working and facilities;
- (b) health and sanitation problems, family health and family planning;
- (c) causes, spread and prevention of particular diseases;
- (d) any other specific issues as they occur. This programme has been introduced at the General Hospital, Colombo, and if successful will spread to the other health districts.

Apart from these specific schemes there is the general dissemination of health information through non-institutionalised means. Trained personnel such as Medical Officers of Health and the para - medical staff collaborate with voluntary agencies and other social organisations and provide advice on their programmes. The mass media of the radio, film, newspaper and other publicity devices such as health exhibitions are used for the purpose of health education.

What has been described above are the main components of health education in the country. On the whole, the essential objectives of health education and the important target groups have been identified in the prevailing programmes. The organisational framework which includes, schools, Maternal & Child Health Centres, health education schemes in hospitals, health exhibitions and publicity campaigns, directs health education to segments of the population and areas of morbidity which are most in need of health education. The actual performance of the health education programme, however, has not been evaluated and it is difficult to come to any conclusions on its effectiveness and capacity to reach the target groups. Studies on specific health programmes throw some light on

the level of health information and factors which build up resistance against health programmes. In the case study done in selected areas on immunisation regarding motivational reasons involved in the low incidence of completed polio immunisations among children, it was found that at least 96% were aware of the necessity to be immunised. But large numbers-69,6% rejectors of polio immunisation - associated fever as a side-effect; 45% were not certain whether immunisation was in fact effective in preventing polio; 41% of rejectors and 13% of acceptors admitted that they felt that the infants were too young to take the immunising agent. These responses indicate that the polio immunisation programme is a priority area for health education.

Similar studies on other health programmes could identify priorities for health education. For the age groups under study, the most important component in the health education programme are the school health programmes, the Maternal & Child Health Centre and Health Exhibitions. These lend themselves to the implementation of a well integrated programme of health education which reaches the young population. Such a programme could be supported by a series of studies on the health programmes specified to young age groups, - e. g. infant mortality, morbidity among age groups, coverage of immunisation programmes, family size and child care - which among other things will identify critical gaps in knowledge and information regarding health problems among different social groups and in different regions.

Family Planning activities were first undertaken in 1953 by the Family Planning Association, an affiliate of the International Planned Parenthood Federation. The Government entered this field with the signing of a bi-lateral agreement with the Government of Sweden and the setting up of the Family Planning Pilot Project in 1958. In 1965, the Government decided to integrate family planning activities with the Maternal & Child Health Services. The national family planning programme was started in 1966. The Family Health Bureau was established to co-ordinate all government sponsored Maternal and Child Health and Family Planning activities in the country. This institutions also collaborates with other institutions like the Family Planning Association of Sri Lanka, the Planters' Association Estates Health Scheme.

The target of the National Family Planning Programme is to lower the crude birth rate from 35 to 25 by 1975. The Family Planning programme was undertaken by the government primarily as a health measure. The target of 25 births per 1000 in 1975 was expected to reduce the average annual rate of population growth from 2.6% to about 1.6%. This required an estimated target achievement of 110,000 acceptors a year. Family planning is conducted in 544 clinics distributed over the different districts. There are 22 units opened in the estate areas. Table II gives the regional distribution of these clinics in 1973.

The total number of acceptors for 1973 were 95,931 as compared to 71,044 in 1972 showing an increase of 35.9%. In 1973 alone 20,248 sterilizations were reported as against 9,576 in 1972. Of all the major methods, sterilisations in 1973 marked a distinct increase (vide Table II.1). The Table II.2 indicates acceptance rates in relation to population (1973). The highest acceptance was recorded for Ratnapura SHS division (89.2 per 19,000 population) followed by Colombo LHS division (86.8 per 10,000) and Matale SHS division (84.3 per 10,000 population). The lowest recorded was in Jaffna division (36.0 per 10,000 population.) About 63% of the new acceptors had less than 5 children and about 54% of the new acceptors were under 30 years of age.

There are a few Government programmes which are directly aimed at providing nutritional supplements to disadvantaged and vulnerable groups. These are **the feeding programmes** to lactating mothers and Infants administered by the Maternal and Child Health Centres, the School Feeding Programme, and the treatment given to hospitalised cases of malnutrition. One of the problems of national feeding programme is that it may fail to discriminate between those in genuine need of assistance and those who are not. The financial resources for these programmes have been obtained from aid-giving agencies such as CARE, and there is understandable reluctance on the part of such agencies to finance a large feeding programme which will remain indefinitely beyond the financing capacity of the national Government. The programme would have to be conceived in a manner which would progressively enable the

Government to take over the financing from its own resources. More general broad spectrum programmes for improvement of nutritional levels have also been mooted. One such proposal recommends the fortification of one item of mass consumption such as powdered milk or flour to supplement the nutritional deficiencies in the average diet. Other programmes aim at the production of food with higher nutritional value including both new crops as soya as well as rapid expansion of slow moving sectors such as animal husbandry. A well conceived programme on applied nutrition which was attempted a few years ago sought to link the home school and the farm in a co-ordinated effort to improve nutritional levels by making best use of food resources available in the immediate environment. The project, however, did not achieve satisfactory results as it could not gain the required administrative support from all the agencies involved. In fact there seem to be inadequate attention paid to the nutritional aspects of social development at national planning levels. There is no evidence of a planned effort to evaluate and bring together different activities related to nutrition in the feeding programmes, the food production programmes, activities in the field of applied nutrition and health education in a meaningfully integrated manner, aimed directly at improving nutritional standards and increasing awareness and knowledge among the public in regard to nutrition.

In regard to **environmental sanitation**, the Government's current Five Year Plan includes a programme for the improvement of rural water supply through 100 rural schemes at an estimated cost of Rs. 22 million. Subsidies are granted for the construction of communal wells by Rural Development Societies as well as household wells by peasants. There is also a programme of assistance for the construction of sanitary latrines. The coverage of these programmes has, however, been limited by the volume of resources that the State has been able to release for these programmes. One possibility of expanding these programmes is through self-help schemes which could be organised by voluntary agencies.

Regional Variations

The medical data available in the form in which it is collected at present do not readily lend themselves to the analysis of regional variations in regard to health for the population as a whole. The inadequacies of data become more evident when the regional analysis is attempted on an age-specific basis. However, on the data available, a few broad conclusions regarding regional variations could still be made.

The data on age specific mortality rates draw attention to five Districts where mortality in the age groups 0-19 are higher than the national average. These are Ratnapura, Badulla, Kandy (including Moneragala), Batticaloa, and Matale. The data on foetal and maternal deaths do not show significant variations. While a high foetal death rate is recorded for Districts such as Jaffna, Kandy, Nuwara Eliya, the maternal death rates are not very different from the national average. The data on age-specific morbidity rates are neither adequate for any given year, nor available over a sufficient period of time for a meaningful analysis of regional variations. Statistics pertaining to treatment at outpatient units in Government institutions available in the year 1966/67 show that Kurunegala, Kandy, Badulla, Anuradhapura and Matara had higher levels of morbidity than other Districts. According to the Socio-Economic Survey, Zone 2 which contains Hambantota, Moneragala, Amparai, Polonnaruwa, Anuradhapura and Puttalam recorded the highest rate of morbidity for the age Groups 0-9.

The available data for communicable diseases and the immunisation programme also show that areas where there is a high prevalence of these diseases are also areas where there has been low response for immunisation - Typhoid in Anuradhapura, Badulla, Colombo, Kandy, Matale and Ratnapura; Polio in Badulla and Kandy. It has to be mentioned, however, that there are a few other Districts where the high incidence of these diseases is not connected with participation in the immunisation programme.

The regional health data set out above could be compared with the district distribution of medical institutions and health services catering to the young population. There are significant disparities in the required distribution of Maternal & Child Health Centres. The number per 100,000 of population ranges from 23.2 for Batticaloa / Amparai to 9.2 in Galle, 6.8 in Mannar and 6.7 in Colombo. In drawing inferences from comparative indicators of this type, various factors which are ignored in these indicators have to be taken into account. The urban coastal belt is relatively better served by private medical institutions and private medical practitioners than the rest of the country. It also contains the major proportion of the well-to-do minority in the country who are capable of purchasing these services and who prefer them to state services. These factors will significantly influence the demand for state services. When allowance is made for these exceptions, the distribution of Maternal & Child Health Services is below the national average in Ratnapura, Vavuniya/Manner, Anuradhapura/Trincomalee, Kandy and Matale.

When the numbers of auxiliary health personnel - Public Health Inspectors, Public Health Nurses, and Public Health Midwives are compared with the number of births for the different districts, the Districts with the poorest ratios are Badulla/Moneragala, Batticaloa, Anuradhapura, Kandy and Matale where the ratios are well below 1 worker to 100 births. The better served Districts have ratios in the region of 1:100. The basis for the deployment of the different cadres in the auxiliary Health Service is also not quite clear. The ratios of public health nurses to midwives vary widely from district to district - e.g. 1:64 in Jaffna and 1:40 in Vavuniya and Batticaloa; 1:5 in the Colombo District, 1:16 in the Kandy District and 1.20 in the Kegalle and Ratnapura Districts.

The data on Maternal & Child Health Work for a selected year also present wide divergencies in performance. The 1369 centres ran approximately 34,000 clinics during 1970/71 for ante-natal and natal care of mothers, infants

and pre-school children. Approximately two-third the number of clinics were for ante-natal care. The data on the districts do not reveal any regular pattern in the numbers of the different types of clinics held. There is no indication that there has been a regular programme of uniform intensity conducted in all the Districts. Ratnapura with 62 centres show 1,932 clinics for post - natal care and 1,499 clinics for infants while Vavuniya with 102 clinics record only 389 and 334 for these groups. Again, Kalutara with 79 centres shows a programme of 2099 ante-natal, 79 post - natal, 978 infant, 1026 pre-school clinics. Kurunegala with 176 centres have had 1647, 290, 413 and 382 respectively from each type of clinic. These figures are reflected in the numbers of mothers and children who have participated in these programmes.

The programme of health examination in schools shows similar variations in the levels of effectiveness and participation in the different districts. In Jaffna, Kalutara, Mannar/Vavuniya, Puttalam, Batticaloa, the numbers examined are close to or above 10% of the children enrolled in school. The lowest rates of participation are in Anuradhapura/Trincomalee, Badulla/Moneragala and Ratnapura and Galle. It would appear that the performance under these programmes largely depends on the initiative and efficiency of medical personnel involved rather than on a plan formulated and supervised at the national level.

V

Some elements in a co-ordinated Health programme for the Young

The Health programme already contains a number of elements which can be effectively co-ordinated to improve the delivery of services to the young population. These are the Maternal and Child Health Centres, the Immunisation Programme and the School Health Services. Each Maternal and Child Health Centre caters on an average to a pre-school population of approximately 2000 in the age group 0-5 years. These centres offer a rich potential for the enhancement of their programmes to enable them to function

as multi-purpose centres for the pre-school group, with the focus on health. Their activities at present include ante and post-natal care, services to infants and pre-school children, family planning and health education. It would be necessary to examine how these programmes could be implemented to serve on a systematic and a regular basis the entire pre-school population in the area of its operations. The centre could be linked to the programme of pre-school units proposed by the Ministry of Education, designed to prepare children of 4 and 5 years of age for formal schooling. The prevailing network of Maternal and Child Health Centres, at an average of 2000 pre-school children per centre may not have the capacity to undertake an intensive programme which could serve these children on a regular basis. If this population is served in groups of 40, the centre would take 50 days to cover the entire population and would reach them approximately 5 to 6 times a year. Additional mobile centres in a district will be needed to make the coverage effective. A number of voluntary agencies such as the Lanka Mahila Samiti, the Sarvodaya, the rural development societies could be mobilised to provide voluntary services where appropriate, to keep the cost of such a programme at the minimum. What could be developed is a well organised Maternal & Child Health Centre in which the pre-school population in the locality is enrolled, the "clinics" scheduled on a regular basis and the attendance in terms of households carefully supervised. In this way the health of the pre-school population will be monitored and the effectiveness of the preventive and curative services to this group will be improved. Such a programme would be linked to the immunisation programmes. More effective surveillance of these programmes to detect the cases which are not covered by the programme would have to be an important component of the health services for the young age group. The coverage of the immunisation programmes could be greatly improved through both an improved Maternal & Child Health Service, and a more effective and extensive school health programme. An experimental programme which makes the

Maternal & Child Health Centre the focal point for integrated services to the pre-school population and links it with educational programmes could also be undertaken to develop a new type of multi-purpose centre.

The school health programme can be a very effective means by which the preventive and to a lesser extent the curative services can reach the school going population. It may be necessary to evaluate the effectiveness of these services through a reliable cost-benefit analysis. It might be argued that the resources deployed on monitoring the health of the student population could be better used on curative services which demand high priority. It is not possible to come to a categorical conclusion in regard to this issue. As was pointed out already, the long term returns on a sound school health service which can improve the effectiveness of immunisation programmes and provide preventive and curative medical attention to a vulnerable section of the population at their formative stage can be very considerable. The school health programmes have to be systematically administered to improve the health and nutritional levels of the school going population; it must reach the entire student population without making inordinate demands on resources which are already scarce. In order to formulate such a programme, the existing programme will have to be studied in detail and feasible alternative schemes developed.

The health education programme which was discussed earlier would form a component of the Maternal & Child Health Centre's activities, the immunisation programmes, and the school health service. This is once again an area in which voluntary organisations could actively participate within a well structured and co-ordinated programme. School Health exhibitions which have been a part of the health education programme need to be organised on a regular basis to increase the coverage and reach every district. They could be adapted to the particular health problems of the District, whether these are related to diseases endemic to the area, or specific impediments to health improvement such as low participation in immunisation programmes.

Environmental sanitation programmes are another priority in a health programme for the young. The school itself could have a demonstration programme for the locality in respect of protected sources of water for drinking, toilet facilities, proper arrangements for disposal of waste and control of environmental pollution in general. Divisional Development Councils and Rural Development Societies could mobilise self help for schemes of rural water supply and environmental sanitation. Here again, voluntary agencies could make a significant contribution.

In the field of nutrition, it would be possible to organise applied nutrition projects which would link the feeding programmes, selected components of the food production programme and elements in the applied nutrition project which had been implemented in the recent past. Such a programme will link the school, the maternal and child health centres, the home and the farm in a co-ordinated effort which includes nutritional supplements for the vulnerable and disadvantaged groups, education on nutrition, change of dietary habits, and nutrition-oriented food production in the home garden and farm. The last objective has, of course, to be achieved within the limits set by other constraints and is not intended to replace other commercial cropping patterns.

We saw that the proportion of national resources now spent on the provision of free medical services for the entire population has been relatively very high. Any improvement or extension of health programmes for the young would make new demands on resources which are already inadequate to maintain the existing system. Many of the inadequacies and deficiencies of the health system have been attributed to lack of financial resources and consequent shortages of personnel and equipment. At the same time it is evident that many parts of the existing system are not functioning at the desired levels of efficiency. Improvements to the health services of the young have, therefore, to be low-cost; they should lead to better and more effective use of existing capacities; this should result in

re-allocation of available resources which takes better account of the age specific needs and results in a more rational distribution of effort. In such an effort, the system of indigenous medicine and the services available through it will have to be incorporated.

VI

Conclusions

The foregoing analysis of the state of health of the young population and the programmes for the delivery of health services to children and adolescents had of necessity to be sketchy for want of adequate and reliable health statistics. However, from the restricted study that has been made, the following conclusions emerge:

- There have been marked regional variations in the delivery of some of the health services to children and adolescents. Data in respect of regional delivery of services are available only in regard to a few services and showed marked regional disparities, e. g.

Immunisation against Polio which shows that the regional variations are very great ranging from 90% coverage in Colombo, Kurunegala, Jaffna and Kalutara to between 40% and 50% in Matale, Galle, Batticaloa and Amparai District; the school health programmes, where coverage ranges from 16% for Jaffna and 13% in Kalutara to 4.7% in Galle and 6.2% in Badulla; maternal and child health centres, which are available on a ratio of 19 per thousand in Matara/Hambantota, 17 in Kurunegala, 8.9 in Kandy and 6.8 in Mannar, the distribution of paediatric beds is heavily weighted in favour of the Colombo metropolis; the age-specific services to the young age group in the hospital system appear to be disproportionately small.

- There has been no systematic study of the nutritional standards of children and adolescents of different social and economic backgrounds such as those of urban slums,

rural areas, and low income families of urban and rural areas. Occasional studies undertaken by individual researchers and public institutions in a few areas reveal that -

- (a) There is severe calorie-protein malnutrition among children and adolescents in urban and rural households in lowest income groups, particularly those below Rs. 100/- per month, judging by their expenditure on food and drink and by the quantity and quality of per capita food consumption.
 - (b) nearly 8% of children who received treatment at the main childrens' hospital in Colombo were found to be suffering from third degree malnutrition.
 - (c) nearly 65% of children who lived in a suburb of Colombo suffered from either 1st degree, 2nd degree or 3rd degree malnutrition.
 - (d) A sample survey conducted by the Municipal authorities in Colombo revealed that 42% of children were under-nourished and showed signs of malnutrition.
- The coverage of the Health Ministry's programme of immunisation of children against poliomyelitis is poor, extending to only a third of the child population. Even this coverage is incomplete because, of the 3 prescribed doses of oral vaccines, only half the number of children covered took all 3 doses, the other half took only 1 or 2 doses.
 - The incidence of tetanus among children has been rising during the past 10 years but the immunisation programme against tetanus covered only 30% of the child population and even the 30% had received only partial immunisation.
 - The campaign of administering the triple vaccine against diphtheria, whooping cough and tetanus has reached only 30% of infants and these infants have only been partially immunised with only one dose. Immunisation rate with 2nd and 3rd doses shows a steep decline.

- The incidence of gastro-enteritis and helminthiasis among children, adolescents and adults is high. Gastro-enteritis is the fourth, and helminthiasis is the eighth most prevalent disease in Sri Lanka. Worm infestation of infants and children has been found to afflict over 50% of all children under 10 years. These diseases are caused by bad water and poor environmental sanitation.
- The campaign of children against small-pox has reached only 66% of children under 15 years. The number of secondary vaccinations has dropped sharply since 1966/67.
- A serious downward trend in the number of services (visits by public health personnel) delivered to children has set in since 1961, particularly the maternal and child health services to infants and pre-school children.
- The environmental sanitation of the dwellings of nearly half the population is very poor, lacking safe water supply and sewage disposal.
- The school health programme of examination and treatment of children at school reaches only 8% of the school population.
- The health education programme in schools, aimed at teaching personal hygiene and environmental sanitation reaches only a small section of the school population.

An effective health programme for the young population would require the development and intensification of several elements in the existing services -

- The Maternal and Child Health Centre programme could be intensified, the centre given a multi-purpose role and co-ordinated with other pre-school units. The centre could administer a regular and systematic school programme of clinics in which the entire pre-school population in the locality is enrolled so that prevention and curative services reach this group in a sustained manner. A model programme would have to be formulated for a group of selected districts.

- The immunisation programmes would have to be another point of concentration. There has to be intensive surveillance to ensure full coverage. Such schemes of surveillance can be linked to the Maternal & Child Health Centre programmes for pre-school children and to school Health Services for the school going population. The voluntary agencies could also be mobilised to raise the health consciousness among the people and motivate their participation in immunisation programmes.

- The school health services should be re-structured to become effective as the means of monitoring the health of the student population and providing preventive and curative services. These programmes could feed back to the school curricula in health education and make the school active in improving the knowledge of the student population and the community in matters relating to health and nutrition.

- A co-ordinated programme of health education for the young can commence at pre-school level in the Maternal & Child Health Centres, use the immunisation programmes where relevant, and proceed to the more formal curricula in schools. Regular exhibitions could make an additional impact. The activities of voluntary agencies could contribute to this programme.

- For the improvement of environmental sanitation, schools could be used for demonstration programmes in a way which would have a wider impact on the community. The Divisional Development Councils, Rural Development Societies and voluntary agencies such as Sarvodaya could organise self-help for programmes of environmental sanitation.

- Model nutritional programmes could be organised linking the maternal and Child Health Centre, the School, the home and the farm, and co-ordinating the feeding programmes, education in nutrition, changes in food habits and selective programmes of food production.

- The components of a health programme for the young population that have been outlined above could be developed within the framework by a few selected districts.

The programmes could be appropriately adapted to the different conditions in each district. These programmes could be part of the model programmes suggested for education and non-formal education, and could develop the linkages between the programmes in each of these fields. As demonstrated already, the programmes in these connected fields converge on the programmes for pre-school children, school health services, health education, environmental sanitation and nutrition.

- The programmes that are suggested would require re-adjustment in the system of health service in the young age which will restore prevailing imbalance both in regard to regional distribution as well as the allocation of resources to age specific services for the young within the total system. This would require critical study and analysis of these two aspects in the prevailing system.

- Formulation of the programmes outlined will require substantial improvements in the existing statistical system to enable the collection of reliable age-specific data. It would be necessary to obtain district-wise data on age-specific morbidity rates, the incidence of children's diseases, the nutritional levels in different income groups, incidence of malnutrition, fertility rates and family size. The statistics already collected in the various units of the Health Ministry would have to be suitably modified to provide an age-specific profile of health conditions. The collection of the data currently undertaken would have to be more closely supervised for accuracy and reliability.

CHAPTER V

SPORTS AND RECREATIONAL NEEDS OF CHILDREN AND ADOLESCENTS

I

This chapter discusses the aspects related to sports and recreational needs of children and adolescents. It is only recently with the creation of a Ministry of Sports that these aspects have received attention at the national level in a formal institutionalised manner. As a result the collection of data and the investigation of needs in the field of sports and recreation has been neglected in the past and the information available is for the most part scanty and fragmentary. The material in this chapter has therefore been organised differently from other chapters. The chapter provides a brief view of the traditional scene in regard to play and recreation and examines recreational facilities for the different groups of children and adolescents – the pre-school, the school-going and out of school population in the young age groups. The analysis focuses attention on the wide disparities in the organisation of recreational facilities as between the urban and rural sector.

II

The Pre-School Child

The pre-school child is usually able to meet most of its emotional and educational requirements through its own home and neighbourhood environment. In its first stage of development which is referred to by child psychologists as the "sensorimotor period", i. e. from birth to roughly about two years, he learns to distinguish objects of one class from another. The second stage which is known as "pre-operational period", i. e. from about two to six years, is one in which he learns to reason and identify objects. These developments

take place through the child's interaction with the various persons who come within its range of activities. These are normally the members of its family and the peer group from the neighbourhood. Apart from members of its family, a child's first point of contact with group activity is through the medium of play and games. Pre-school children normally seek their own playmates and in the absence of directed playtime activity, evolve their own forms of play. It is through the natural exercise of playing with other children that a child learns his first lessons in socialisation. He begins to acquire the initial steps towards self-control and the ability to interact with people in socially acceptable ways. Sports and play in addition to serving as a media of socialisation provide the child with opportunities for releasing his tensions and inhibitions. In these he finds the occasion to express various emotional states and to learn to exercise effective restraints when necessary.

In Sri Lanka where the family organisation is based on the immediate conjugal monogamous group of spouses with their dependent children, parental attachment to infants is extremely intimate, with overt demonstrations of affection and young children enjoy considerable indulgence. A study of childhood experience among Sinhalese children reveals that "great affection is shown by the father towards infant children. They are stroked, patted, kissed and fondled to a degree which would be considered almost effeminate behaviour on the part of an English or American father"¹ - Apart from the congenial house atmosphere where love and affection is found in abundance, the pre-school child especially in the urban areas is exposed to a variety of neighbourhood influences and finds greater opportunity for play than in the rural areas. Toys and artifacts for play and amusement are available in greater quantity and quality to the urban child. There is a noticeable tendency for the higher income groups to lay greater

1. (Strauss, Murray A: Childhood Experiences and Emotional Security in the context of Sinhalese Social Organisation, **Journal of Social Forces**, December 1954).

stress on toys that would arouse a child's intellectual curiosity and be of greater educational value as compared to the lower income groups where toys, especially of the pre-school child, have some domestic utility values.

The universality of toys is a concept well illustrated in the following extract from a study of the history of toys: "An example of the universal type of toy shape popular in all countries, civilisations and times is the ordinary rattle shape. Both the rattle and the ball derive from the simple globular shape of a fruit, nut or gourd, either carved out for a ball or with the seeds left inside for a rattle. The extra-ordinary similarity of the ancient rattle to the modern one makes it perhaps the most unchanging of all toys"¹ The rural child in Sri Lanka, however did not enjoy a range of toys and artifacts that were produced as adjuncts of the industrial growth of western countries. The range in fact was unusually limited. It was in 1873 that a commentator exclaimed, "of the toys, the Sinhalese have hardly any".² It would appear that the only toys available in Sri Lanka at that stage were tops made of fruits and pea-shooters of bamboo.

Discussions with a cross-section of some of the leading toy distributors and manufacturers reveal that prior to world war II when Britain, Germany and Japan were the principal sources of toy imports to Sri Lanka almost the entirety of distribution was in Colombo and other principal towns. Toys hardly reached the rural areas mainly due to the fact that the low income levels in the rural areas could not afford the comparatively high costs of imported toys. In the late nineteen forties a significant breakthrough had been made with the local mass production of rubber toys which were cheap and durable and which soon found popularity in the remote areas. With the total ban on the import of toys in the early sixties, the production of local toys received an additional stimulus. Toys made of wood hardboard, metal and plastic have reached rural homes where

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1. Antonia Fraser: **A History of Toys** - George Weidenfeld and Nicolson, London 1966.
 2. Ludovici L: **Sports and Games of Sinhalese**, J. R. A. S. 1873

the child's world of play is now incomplete without toys and artifacts. The Sarvodaya toy - making project is an interesting example of toy production out of indigenous material the cost of which is remarkably low. Apart from the sarvodaya toy project, its pre-school programme lays much emphasis on a well designed system of play. A feature of the teacher training programme is the use of indigenous material such as plywood instead of paper cut-outs, plant dyes in place of poster colours, wood resin as a substitute for gums and posters. This programme is described in greater detail in Chapter III.

Besides playtime and recreational aids available to children for play within the confines of the home there are few other institutional devices for recreation outside the home. In certain areas, there are children's parks and recreational centres open to the public but which are largely utilised by middle-class children. These are confined to relatively large urban communities managed by municipalities or urban councils and capable of generating resources for local development. These facilities are however mainly enjoyed by the upper and middle classes in the urban sector, who are able to employ domestic aid and organise their leisure time activities and direct the recreation of their children. The patterns of living among the urban poor do not allow for similar satisfaction of the recreational needs of their young. The rural children of pre-school age by virtue of the traditional child rearing practices in rural Sri Lanka are left to their own devices in their homes. There is very little neighbourhood contact for play but the localised kin groupings which are a feature of village life in Sri Lanka throw out a web of relationships which provides the partners for play and recreation. As stated by Strauss in his study, "Children under five are left to the care of an older sibling or grandparents, if possible; those over five are virtually unsupervised."¹ Chapter III contains an account of the existing institutions for the preparation of pre-school children for entry into the school. The nursery schools of different types are based

1. Struss, Murray A - op - Cit.

on a diversified curricula which combined elements of play with learning. The coverage of these institutions is however very limited and is mainly concentrated in the urban sector. The rural programme such as those of Sarvodaya and Lanka Mahila Samiti are prototypes capable of improvement and expansion as pre-school learning and recreation centres for this age group. With local initiative and the sponsorship of the Local Government authorities, it would not be difficult to organise low cost programmes to cater to the recreational needs of the pre-school group. The voluntary agencies could be mobilised for recreational programmes. Common playsites could be developed at low cost and equipped with locally produced swings, slides and other equipment for play. Entertainment for children through plays, exhibitions, shows of various types could be organised. The local production of toys could be stimulated. The feasibility of such a programme could be examined by selecting a few local communities as demonstration projects.

III

The School - going Child

There has apparently been little emphasis on physical education, sports, or recreational activities in the formal educational system which existed in Sri Lanka prior to the British occupation. The country as a whole had however not been devoid of sports and recreational activity either for the youthful members of the population, or for those adults who sought recreation. Traditional Sinhalese sports had been of four broad types during the pre-Portuguese period and were categorised as religious games, outdoor games, games of skill and games of chance. Linkages with the existent socio-cultural situation could be clearly detected in the form and content of these sports which were of recreational value and also served certain social functions. Some of these sports date back to several centuries past but are continued in contemporary Sri Lanka although the social functions they serve have since changed. A description of some of the principal games in each of the four categories is furnished below;

Religious Games - e. g. Ang Edeema, Pol-geheema.

Ang Edeema is a game where the participants divide themselves into two teams - upper and lower. The distinction is merely topographical, the participants who position themselves towards the head of a valley or stream being upper and those further down forming the lower team. The principle of the game is that of tug-of-elk horn. The two elk horns are interlocked in each other and tied at either end by cords of buffalo hide which is held by the two teams which keep on tugging with the idea of breaking the opposite team's horn. The contest goes on for hours and watched by the entire village and proceedings commence with the kapurala making an appeal to the gods. "Religious games such as Ang Edeema and Polgeheema were, for example, in propitiation of some offended deity, and whether sickness had visited the people, murrain attacked the cattle, insects or gnats settled on the young rice fields, or a protracted drought threatened calamity to man and beast, the alarmed Sinhalese peasant knows no more efficacious remedy than an appeal to Vishnu, or Siva, Pattini Deiyo, Kataragama Deiyo, or Basna-ira Deiyo through the medium of an Ang Edeema¹. Ang Edeema continues to be held in certain parts of Sri Lanka, but more as a festive sport.

Outdoor Sports- e. g. Buhukeliya

This is considered to be a purely indigenous Sinhalese game. It is held in an open space where the boys assemble and divide themselves into two teams each under its own leader. When the teams range on either side two coconut shells with the husks on are placed on end three or four inches apart with a piece of stick forming a bridge. This is considered the wicket. The ball is an unripe pommelow rendered soft and elastic by hot ashes and protected by a closely-plaited envelop of strips of bark. The players who hold the ball retire to a distance of 20 to 30 yards while the other team stand behind the wicket and disperses around

1. Ludovici, L: *Sports and Games of the Sinhalese* J. R. A. S. 1873.

the field as fielders. The captain of one team bowls at the wicket in an effort to knock the bridge over. The other team tries to catch the ball off the bounce. If the bowler knocks the bridge over, one of the opposite team goes out; if the ball is caught, the bowler goes out.

Games of Skill- e. g. Kottu-ellime, Chaturange

Kottu-ellime is on the lines of draughts and Chaturange which is said to have been an ancient Sinhalese game akin to chess was known only to the learned and by its Sanskrit name.

Games of Chance- These were mainly with cards and dice and rarely indigenous. Most of these games were of European origin.

The first step towards official recognition of the need for sports and physical exercise in the school curriculum appears to have been taken in 1891 when physical training and drill was included in the normal curriculum of every school. By 1902 drill was compulsory in all schools and there was an increasing demand for playgrounds. The Director of Public Instruction had commented in his Administration Report of 1900: "There has also been an attempt to introduce in to Government schools some forms of game which can be easily learnt and can be played without expense and does not require much space. So 'rounders' was introduced at the suggestion of one Mr. Sextus. Rules were translated in to Sinhala, with diagrams, and sent to every schoolmaster. The results were so successful that inter-school games were arranged". In 1920 two hours of physical training and development were made compulsory for every school child.

Prior to the introduction of universal free education sports and athletics had become a well-organised activity in the English medium public schools in the urban sector. Inter-school cricket and annual sports events were a popular and regular feature in the school-life of the urban community. This intense activity in sports and athletics was however confined to the thin layer of the English educated and

westernised minority. This situation changed appreciably with the introduction of free education. The large mass of rural school children were increasingly drawn into the nationally organised system of sports and athletics. In 1950 a branch of Physical Education and Health was formed in the Department of Education. Sports Meets and Inter-Schools sports meets which were the preserve of the English schools in urban areas began to spread to rural schools and was placed on an organised footing. The Facilities and Service Fees Regulations, 1958, introduced in terms of the Education Ordinance, No. 31 of 1939, empowered all schools to levy and utilise a Facilities and Service Fee for any of the following purposes:

1. For the payment of fees and allowance to coaches and teachers who are in charge of games, athletics, cadeting, scouting and girl-guiding and for defraying the expenses incurred by the school in connection with those activities.
2. For the maintenance of gymnasia, playing fields and swimming pools.
3. For the purchase of cine films and cine projectors.
4. For subsidising educational tours organised by the school.
5. For the provision of dental treatment to pupils.
6. For such other purposes as may be approved by the Director.

The maximum amount that could be levied as Facilities and Service Fees from a student are limited by regulation to Rs. 5 per head from Secondary School students and Rs. 3 per head from those in elementary grades. However no student could be refused admission to school on the grounds of non-payment of this fee.

The Free Education system introduced in 1944 absorbed a high proportion of the Government budget. The distribution of educational facilities to cater to all sections of the population required heavy capital and recurrent outlays.

It is to be expected that in the allocation of funds, sports and physical education was assigned relatively low priority. The system of levying Facilities Fees was designed to help in the self-financing of schools sports activities, particularly the cost of sports materials. The urban schools with the larger play grounds and diversified programmes of sport were quick to make full use of the facilities fee. Table XXI of Ch. II in the Appendix furnishes a statement of expenditure on sports and libraries in the various schools on a district basis. The per capital expenditure on sports and libraries is highest in Jaffna followed by Colombo, Kandy, Matale and Batticaloa. At the bottom of the scale are typically rural districts such as Moneragala and Polonnaruwa. The regional variation in the collection of facilities fees are discussed in Chapter III. The scheme can be expected to operate well in communities where average household incomes are satisfactory. Urban communities would therefore be at an advantage and would be able to get more funds for the activities to be financed through facilities fees. The data however reveal a pattern of collections which cannot be explained entirely in terms of income disparities. The fee is a nominal sum and within the capacity of an average rural household. Defaults in payment are also partly attributable to a lack of community participation in school affairs and the well being of the young generation. The motivation of the adult community for greater voluntary support would have to come in the first instance through active and well motivated parents-teachers associations.

The Department of Education implements its sports, recreational and physical educational programme through its network of 9,500 schools. Although there is no category of school staff recruited solely for instruction in sports or recreation, the sports activities at school level are undertaken by a games master who is a member of the teaching staff and who exercises his function as games master purely in a voluntary capacity. The normal procedure is for the Principal of the institution to appoint a member of the teaching staff who has either shown prowess in sports as a student or who has the aptitude for sports. In order to

enhance the qualitative aspects of the sports programmes in schools and also to ensure uniformity of practices and procedures, the Education Department lends institutional support to the schools through the Department of Physical Education which is manned by three Chief Education Officers, four Education Officers and twenty four Inspectors of Physical Education. The Inspectorate holds in-service training programmes and coaching classes for games masters and coordinates the sports activities of all schools. The Physical Education Department is also concerned with the function of identifying needy areas for development of sports and it concentrates its activities in the rural schools. A sum of Rs. 12,000 is spent each year in the form of financial assistance for organisation of sports meets by schools lacking in playground and other facilities for recreation. A sum of Rs. 80,000 is also utilised annually for funding the purchase of sports equipment by schools which do not levy facilities fees from students.

The Physical Education Department also holds several all-Island sports competitions which cover the 9,500 schools in the 190 circuits. An estimated 60,000 pupils participated during each of the past two years. The following are the all-Island competitions held by the Department annually and which serve to draw talent from the village school level. In an effort to encourage rural participation, the Department restricts participation in these competitions only to students who have hitherto not obtained a place in any of the inter-school competitions held by the controlling bodies for school sports.

1. Junior Schools – Track and Field Athletics Competition.
2. All-Ceylon Schools Physical Training Competition.
3. Central and Senior School Track and Field Athletics Championships.
4. All-Ceylon Junior and Senior Volleyball and Netball Championships.
5. All-Ceylon Gymnastics Championships.

6. All-Ceylon Wrestling Championships for Schools.

7. All-Ceylon Athletic Championships for Schools.

These competitions cater exclusively to students in government institutions. Supplementing this programme are the programmes of several controlling bodies of the various sports. These organisations were founded by the participant schools with assistance from the national controlling bodies for the various sports. The organisations have fairly long traditions and their main functions are to organise sports competitions for the member schools and to set down uniform standards and procedures for the conduct of inter-school competitions. There is a noticeable urban bias in the controlling bodies. This is largely unintentional and due mainly to the historical development of sports in urban areas. Some of the more prominent associations are the Ceylon Schools Athletics Association with a membership of 150 schools and conducting its annual meet through 13 zones spread over the Island and the schools sports associations catering to the following games: Football, Rugby, Table Tennis, Netball, Cricket, Swimming, Hockey, Basketball, Lawn Tennis, Volleyball. Most of the member schools are in urban areas, particularly because some of these sports are exclusively available in the Colombo schools. The infrastructure in the form of large playgrounds is well developed in the urban sector particularly in Colombo and its environs. In contrast the rural sector has a poor and inadequate infrastructure for wide range of sports. It has to concentrate initially on those games which require smaller outlays on infrastructure and sports materials - e. g. volley ball, basket ball, badminton, table tennis as well as adaptations of traditional games such as elle. This emphasis is already reflected in the Inter-Provincial Sports Festivals held by the Sports Ministry.

IV

The Non-Schooling Population in the Young Age Groups

The population in the age group 5 - 24 years in Sri Lanka is approximately 5.9 million and comprise 46.6% of the country's total population. There are approximately

1 million who do not either attend school or engage themselves in work of any kind. Additionally there are 660,000 who are engaged in duties within the home but also are not employed or attend school. The total number of non-schooling children may therefore be considered as around 1.6 million.

Sports facilities for the non-schooling young are available through the Sports Ministry, Local Government institutions, sports clubs and voluntary organisations.

The Ministry of Sports which was established in 1970 administers its sports programme through a Director of Sports, 3 Assistants, 22 District Sports Officers and 160 Sports Officers. The Director and Assistants man the General Administration based at the Head Office. The District Officers are stationed in each of the 22 Kacheries¹ and function under the administrative direction of the Government Agent of the area. The Sports Officers are stationed in the Divisional Revenue Office² and are required in the development of sports activities in the areas, to organise work camp, and to conduct an annual sports meet between the Gramasevakas' Divisions³ in the area. When the Ministry of Sports was established in 1970 it had the use of an already developed base of operation in the sports infrastructure available in the network of schools. Sports Officers were able to use the school playground or building as the nucleus of sports activity and the students as a medium through which the message of sports could be carried through the village. The fact that the Sports Officers and school staff derived their authority from two different sources had, however, created a situation where conflicts of interest arose. The Government has recently taken a decision defining the areas of operation of the two departments. The Department of Education was vested with the sole authority of control and development of sports and allied activities within schools. The

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1. District Administration Offices
 2. Sub-Divisional Administrative Offices
 3. Village Administrative Divisions

Department of Sports was allotted the function of developing sports activities which do not concern schools. This decision took away an essential institutional aid through which Sports Officers could have operated in the village. The resulting hiatus seems to have reduced the effectiveness of the Sports Officer at the village level of operations. The Sports Officers have now to depend entirely on sports clubs and Local Government organisations for their activities, and these are available only in the developed urban areas. It has to be noted that in the rural area participation in the school system is as yet low, and the rate of drop out is high. Sports facilities available in the school system is therefore able to reach only about half of the school age population or less. Some co-ordination of sports facilities for both the school-going and non-school-going components of the young population in the rural sector appears to be both rational and necessary.

The Ministry of Sports receives a budgetary allocation of Rs. 400,000 for annual expenditure on playground development. In view of the limitation of funds the Ministry does not finance the acquisition of lands, but utilises these funds for assistance to local bodies which desire to develop playgrounds already in existence. Assistance is normally in the form of finance for levelling of grounds, fencing, construction of pavilions etc. The Municipalities of Colombo, Kurunegala, Badulla, Kandy, Anuradhapura, Jaffna, Batticaloa, Galle, Matara, Kalutara and Nuwara Eliya have benefitted from this programme of assistance which ranges from grants of Rs. 10,000 to Rs. 50,000 per organisation. As a project aimed at development of sports in the rural sector, the Ministry renders assistance by gifting volleyballs and netballs and nets to sports clubs. An estimated 1,200 new volleyball courts and 160 netball courts have been established in rural areas through this programme.

One of the main objectives of the Ministry of Sports is to seek and identify talent especially in the rural areas and to train and assist the sportsmen concerned by coaching and guidance. To quote from the words of the Minister of Sports: "As Minister of Sports I consider it a primary duty by the people to take to villages, where the majority of people live,

the sports which were earlier confined to the urban areas. I am glad that I have been able to fulfil this duty to an appreciable extent." And, "another decision of mine is to provide facilities for sports in the rural areas, where such facilities are not available"¹

The climax to the sports activities of the Ministry of Sports is the all-Island Sports Festival held through-out the Island as preliminary competitions and culminating in the Inter-Provincial Festival in Colombo. The rules for entry to the respective competitions are such that those who have represented Sri Lanka or have been placed within the first three in the case of athletes, are not permitted to participate in the competitions. This rule has been introduced in order that new talent may be un-earthed and also to encourage rural sportsmen who do not have similar opportunities for participating in competitions unlike their urban counterparts. The 1972 and 1973 festivals both contributed to the discovery of hitherto unknown sports talent. At the base the competitions take place between Inter-Gramasevaka areas. Those who qualify participate in Inter - D. R. O. area meets. Thereafter at the Inter - District meets from which the Inter-Provincial competitors are chosen. It is estimated over 100,000 participated in the 1973 festival which consisted of athletics, volleyball, football, netball and elle.

Table I which furnishes the provincial participation at the finals, gives some idea of regional activity in athletics and the regional weightage given to certain events. The data in this Table reveals that the highest percentage of finalists were from the Western Province, the most urbanised locality in the country - 27.2%. An interesting feature is that the finalists from the Western Province were spread almost uniformly over all the events excepting the long distance running events which were almost entirely dominated by the Central, Southern and N. W. P. athletes. Another interesting feature is the comparatively high rates of performance by athletes from Uva Province which amount to 10.8%

1. K. B. Ratnayake Minister of Sports - Message to the 2nd Inter-Provincial Sports Festival conducted by the Ministry of Sports, August 1973.

as compared to the joint contribution of the Northern and Eastern Provinces which is 7%. The poor rates of performance are from Sabaragamuwa, 2.8%; North Central Province, 4.2%; Northern, 5.1%; and Eastern 1.9%, which constitute the rural hinterland of the economy. The North Western Province, Southern, Western and Central Provinces have jointly contributed 75% of the finalists at the Meet. The data reflect the uneven spread of sports achievements and the broad disparities that exist between the more urbanised and the predominantly rural areas in the country.

Of the other sports events which comprised the festival the finalists in the **elle** and volleyball tournament were the Western and North Western Provinces. The Finalists in the Football Tournament were Eastern Province and the Province of Uva while the finalists in the Netball Tournament were the Northern and Eastern Provinces.

The Ministry of Sports had made an attempt to assemble statistics regarding the availability of play-grounds on the basis of a questionnaire issued to the Sports Officers who were directed to report on the play-grounds available in their areas of operation. The information received is incomplete and there does not seem to be uniformity of assessment in the data. In fact, only 314 of the 665 local bodies in the Island, i.e. less than 50% have been covered. Nevertheless, the information gives some idea of the position as regards availability of playgrounds and is furnished in Table II. The total acreage of playgrounds is 305 from which an estimated national approximation of 741 acres could be derived. The regional differences indicated in the Table cannot be too heavily relied upon however in view of the fact that the data is incomplete and therefore cannot be treated even as a sample. Most of the figures refer to playgrounds administered by the local authorities and do not include other playgrounds. The total picture for Districts such as Colombo, Kandy and Jaffna would be substantially different when playground facilities other than municipal facilities are included.

To complete the picture, it would be useful to examine at some length a few aspects of the urban scene. The Colombo Municipal Council has the widest organisation of sports activities in any local government body, and has a planned programme of sports promotion. It has a selected staff of playground instructors who have been chosen largely for their prowess in sports. These instructors man the Council's network of 40 playgrounds and 37 community centres serving a city population of 511,644 (1963 Census). The municipal playgrounds are in addition to the several playgrounds and arenas belonging to the numerous sports clubs in Colombo. A survey was made with the assistance of the Chief Playground Instructor of the Municipality in order to ascertain the nature of participation in sports activities. The results of the survey indicate that only 6,293 persons utilise the facilities made available by the Municipality.

The overall poor rate of participation may well be due to the fact that there is a well distributed system of sports facilities other than the Municipal facilities available to the city population through the schools and sports clubs. The sports clubs in the city generally cater to adults and youth of the comparatively affluent strata and those who cannot afford the high subscription rates of the clubs will avail themselves of the free facilities offered by the municipalities. The non-schooling child from the low income groups should find the municipal sports facilities system useful and serving an essential requirement but on the contrary the numbers of those participating reveal a lack of interest. Some of the playground instructors believe that this is due to the fact that most young persons are just not interested in spending their leisure in a playground. They seek other leisure-time activities such as listening to the radio, going to a cinema or joining their peers in conversation and gossip. Although there may be some validity in this view, it would seem that there are other factors which constrain the more popular use of these facilities. The playgrounds as they are run now are just made available for anybody's use; there is no attempt on the part of the instructors to develop a club spirit among the participants. Youth and adolescents value the group

spirit and the sense of belonging to a group with common attachments. Group adhesiveness, the sense of loyalty to the organisation and other social ramifications which hold together the numbers of a sports club, also serve as an attraction to those outside the fold. This leads to sports rivalry between the clubs and creation of popular interest. Such features are conspicuously absent in the municipal system where participation is on an individual basis and social groupings are rare. One municipal playground included in the survey was a rare exception. Here the instructor had shown exceptional organisational ability. The attendance at this playground is the highest although the facilities available are not as complete as in other centres.

The index of sports participation for the Colombo Municipality could be applied in lesser degree to other urban areas, where sports facilities are not available in the same abundance. The urban child, especially those residing in and around the City of Colombo, has easy reach to a wide variety of sports activities and creates a more effective demand for sports facilities through an articulate middle class and its network of social institutions which are more sensitive to the needs of children than the traditional society of the rural sector. In Colombo, for example, there are three school swimming pools. Swimming pools are not found elsewhere except for the few in the suburban tourist hotels, where however charges are prohibitive and thus do not in any way assist the local residents. Popular urban sports are cricket, rucker, hockey, football and tennis which require well-developed and extensive playing areas. The urban schools and clubs are able to afford the cost of maintaining the sports arenas as well as the ancillary sports equipment required for the sports, either through their affluent clientele in the city who patronise the clubs or through gate collections which are possible only in the city with its heavy population. The rural sector does not have such resources and resultantly cannot offer the same variety of sports. The popular sports in the rural areas are volleyball and netball which require a small playing area and comparatively low-cost equipment. The Ministry of

Sports seems to have taken the desired step of attempting to develop sports in the rural areas through a scheme of development described elsewhere in this study. In an emergency plan for employment formulated in 1970 the Ministry of Planning and Employment included a programme for the establishment of low cost cultural centres, widely distributed in the rural sector. These were to cater to the recreational needs and intellectual interests of rural communities, promote local talent in the arts, including literary skills, music, drama, dancing, organise entertainment and function as far as possible on a self-financing basis. The programme was to satisfy a growing need in the rural sector. The traditional forms of recreation (festivals, thovil ceremonies, folk drama) which were integrally limited to a system of belief and a way of life were slowly disappearing or were not fulfilling the needs of a new generation exposed to modern education. There was a resulting aimlessness and vacancy in the leisure of the rural youth, aggravated by long periods of waiting for employment. A cadre of extension staff was recruited to develop the proposed centres. The programme of activities of these centres has however not been clearly identified and adequately elaborated and they have failed to develop on the lines that were envisaged. The objectives in the original proposal are however worth exploring. A few centres could be organised on an experimental basis in selected communities. They could draw on existing programmes such as those organised by young peoples religious associations - Y. M. C. A., Y. M. B. A., Y. W. C. A., Y. M. M. A. The centres could link together a range of activities including cultural activities and sports. This type of centre which has sufficient diversity and range in its programmes could serve as a meeting point for young persons with diverse interests, increase the level of participation and support the specialised interests of the component groups such as sports, physical education, cultural pursuits.

The need for recreational centres and playgrounds are emphasised largely in urban areas. The need for areas specially allocated for recreation and play is dictated by the

densities of settlement. But even in urban areas, there is little evidence of conscious planning for areas of play and recreation in relation to density of settlement as part of a well conceived spatial plan. In rural areas with the lower ratio of men to land and the lower density of population the need is not articulated as in urban areas. It is therefore rarely that special attention is given to recreational needs by local institutions. Local authorities and rural development societies are nevertheless acting in providing playgrounds as ad hoc projects.

The development of recreational facilities is an area which offers considerable scope for self-help and voluntary effort at the village level. A well designed recreational plan for a selected local community could be implemented as a pilot project to mobilise self-help and the organisational assistance of a wide range of voluntary agencies for upgrading recreational facilities in the rural sector. Such a plan could include the pre-school programmes that have been discussed, and the experimental centre for cultural and recreational activities which was described. It could provide a frame which co-ordinates the relevant activities of the young population both within and outside the school system. The plan should have innovative and imaginative ways of making the best use of local resources both physical and human for the recreational needs of the community. The village reservoir, the rivers and streams and other natural assets may show hitherto unused potential for organised recreation and sports. Swimming for example has been totally neglected as an organised sport in the rural sector although natural facilities are often available. Such a programme could include the rudiments of physical and environmental planning for recreation. It could mobilise self-help for building up the physical infrastructure required.

V

Conclusions

- Organised state activity at the national level to promote sports and recreational activity is of recent origin. Consequently the data available in regard to the availability

of sports facilities and level of participation is inadequate and fragmentary. A programme for the systematic collection of relevant data has therefore to be given high priority.

The development of recreation and sport could be first seen in the broader social setting. The traditional organisation of rural society included entertainment, recreation, sports as an integral and indistinguishable part of other social activities—religious occasions, devil dancing ceremonies, village festivals. It did not have the specialised character which recreation has acquired in the modern setting. The traditional fabric of recreational activity is being slowly displaced and different forms and institutions are either already taking their place or have to develop to fill the gap.

- Organised and specialised sports activity among the population began with the modern school system in the urban sector. A number of games popular in the West were introduced and popularised - cricket, rugby, hockey, football, tennis, badminton, netball. These sports activities were for a long time confined to the urban minority.
- With the introduction of free education, the expansion of the school system and the entry of large numbers of rural children, the rural sector became gradually included in the system of organised sports. The better infrastructure and facilities remain with the schools in the urban sector.
- Financial resources for development of sports within the school system are severely limited. Facilities fees contributed by the parents of school children are the main source for purchase of sports materials. Coaching and training has to be organised on a voluntary basis. Within this set-up schools in the rural sector with low income households are invariably at a disadvantage.
- The young population who are out of school are served by the Sports Ministry, which has to make use of existing facilities outside the school system. This

specialisation in the administration of sports facilities whereby the Education Ministry is responsible for the student population and the Sports Ministry for the young outside the school system works to the disadvantage of rural areas where the participation in the school system is low, drop out is high and sports facilities outside the school system very limited. Closer co-ordination and sharing of facilities in such areas appears to be both rational and necessary.

- Available data confirm that sports participation and athletic achievement are heavily concentrated in the highly urbanised areas, where long tradition of sports activities combined with adequate sports facilities exist.
- The inadequacy of physical facilities in the rural sector such as large playgrounds, recurrent costs of sports make it incumbent for the rural sector both within and outside the school system to concentrate on sports which need a low-cost infrastructure and whose recurrent costs are low - volleyball, netball, badminton, table tennis, adaptation of traditional games. The Sports Ministry's programmes recognise these priorities.
- The activities of the pre-school group are again better organised in the urban sector. The low-cost programmes in the rural sector such as those of Sarvodaya and Lanka Mahila Samiti offer scope for further development and expansion to enrich the recreational life of the rural child.
- The proposal for the establishment of cultural centres in the 'crash' programme of employment formulated by the Ministry of Planning and Employment in 1970 could be suitably adapted and implemented on an experimental basis in a few selected local communities. The centres had been conceived with the objective of improving the quality of recreational life in the rural areas particularly in view of the breakdown and slow

disappearance of traditional forms of recreation and rural entertainment, as well as the changing recreational needs of a young rural generation exposed to modern education.

- Physical planning for the recreational needs of the community and of the young in particular has received little attention in the urban areas and almost no attention in the rural areas. Communal playsites for young children could be developed and equipped with basic items such as swings, slides at relatively low cost even in rural communities. Natural resources and physical assets which are available such as reservoirs, streams, rivers, tank beds in the dry season could be put to better recreational use.
- Recreation plans could be formulated for a few selected rural communities which bring together the different elements which have been described above including pre-school activities co-ordination of activities for the school-going and the non-school-going population, development of sports activities which require low cost infrastructure and low recurrent expenditure, a centre for recreational and cultural activities, suitable physical planning which makes best use of natural assets that are available. One such plan for a selected local community could form a component in each of the model District plans for children and adolescents.

CHAPTER VI

SUMMARY AND CONCLUSIONS

TOWARDS AN INTEGRATED APPROACH IN PLANNING FOR THE NEEDS OF CHILDREN AND ADOLESCENTS

The broad conclusions which emerge from the present study point to a wide range of feasible programmes which provide the basis for an integrated approach in planning for the needs of children and adolescents. This chapter recapitulates the main conclusions in each chapter and presents them together so that the various elements could be viewed within the total framework, and the complementarities and linkages among the different programmes could be clearly identified.

- The analysis of the **demographic** structures in different districts draws attention to the different demographic situations resulting in different patterns of demand and requiring different strategies of investment in regard to the services catering to children and adolescents. There are three broad types of demographic structures which have been identified in this initial exercise.
- There is **first** the age structure in which the 3 age cohorts in the segment 0-14 years were almost equal in size. Thereafter the age cohorts 15-19 and 20-24 progressively diminish in size. In the **second** type the 2 age cohorts in the segment 0-10 are again almost equal in size. Thereafter the structure tapers and each older cohort is increasingly smaller in size. In the **third** type the age structure is more distinctly pyramidal in shape with a progressive reduction in size in each older 5-year age group,
- These three demographic variants have significant implications for the age specific services catering to the young population. In the first, the "barrel" shape of the first

3 age components upto 14 years suggests that services for these 3 groups will not feel serious demographic pressures as one age cohort moves to the next. For example, existing educational facilities at the primary level at current levels of participation will continue to be in balance with the student population for the next five years. In the 10-14 age group this state of relative balance could persist for about 10 years.

- In the second type the situation is altered. The pressures will be felt beginning from the 10-14 age group as the larger cohort in the 5-9 year age group enters the 10-14, and the 10-14 moves into the 15-19 age group.
- In the third type the pressures will be felt at all levels.
- It would be useful to work out three typical demographic projections upto about 1990 for the three types of age structure, selecting a district from each group. These would provide the frame within which future plans for the young population could be formulated in relation to the special demographic characteristics of the different regions.

The analysis in the other sections of the report could be summarised giving emphasis to the links between the programmes in the different fields and outlining the design for an integrated approach.

- The section on **formal education** examines the availability of educational services in relation to the current levels of participation in the system. It attempts to place the educational needs within the broader socio-economic perspective. In doing so it draws attention to the serious imbalances between education and employment which have grown out of a formal education ill fitted to the occupational environment, and which have been accentuated by the relatively sluggish growth of the economy. The recent educational reforms have attempted to correct some of the deficiencies in the educational system.

- The analysis in the study identifies five groups of districts, of which, each represents a typical combination of educational needs and problems.
- One group presents a situation in which participation rates are lower than the national average from the primary level onwards; the drop-out rate in the first five grades is exceptionally high; the diversification of education in the small secondary stream is restricted and negligible; the composition of teaching skills is poor in comparison to other Districts; physical facilities in regard to classroom accommodation and access to schools in terms of distance and location poor. Moneragala is a typical District in this category. In districts of this type together with efforts directed at raising participation, there has to be a special effort at adapting primary level programmes to impart to them a 'terminal' character so as to equip early school-leavers with a well integrated though basic stock of knowledge and assortment of skill which are relevant to their work environment. In these Districts, the pre-vocational programmes at the secondary level again need to be closely linked with available work opportunities and would have a different character from programmes in an urban work environment. The composition of teaching skills and physical facilities would need to be upgraded. The problem of distance to schools, size of school and class room, and even the type of teacher may all need to be re-examined so that a more appropriate package could be made available.
- The second group of Districts with another set of problems are the Tamil Districts with the exception of Jaffna. Here while the physical facilities, composition of teaching skills, and diversification of education are relatively satisfactory, problems relating to low participation from the primary level upwards and a high drop-out rate in the first five grades are again pronounced features of the prevailing situation. In addition there is an exceptionally low level of female participation. What has been said of the adaptation of primary level and pre-vocational programmes for the first

group of Districts apply to this group as well. Improvement in the rates of femal participation would require a broad-based strategy which changes attitudes and provides adequate motivation. In such a programme the services of voluntary agencies such as women's organisations would have to be mobilised. However, the organisation of women in voluntary institutions is inadequate in these very districts and calls for a special effort.

- In the third group of Districts, the participation at the primary level is satisfactory; the drop-out rate rises sharply in the secondary level. The diversification of the education structure is low. The composition of teaching skills is poor.
- In the fourth group of Districts retentions are comparatively high upto the terminal point, but the system of education is heavily biased towards non-technical studies and hence the diversification of studies is limited. The composition of teaching skills at the secondary level is correspondingly poor in relation to science teaching skills. The effort in these districts has to concentrate, among other things, on employment-oriented programmes for school-leavers with comparatively higher educational attainments and consequently a different pattern of job expectations. Along with the diversification of the academic streams, the pre-vocational curricula have to be developed to cater to the special characteristics of the school population in these Districts.
- Finally, Jaffna and Colombo are examples of educational structures which are fairly well balanced and at a higher level of diversification. Participation rates are high, and the drop out rate in the primary and secondary streams are the lowest. Jaffna possesses the best performance in terms of the expectations and demands of the academic educational system. In regard to the availability of services it has reached relatively high standards on all indicators-distribution of junior and senicr schools, distance from schools, balance between 1st level and 2nd level education, class room accommodation, composition of teaching skills.

This is reflected in a correspondingly higher level of efficiency - a comparatively high rate of participation for all three five-year age groups from 5-19, a high proportion of enrolments in the non-arts and technical streams, to relatively high retention rates. These two Districts - and of them Colombo in particular - will however reflect the educational imbalances in an urban and modern setting. Strategies in the primary, pre-vocational and diversified academic streams in these situations will have to be different from other districts.

- The planning of educational services for the young age groups and the different strategies and packages of policies that are needed could be investigated in depth and demonstrated effectively by selecting one district from each typical group for further studies and for evolving model action programmes. These programmes could be developed within the demographic frames described earlier.
- The analysis of the system of **non-formal education** draws attention to the following aspects which could form part of an integrated plan for the services catering to the young population.
- The programmes of non-formal education are directed at the young population in the age groups 05-24 who are out of the formal schooling system.
- The young people in these age groups outside the schooling system are a heterogeneous population with different levels of educational attainment and non-formal education programmes have to be tailored to cater to their heterogeneity.
- The non-formal programmes in so far as they concern the young are mainly aimed at the 15-24 age group. With the exception of Sarvodaya, there are no programmes which directly reach the large out-of-school group in the 5-14 age cohort.
- Components of most of the important non-formal educational programmes are found in almost every District in the country. But intensity of effort and the levels

of participation vary widely from District to District. The better organised non-formal institutions, such as the Diyagala Boys' Town are mainly concentrated in the urban sector and of the urban, the Western region in and around Colombo is best served. At present non-formal programmes whether in the governmental or non-governmental sector are not co-ordinated. There is no concerted and planned effort to develop and build on the complementary and mutually supportive roles which the different non-formal educational programmes could play. The National Youth Council and the Freedom from Hunger Campaign are national level organisations for co-ordination of these activities. At the village level the Divisional Development Council could undertake this work. There is no well defined co-ordinating authority for these activities at the District level. At present the Government Agent and his staff would attend to this function as and when problems need attention.

- The existing programmes of non-formal education contain a large number of elements which could be selected and elaborated into well co-ordinated age specific programmes for the different age groups.
- The out-of-school population in the age group 5-14 is not being adequately served at present by programmes of non-formal education. The programmes for the 5-14 age group would have to combine elements of continuing education with upgrading of skills and aptitudes. The non-formal training programmes for adults should contain a training component which improves the transmission of knowledge and skills from the elders to their children working in family farms and enterprises. The 5-14 age groups could be reached through a number of existing programmes which could be extended and modified appropriately. These are the religious institutions, the Young Farmers Clubs, the Sarvodaya Movement, the Lanka Mahila Samitis, the Boy Scouts and Girl Guides Movements and Farmer Training Programmes.

- For the 15-19 and 19-24 age groups out of school, programmes which are adapted to different educational levels are available. The Sarvodaya, the workshops and some of the training schemes run by the Small Industries Department and the Labour Department's mobile training units will cater to the early school leavers. The vocational training centres run by the religious institutions, e.g. Diyagala Boys' Town, the Industrial schools by the Small Industries Department, the vocational training centres of the Labour Department will cater to youths with better educational attainments.
- From these elements it would be possible to formulate integrated and age-specific programmes of non-formal education catering to the different groups of the young population. This could best be done by developing programmes for a selection of districts with different sets of needs. The Districts suggested for a similar exercise on formal education could be taken for non-formal education as well. The complementarities between the formal and non-formal systems and the close links between learning and work opportunities could be elaborated in the different situations prevailing in the different districts.
- Special vocational training projects such as Tanamalvila project of Sarvodaya, or Diyagala Boys' Town, the special projects of the Rural Development Societies, the model centre of the Lanka Mahila Samiti, the five Districts of concentration for the Young Farmer Clubs could be used as focal points for these integrated programmes and the activities developed and organised around them.
- These integrated programmes would have to be employment-oriented and closely linked to work opportunities. For this purpose the non-formal education programmes should as far as possible be co-ordinated with the projects of the Divisional Development Councils, Youth Settlement Schemes and other Youth schemes commenced under the Land Reform.

- The administrative framework for the co-ordination of non-formal education programmes has to be developed through the National Youth Council and the Freedom from Hunger Campaign at the national level, and the Divisional Development Council at the village level. Effective machinery for co-ordination at the District level has to be established.
- There have been marked regional variations in the delivery of some of the **health services to children and adolescents**. Data in respect of regional delivery of services are available only in regard to a few services and showed marked regional disparities, e. g. immunisation against Polio which shows that the regional variations are very great ranging from 90% coverage in Colombo, Kurunegala, Jaffna and Kalutara to between 40% and 50% in Matale, Galle, Batticaloa and Amparai districts; the school health programmes where coverage ranges from 16% for Jaffna and 13% in Kalutara to 4.7% in Galle and 5.2% in Badulla; Maternal and Child Health Centres which are available on a ratio of 19 per thousand in Matara/Hambantota, 17 in Kurunegala, 8.9 in Kandy and 6.8 in Mannar; the Distribution of paediatric beds is heavily weighted in favour of the Colombo metropolis; the age-specific services to the young age group in the hospital system appears to be disproportionately small.
- There is severe calorie-protein malnutrition among children and adolescents in urban and rural households in lowest income groups, particularly those below Rs. 100 per month, judging by their expenditure on food and drink and by the quantity and quality of per capita food consumption.
- The coverage of the Health Ministry's programme of immunisation of children against Poliomyelitis is poor, extending to only a third of the child population.
- The incidence of tetanus among children has been rising during the past 10 years but the immunisation programme against tetanus covered only 30% of the child population and even the 30% had received only partial immunisation.

- The campaign of administering the triple vaccine against diphtheria, whooping cough and tetanus has reached only 30% of infants and these infants have only been partially immunised with only one dose.
- Worm infestation of infants and children has been found to afflict over 50% of all children under 10 years.
- The campaign of vaccination of children against small-pox has reached only 68% of children under 15 years. The number of secondary vaccinations has dropped sharply since 1966/67.
- A serious downward trend in the number of services (visits by public health personnel) delivered to children has set in since 1961, particularly the maternal and child health services to infants and pre-school children.
- The Maternal and Child Health Centre programme could be intensified, the Centre given a multipurpose role and co-ordinated with other pre-school units. The Centre could administer a regular and systematic programme of clinics in which the entire pre-school population in the locality is enrolled so that prevention and curative services reach this group in a sustained manner. A model programme would have to be formulated for a group of selected districts.
- The immunisation programmes would have to be another point of concentration. There has to be intensive surveillance to ensure full coverage. Such schemes of surveillance can be linked to the Maternal and Child Health Centre programmes for pre-school children and to school health services for the school-going population. The voluntary agencies could also be mobilised to raise the health consciousness among the people and motivate their participation in immunisation programmes.
- The school health services should be re-structured to become effective as the means of monitoring the health of the student population and providing preventive and curative services. These programmes could feed back to

the school curricula in health education and make the school active in improving the knowledge of the student population and the community in matters relating to health and nutrition.

- A co-ordinated programme of health education for the young can commence at pre-school level in the Maternal and Child Health Centres, use the immunisation programmes where relevant, and proceed to the more formal curricula in schools. Regular exhibitions could make an additional impact. The activities of voluntary agencies could contribute to this programme.
- For the improvement of environmental sanitation, schools could be used for demonstration programmes in a way which would have a wider impact on the community. The Divisional Development Councils, Rural Development Societies and voluntary agencies such as Sarvodaya could organise self-help for programmes of environmental sanitation.
- Model nutritional programmes could be organised linking the Maternal and Child Health Centre, the school, and home and the farm, and co-ordinating the feeding programmes, education in nutrition, changes in food habits and selective programmes of food production.
- The components of a health programme for the young population that have been outlined above could be developed within the framework of a few selected districts. The programmes could be appropriately adapted to the different conditions in each district. These programmes could be part of the model programmes suggested for education and non-formal education, and could develop the linkages between the programmes in each of these fields. As demonstrated already, the programmes in these connected fields converge on the programmes for pre-school children, school health services, health education, environmental sanitation and nutrition.
- The programmes that are suggested would require readjustment in the system of health services in the young age which will restore prevailing imbalances both

in regard to regional distribution as well as the allocation of resources to age-specific services for the young within the total system. This would require a critical study and analysis of these two aspects in the prevailing system.

- Formulation of the programmes outlined will require substantial improvements in the existing statistical system to enable the collection of reliable age-specific data. It would be necessary to obtain district-wise data on age-specific morbidity rates, the incidence of children's diseases, the nutritional levels in different income groups, incidence of malnutrition, fertility rates and family size. The statistics already collected in the various units of the Health Ministry would have to be suitably modified to provide an age-specific profile of health conditions. The collection of the data currently undertaken would have to be more closely supervised for accuracy and reliability.
- Organised state activity at the national level to promote **sports and recreational activity** is of recent origin. Consequently the data available in regard to the availability of sports facilities and level of participation is inadequate and fragmentary. A programme for the systematic collection of the relevant data has therefore to be given high priority.
- The development of recreation and sport could be first seen in the broader social setting. The traditional organisation of rural society included entertainment, recreation, sports as an integral and indistinguishable part of other social activities - religious occasions, devil-dancing ceremonies, village festivals. It did not have the specialised character which recreation has acquired in the modern setting. The traditional fabric of recreational activity is being slowly displaced and different forms and institutions are either already taking their place or have to develop to fill the gap.
- Organised and specialised sports activities among the young population began with the modern school system in the urban high. A number of games popular in the

West were introduced and popularised - cricket, rugby, hockey, football, tennis, badminton, netball. These sports activities were for a long time confined to the urban minority.

- With the introduction of free education, the expansion of the school system and the entry of large numbers of rural children, the rural sector became gradually included in the system of organised sports. The better infrastructures and facilities still remain with the schools in the urban sector.
- Financial resources for development of sports within the school system are severely limited. Facilities fees contributed by the parents of school children are the main source for purchase of sports materials. Coaching and training has to be organised on a voluntary basis. Within this set-up schools in the rural sector with low-income households are invariably at a disadvantage.
- The young population who are out of school are served by the Sports Ministry which has to make use of existing facilities outside the school system. This specialisation in the administration of sports facilities whereby the Education Ministry is responsible for the student population and the Sports Ministry for the young outside the school system works to the disadvantage of rural areas where the participation in the school system is low, the drop-out rate is high, and sports facilities outside the school system very limited. Closer co-ordination and sharing of facilities in such areas appears to be both rational and necessary.
- Available data confirm that sports participation and athletic achievement are heavily concentrated in the highly urbanised areas where long traditions of sports activity combined with adequate sports facilities exist.
- The inadequacy of physical facilities in the rural sector such as large playgrounds and the recurrent costs of sports make it incumbent for the rural sector both within and outside the school system to concentrate

on sports which need a low-cost infrastructure and where recurrent costs are low - volley ball, netball, badminton, table tennis, adaptation of traditional games. The Sports Ministry's programmes recognise these priorities.

- The activities of the pre-school group are again better organised in the urban sector. The low-cost programmes in the rural sector such as those of Sarvodaya and Lanka Mahila Samiti offer scope for further development and expansion to enrich the recreational life of the rural child.
- The proposal for the establishment of cultural centers in the 'crash' programme of employment formulated by the Ministry of Planning and Employment in 1970 could be suitably adapted and implemented on an experimental basis in a few selected local communities. The centres had been conceived with the objective of improving the quality of recreational life in the rural areas, particularly in view of the breakdown and slow disappearance of traditional forms of recreation and rural entertainment, as well as the changing recreational needs of a young rural generation exposed to modern education.
- Physical planning for the recreational needs of the community and of the young in particular has received little attention in the urban areas and almost no attention in the rural areas. Communal playsites for young children could be developed and equipped with basic items such as swings, slides, at relatively low cost even in rural communities. Natural resources and physical assets which are available such as reservoirs, rivers, tank beds in the dry season could be put to better recreational use.
- Recreation plans could be formulated for a few selected rural communities which bring together the different elements which have been described above including pre-school activities, co-ordination of activities for the school-going and the non-schoolgoing population, development of sports activities which require low cost infrastructure

and low recurrent expenditure, a centre for recreational and cultural activities, suitable physical planning which makes best use of natural assets that are available. One such plan for a selected local community could form a component in each of the model District plans for children and adolescents.

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- The different parts of the study converge to provide the basic elements in an integrated approach to planning and implementation of age-specific programmes. The study attempts to identify the patterns in which the significant regional variations occur and in this manner points to a broad typology of needs and problems in relation to the needs of children and adolescents. It also indicates how the conclusions could be taken further in a programme oriented to policy and action through the development of model programmes for a few typical situations.
- The study has attempted to distinguish between different patterns of needs among children and adolescents in varying regional conditions in relation to the four sectors that have been examined. In each sector the study has indicated the main elements of a programme adapted to typical combinations of problems and needs as they emerge in the different districts.
- In these programmes it is possible to identify several groups of activities which can be combined in a composite interlinked package of services in formal education, non-formal education, health, nutrition and recreation directed at the different age cohorts in the 0-19 age groups and the special characteristics of these age cohorts in these districts. Examples are the intensification and diversification of pre-school programmes with Maternal and Child Health Centres as focal points, linking health, nutrition, education and recreation and mobilising both government and non-governmental agencies; linkages; between formal education, non-formal education

and development activities and projects suitably adapted to different districts, with non-governmental and governmental agencies suitably co-ordinated; new and enlarged types of applied nutrition programmes in which the roles of the school, the home, the family farm, the child health centre are actively interlinked; school health services which link health, nutrition and education. All these programmes could be formulated and implemented to reach multiple objectives.

- In the formulation of the model District Programmes which have been discussed one important task will be to identify these packages, elaborate on their content, and give them effective organisational forms.
- Developing any one of these package programmes will no doubt involve a great deal of detailed and intensive work. For example, enhancing the role of the Maternal and Child Health Centre, the development of curricula to impart a terminal character to the early segments of the educational structure, adapting pre-vocational programmes to regional situations, giving substance and relevance to the content of non-formal education in relation to the heterogeneity of its clientele, call for innovative skills of a high order. Re-orientation of age-specific programmes in the manner suggested will carry with it a major component of retraining of cadres. Creating effective co-ordinating mechanisms across departmental and Ministerial boundaries will pose another major challenge.
- In the programmes that have been discussed in the study occasional reference has been made to pockets of hardcore poverty among the low income groups. Households which according to the socio-economic survey are earning incomes below Rs. 100 per month would fall into this category. The young population in these income groups would be among the most vulnerable section of the population. From the data assembled for the study it is possible to identify three representative locations of

such poverty. One could be found in a specially depressed section in the rural sector among village communities which have suffered severe economic and social discrimination on account of caste. Many of the Sarvodaya villages would represent poverty of this type. Another could be in an urban community resident in temporary and substandard housing - a slum community or shanty community. In the estate sector a community of Indian plantation labour in the mid country would be another such disadvantaged group. Three such communities could be selected, one each from the rural, urban and estate sectors, a case study in depth undertaken in each and the relevant elements of the typical programmes adapted to conditions of extreme poverty developed within the Five-Model District Programmes. All these situations will not occur in each of these five Districts, but in each an appropriate programme could be developed.

TABLES

TABLE I
Population Distribution by Age Groups and Sex for the Census Years 1901 - 1971

Census Year	All Ages	Age Group				(0-14) as a percentage of all ages	Age Group			(15-24) as a percentage of all ages	Age Group 25-49	(25-49) as a percentage of all ages	Age from 50 and over.	((50 and over as a percentage of all ages
		Age Group					15-24	20-24	15-24					
		0-4	5-9	10-14	0-14									
1901	M	1896	329	264	202	795	180	183	363	19.14	577	30.43	161	8.49
	F	1670	310	240	161	711	206	174	380	22.75	474	28.38	105	6.28
Total		3566	639	504	363	1506	386	357	743	20.84	1051	29.47	266	7.45
1911	M	2175	312	285	271	872	178	194	372	17.10	714	32.83	217	9.97
	F	1931	296	275	236	807	169	195	364	18.85	583	30.19	177	9.16
Total		4106	608	564	507	1679	347	389	736	17.93	1297	31.58	394	9.59
1921	M	2382	328	293	295	916	214	222	436	18.30	789	33.12	241	10.11
	F	2117	315	282	258	855	199	220	419	19.79	648	30.61	195	9.21
Total		4499	643	575	553	1771	413	442	855	19.01	1437	31.94	436	9.69
1946	M	3532	437	412	415	1264	364	328	692	19.60	1181	33.44	395	11.18
	F	3125	424	400	391	1214	316	314	630	20.16	956	30.59	324	10.36
Total		6657	861	812	806	2478	680	642	1322	19.86	2137	32.10	719	10.80
1953	M	4269	609	550	475	1634	364	359	759	17.78	1371	32.12	505	11.82
	F	3829	600	536	445	1581	340	372	712	18.59	1137	29.69	399	10.42
Total		8098	1209	1086	920	3215	704	767	1471	18.16	2508	30.97	904	11.16
1963	M	5503	816	736	682	2234	521	440	961	17.47	1576	28.63	732	13.30
	F	5086	783	724	650	2158	502	444	946	18.60	1407	27.66	576	11.33
Total		10589	1599	1460	1332	4392	1023	884	1907	18.01	2983	28.17	1308	12.35
1971	M	6526	857	833	829	2539	687	614	1301	19.94	1738	26.63	948	14.52
	F	6185	832	833	794	2459	678	629	1307	21.12	1787	28.89	632	10.22
Total		12711	1699	1686	1623	4998	1365	1243	2608	20.51	3525	27.73	1580	12.43

Source: Census Reports of the Department of Census and Statistics.

POPULATION BY 5 YEAR AGE GROUPS
1946
Chapter I

Table II

DISTRICTS	ALL AGES	0 — 4	5 — 9	10 — 14	15 — 19	20 — 24	25 & Over
Sri Lanka	T	861,439	811,363	805,642	680,614	641,571	2,856,710
	M	3,532,218	411,832	414,620	364,467	327,847	1,576,020
	F	3,125,121	399,531	391,022	316,147	313,724	1,280,690
Colombo	T	1,420,332	144,906	151,698	147,373	157,411	659,511
	M	779,800	73,150	78,710	82,181	87,825	377,287
	F	640,532	71,756	72,988	65,192	69,586	282,224
Kalutara	T	456,572	54,982	56,196	46,852	42,023	198,677
	M	234,630	28,037	29,084	24,628	19,320	104,113
	F	221,942	26,945	27,112	22,224	22,703	94,564
Kandy	T	711,449	94,696	86,699	73,098	67,001	288,571
	M	376,990	47,924	44,291	38,608	34,094	160,712
	F	334,459	46,772	42,408	34,490	32,907	127,859
Matale	T	155,720	21,708	19,007	15,545	14,458	63,984
	M	83,194	10,957	9,617	8,330	7,368	36,300
	F	72,526	10,396	9,390	7,215	7,090	27,684
Nuwara Eliya	T	258,121	41,406	31,775	25,310	23,906	109,500
	M	140,592	18,216	15,789	13,021	12,028	60,852
	F	127,529	18,008	15,986	12,289	11,878	48,648
Galle	T	459,785	57,353	61,092	47,783	38,322	195,209
	M	227,055	29,544	30,993	23,612	15,949	96,298
	F	232,739	27,809	30,099	24,171	22,373	98,911
Matara	T	351,947	44,851	50,288	35,785	28,155	143,098
	M	175,841	23,342	26,129	17,241	11,771	71,656
	F	176,106	21,509	24,159	18,544	16,438	71,442
Hambantota	T	149,686	17,183	21,827	15,709	14,771	61,242
	M	79,862	8,998	11,842	8,776	7,541	32,848
	F	69,824	8,185	9,985	6,933	7,230	28,394

(Continued)

(Continued)

DISTRICTS	ALL AGES	0 - 4		5 - 9		10 - 14		15 - 19		20 - 24		25 & Over	
		T	M	T	M	T	M	T	M	T	M	T	M
Jaffna	424,788	44,873	47,733	50,274	43,446	36,636	201,826						
	212,194	22,634	24,051	25,015	21,936	17,215	101,343						
	212,594	22,239	23,682	25,259	21,510	19,421	100,483						
Mannar	31,538	3,146	3,226	3,029	2,837	3,642	15,618						
	18,787	1,619	1,617	1,618	1,698	2,371	9,864						
	11,751	1,527	1,649	1,411	1,139	1,271	5,754						
Vavuniya	23,246	2,547	2,682	2,485	2,388	2,442	10,702						
	13,414	1,290	1,341	1,286	1,340	1,433	6,724						
	9,832	1,257	1,341	1,199	1,048	1,009	3,978						
Batticaloa	203,186	26,933	27,276	26,114	20,553	18,081	84,229						
	102,307	13,876	13,718	13,573	10,343	8,362	42,435						
	100,879	13,057	13,558	12,541	10,210	9,719	41,794						
Trincomalee	75,926	7,022	7,182	6,647	8,066	13,217	33,792						
	50,639	3,565	3,685	3,630	5,495	10,466	23,798						
	25,287	3,457	3,497	3,017	2,571	2,751	9,994						
Kurunegala	485,042	63,827	62,801	59,076	50,527	47,710	201,101						
	260,029	32,528	31,734	30,501	28,019	23,400	113,847						
	225,013	31,299	31,067	28,575	22,508	24,310	87,254						
Puttalam	43,083	4,712	4,577	4,676	4,145	4,795	20,178						
	24,972	2,398	2,394	2,481	2,477	2,788	12,434						
	18,111	2,314	2,183	2,195	1,668	2,007	7,774						
Chilaw	139,764	16,622	16,099	16,300	14,309	14,086	62,348						
	74,206	8,481	8,100	8,188	7,706	6,799	34,932						
	65,558	8,141	7,999	8,112	6,603	7,287	27,416						

(Continued)

(Continued)

DISTRICTS	ALL AGES	0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & Over
Anuradhapura	T	14,430	16,715	16,274	15,093	16,397	60,625
	M	7,278	8,432	8,926	9,195	10,098	38,421
	F	7,152	8,283	8,348	5,898	6,299	22,204
Badulla	T	55,810	53,054	49,989	35,945	30,122	147,318
	M	28,011	26,740	25,280	19,072	15,206	81,889
	F	27,799	26,314	24,709	16,873	14,916	65,429
Ratnapura	T	51,495	44,723	41,995	34,150	31,904	139,353
	M	26,187	22,696	21,624	18,541	16,409	80,609
	F	25,308	22,027	20,371	15,609	15,495	58,744
Kegalle	T	59,499	54,042	50,201	41,700	36,492	159,828
	M	30,194	27,491	26,043	22,248	17,458	89,658
	F	29,305	26,551	24,158	19,452	19,034	70,170

Source : Census of Ceylon 1946

POPULATION BY 5-YEAR AGE GROUPS
1963
Chapter I

Table III

DISTRICT	ALL AGES	AGE GROUPS						25 & Over
		0 - 4	5 - 9	10 - 14	15 - 19	20 - 24	25 & Over	
Sri Lanka	T	1,599,140	1,460,690	1,332,220	1,022,650	884,520	4,290,840	
	M	815,560	736,210	681,860	520,850	440,270	2,308,100	
	F	783,580	724,480	650,360	501,800	444,250	1,982,740	
Colombo	T	2,207,420	262,120	258,030	221,980	195,660	973,590	
	M	1,171,170	132,520	132,740	116,450	106,350	533,130	
	F	1,036,250	129,600	125,290	105,530	89,310	440,460	
Kalutara	T	84,070	76,020	77,160	64,670	54,130	275,640	
	M	318,390	39,160	39,020	32,600	26,020	139,660	
	F	313,300	36,860	38,140	32,070	28,110	135,980	
Kandy	T	1,047,160	146,710	134,680	108,810	91,810	408,220	
	M	538,660	79,320	69,300	55,090	43,710	217,340	
	F	508,500	72,810	65,380	53,720	48,100	190,880	
Matale	T	255,880	38,240	33,830	24,590	20,540	95,920	
	M	132,690	19,190	16,710	12,220	0,640	52,910	
	F	123,190	19,050	17,120	12,370	10,900	43,010	
Nuwara Eliya	T	398,780	55,820	48,560	41,070	37,560	153,940	
	M	207,210	27,960	23,990	20,170	18,910	86,050	
	F	191,570	27,860	24,570	20,890	18,650	68,890	
Galle	T	642,340	83,130	79,740	65,110	51,160	272,760	
	M	316,270	42,700	40,620	31,540	22,910	132,280	
	F	326,070	40,430	39,120	33,570	28,250	140,480	

(Continued)

(Continued)

DISTRICT		ALL AGES	0 — 4	5 — 9	10 — 14	15 — 19	20 — 24	25 & Over
Matara	T	515,020	78,020	71,670	67,660	51,050	36,970	209,650
	M	257,600	41,990	37,890	34,140	24,990	16,350	102,240
	F	257,420	36,030	33,780	33,520	26,060	20,620	107,410
Hambantota	T	274,670	49,040	45,760	38,570	22,280	17,190	101,830
	M	140,520	24,940	23,140	19,650	11,350	8,270	53,170
	F	134,150	24,100	22,620	18,920	10,930	8,920	48,660
Jaffna	T	613,230	86,350	78,260	79,000	58,750	46,950	263,920
	M	308,070	43,450	39,330	48,880	29,160	21,910	133,340
	F	305,160	42,900	38,930	38,120	29,590	25,040	130,580
Mannar	T	60,180	10,930	9,240	7,090	4,420	4,660	23,840
	M	32,940	5,400	4,720	3,600	2,420	2,370	14,430
	F	27,240	5,530	4,520	3,490	2,000	2,290	9,410
Vavuniya	T	68,500	12,240	10,550	8,430	5,160	5,770	26,350
	M	39,150	6,260	5,390	4,670	3,140	3,280	16,410
	F	29,350	5,980	5,160	3,760	2,020	2,490	9,940
Batticaloa	T	196,090	35,860	31,160	23,860	16,810	14,670	73,730
	M	101,490	17,800	15,250	12,240	8,220	7,150	40,830
	F	94,600	18,060	15,910	11,620	8,590	7,520	32,900
Amparai	T	211,820	38,730	30,170	25,190	18,250	19,170	80,310
	M	114,780	19,740	15,080	13,000	9,700	10,500	46,760
	F	94,040	18,990	15,090	12,190	8,550	8,670	32,550
Trincomalee	T	138,220	24,330	20,620	16,430	11,340	12,530	52,970
	M	77,500	12,410	10,200	8,560	6,160	7,240	32,930
	F	60,720	11,920	10,420	7,870	5,180	5,290	20,040

(Continued)

DISTRICT	ALL AGES	AGE GROUPS									
		0 — 4	5 — 9	10 — 14	15 — 19	20 — 24	25 & Over				
Kurunegala	T	138,010	129,340	117,730	74,070	68,120	327,530				
	M	70,290	65,360	59,570	38,220	32,690	177,410				
	F	67,720	63,980	58,160	35,850	35,430	150,120				
Puttalam	T	45,260	41,930	39,320	26,999	23,840	124,800				
	M	22,710	21,730	20,210	13,850	11,550	69,010				
	F	22,550	20,200	19,110	13,140	12,290	55,790				
Anuradhapura	T	51,890	44,720	37,210	23,100	21,620	100,580				
	M	26,270	22,420	19,960	12,340	11,230	39,480				
	F	25,620	22,300	17,250	10,760	10,390	41,100				
Polonnaruwa	T	21,220	17,290	13,040	9,180	11,060	42,330				
	M	10,440	8,770	6,750	5,460	6,650	27,760				
	F	10,780	8,520	6,290	3,720	4,410	14,570				
Badulla	T	80,400	85,670	63,610	51,600	46,560	193,900				
	M	44,790	39,120	33,040	25,780	22,520	105,550				
	F	35,610	46,550	30,570	25,820	24,040	88,350				
Moneragala	T	26,140	22,350	16,560	9,720	9,690	47,600				
	M	13,040	11,780	8,820	4,960	5,000	28,400				
	F	13,100	10,570	7,740	4,760	4,690	19,200				
Ratnapura	T	82,940	76,910	69,140	55,200	46,810	215,570				
	M	41,840	38,910	35,280	28,060	23,170	119,990				
	F	41,100	38,000	33,860	27,140	23,640	95,580				
Kegalle	T	85,820	83,070	77,460	58,270	47,500	226,390				
	M	43,660	41,730	39,160	28,850	22,500	120,280				
	F	42,160	41,340	38,300	29,420	24,950	106,110				

Source: Census of Population, Ceylon 1963.

POPULATION BY FIVE YEAR AGE GROUPS

1971

Chapter I

Table IV

DISTRICTS	ALL AGES	1971					25 & Over*
		0 — 4*	5 — 9*	10—14*	15—19*	20—24*	
Sri Lanka	T	1,688,672	1,686,328	1,622,706	1,365,074	1,242,427	5,105,936
	M	856,839	853,088	829,128	687,267	613,814	2,685,812
	F	831,833	833,240	793,578	677,807	628,613	2,420,124
Colombo	T	313,123	309,958	317,154	282,099	280,899	1,169,387
	M	159,672	156,181	162,763	146,918	147,723	624,548
	F	153,451	153,777	154,391	135,181	133,176	544,839
Kalutara	T	88,872	86,977	85,270	74,281	68,564	327,860
	M	46,072	44,399	44,188	37,485	32,547	163,915
	F	42,800	42,578	41,082	36,796	36,017	163,945
Kandy	T	156,340	156,729	150,527	128,683	120,375	474,516
	M	79,645	80,119	75,635	62,883	58,257	246,647
	F	76,695	76,510	74,892	65,800	62,118	227,869
Matale	T	44,848	45,157	42,903	34,919	30,736	177,779
	M	23,046	22,648	21,292	17,137	14,556	63,742
	F	21,802	32,509	21,611	17,782	16,180	54,037
Nuwara Eliya	T	61,002	62,053	56,911	46,881	46,537	179,859
	M	30,468	31,266	29,194	23,035	21,908	94,598
	F	30,534	30,787	27,717	23,846	24,639	85,261
Galle	T	93,025	91,010	90,553	77,431	66,420	319,012
	M	47,237	46,286	46,153	37,872	30,892	156,270
	F	45,788	44,724	45,400	39,559	35,528	162,742

(Continued)

(Continued)

DISTRICTS	ALL AGES	0 — 4*	5 — 9*	10 — 14*	15 — 19*	20 — 24*	25 & Over*
Matara	T	588,254	77,446	77,422	65,401	51,353	240,378
	M	289,726	30,344	39,445	31,768	22,122	118,132
	F	298,528	37,339	37,977	33,633	29,231	122,246
Hambantota	T	341,005	48,791	48,279	40,922	32,662	120,904
	M	174,999	24,847	25,352	16,192	16,192	63,675
	F	166,006	23,944	22,927	20,310	16,470	57,229
Jaffna	T	704,350	93,114	89,030	75,422	66,509	292,993
	M	349,223	46,274	45,619	37,958	31,039	144,041
	F	355,127	46,840	43,411	37,464	35,470	148,952
Mannar	T	77,882	12,045	10,065	8,537	7,241	28,267
	M	41,809	6,013	4,945	4,696	4,149	15,917
	F	36,073	6,032	5,120	3,841	3,092	12,350
Vavuniya	T	95,536	13,970	12,629	10,200	9,600	34,467
	M	52,739	6,911	6,538	5,424	5,486	21,054
	F	42,797	7,059	6,091	4,776	4,114	13,403
Batticaloa	T	258,104	42,316	36,445	26,253	21,354	89,974
	M	133,060	21,628	18,872	13,096	10,472	48,043
	F	125,044	20,688	17,573	13,157	10,882	41,931
Amparai	T	272,790	44,233	37,033	26,786	24,197	95,467
	M	142,715	22,500	18,844	13,475	12,458	53,038
	F	130,075	21,833	18,189	13,311	11,739	42,429
Trincomalee	T	191,989	31,506	25,576	19,467	18,261	65,575
	M	103,965	16,059	12,850	10,381	9,495	38,828
	F	88,024	15,447	12,726	9,086	8,766	26,747

(Continued)

(Continued)

DISTRICT	ALL AGES	0 — 4*		5 — 9*		10 — 14*		15 — 19*		20 — 24*		25 & Over*	
		T	M	T	M	T	M	T	M	T	M	T	M
Kurunegala	T	136,164	140,840	141,376	118,399	102,874	388,454						
	M	68,617	71,927	73,149	60,506	51,261	200,227						
	F	502,420	68,913	68,227	57,893	51,613	188,227						
Puttalam	T	52,296	52,959	46,413	44,772	38,224	148,123						
	M	26,780	27,306	23,668	19,986	18,683	78,519						
	F	25,516	25,653	22,745	21,786	19,541	69,604						
Anuradhapura	T	61,281	59,161	55,312	44,704	36,927	131,822						
	M	31,681	29,416	28,989	22,370	19,095	76,358						
	F	29,600	29,745	26,323	22,334	17,832	55,464						
Polonnaruwa	T	27,281	25,997	21,485	17,088	16,271	55,736						
	M	13,520	12,992	11,328	8,708	9,195	35,217						
	F	13,761	13,005	10,157	8,381	7,076	20,519						
Badulla	T	90,012	90,811	84,173	65,008	57,228	229,083						
	M	45,405	45,356	42,297	31,992	27,241	121,984						
	F	44,607	45,455	41,876	33,016	29,987	107,099						
Moneragala	T	33,470	32,257	27,511	19,543	16,442	62,282						
	M	16,608	16,200	14,300	9,986	8,311	36,901						
	F	16,862	16,057	13,211	9,557	8,131	25,381						
Ratnapura	T	90,364	85,279	82,529	71,435	64,664	267,439						
	M	45,747	42,356	41,895	36,208	31,684	145,959						
	F	44,617	42,923	40,634	35,227	32,980	121,480						
Kegalle	T	82,764	83,719	84,110	69,843	65,089	266,569						
	M	41,597	43,160	42,812	34,772	31,048	138,199						
	F	41,167	40,559	41,298	35,071	44,041	128,370						

*Provisional estimates.

Source: Census of Population 1971, Department of Census & Statistics.

Percentage Shares of Population in Different Age Groups For urban & Rural Sectors 1946

	Total			Urban		Sector		Rural		Sector		
	O - 14 Years	15 - 24	25 & Over	O - 14 Years	15-24 Years	25 & Over	O - 14 Years	15 - 24 Years	25 & Over	O - 14 Years	15 - 24 Years	25 & Over
Ceylon	37.23	19.86	42.91	29.95	23.63	46.42	38.55	19.18	42.27	19.18	19.18	42.27
Colombo	32.11	21.45	46.44	28.15	23.88	47.97	34.83	19.79	45.38	19.79	19.79	45.38
Kalutara	37.02	19.46	43.52	32.61	21.94	45.45	37.57	19.16	43.27	19.16	19.16	43.27
Kandy	39.75	19.68	40.57	33.69	24.14	42.17	40.59	19.16	40.25	19.16	19.16	40.25
Matale	39.64	19.26	41.10	35.93	22.82	41.25	40.01	18.91	41.08	18.91	18.91	41.08
Nuwara Eliya	40.80	18.36	40.84	34.91	22.97	42.12	41.05	18.16	40.79	18.16	18.16	40.79
Galle	38.81	18.73	42.46	34.24	21.73	44.03	39.49	18.29	42.22	18.29	18.29	42.22
Matara	41.17	18.17	40.66	36.01	21.32	42.67	41.74	17.82	40.44	17.82	17.82	40.44
Hambantota	38.72	20.36	40.92	34.62	22.93	42.45	39.04	20.16	40.80	20.16	20.16	40.80
Jaffna	33.64	18.85	47.51	32.49	20.84	46.67	33.83	18.51	47.66	18.51	18.51	47.66
Mannar	29.94	20.55	49.51	-	-	-	29.94	20.54	49.52	20.54	20.54	49.52
Vavuniya	33.18	20.77	46.05	-	-	-	33.18	20.78	46.04	20.78	20.78	46.04
Batticaloa	39.53	19.04	41.43	36.83	20.30	42.87	39.72	18.93	41.35	18.93	18.93	41.35
Amparai	-	-	-	-	-	-	-	-	-	-	-	-
Trincomalee	27.46	28.03	44.51	18.45	34.16	47.39	34.21	23.44	42.35	23.44	23.44	42.35
Kurunegala	38.29	20.77	40.94	28.95	25.92	45.13	38.60	20.07	41.33	20.07	20.07	41.33
Puttalam*	32.41	20.75	46.84	33.54	20.53	45.93	34.54	20.41	45.05	20.41	20.41	45.05
Anuradhapura	33.98	22.56	43.46	27.03	23.82	49.15	34.66	22.45	42.89	22.45	22.45	42.89
Polonnaruwa	-	-	-	-	-	-	-	-	-	-	-	-
Baddulla	42.69	17.75	39.56	36.42	22.86	40.72	42.96	17.51	39.53	17.51	17.51	39.53
Moneragala	-	-	-	-	-	-	-	-	-	-	-	-
Ratnapura	40.22	19.22	40.56	32.91	24.51	42.58	40.55	18.99	40.46	18.99	18.99	40.46
Kegalle	40.76	19.46	39.72	32.61	26.21	41.18	40.86	19.38	39.76	19.38	19.38	39.76

* Includes Chitlaw

Source: Census of Ceylon 1946.

CHAPTER I
Percentage Shares Of Population In Different Age Groups For Urban & Rural Sectors 1963

	TOTAL				URBAN				RURAL			
	O - 14 Years	15 - 24 Years	25 and Above	O - 14 Years	15 - 24 Years	25 and Above	O - 14 Years	15 - 24 Years	25 and Above	O - 14 Years	15 - 24 Years	25 and Above
	Ceylon	41.47	18.01	40.52	37.24	20.01	42.75	42.46	17.54	40.00	17.54	40.00	40.00
Colombo	36.98	18.92	44.11	35.67	20.32	43.03	38.10	17.71	44.49	17.71	44.49	44.49
Kalutara	37.56	18.81	43.64	36.91	19.53	43.56	37.72	18.63	43.05	18.63	43.05	43.05
Kandy	41.85	19.16	38.98	38.15	22.11	39.78	42.29	18.81	38.90	18.81	38.90	38.90
Matale	44.88	17.64	37.49	40.53	20.54	38.93	45.44	17.26	37.30	17.26	37.30	37.30
Nuwara Eliya	41.68	19.72	38.60	39.83	21.81	38.36	41.77	19.61	38.62	19.61	38.62	38.62
Galle	39.44	18.10	42.46	38.23	19.22	42.55	39.74	17.82	42.44	17.82	42.44	42.44
Matara	42.20	17.09	40.71	37.66	19.20	43.13	42.81	16.81	40.38	16.81	40.38	40.38
Hambantota	48.56	14.37	37.09	42.32	17.06	40.62	49.11	14.13	36.76	14.13	36.76	36.76
Jaffna	39.73	17.24	43.04	39.42	18.88	41.70	39.82	16.70	43.47	16.70	43.47	43.47
Mannar	45.30	15.09	39.61	38.12	19.29	42.59	46.55	14.35	39.10	14.35	39.10	39.10
Vavuniya	45.57	15.95	38.47	37.27	18.86	43.88	47.20	15.39	37.41	15.39	37.41	37.41
Batticaloa	46.34	16.05	37.60	44.51	16.95	38.54	46.97	15.75	37.28	15.75	37.28	37.28
Amparai	44.42	17.67	37.91	45.11	17.04	37.85	44.31	17.76	37.92	17.76	37.92	37.92
Trincomalee	44.41	17.26	38.32	39.22	18.52	42.16	46.15	16.82	37.04	16.82	37.04	37.04
Kurunegala	45.05	16.63	38.32	34.55	22.50	42.96	45.44	16.42	38.15	16.42	38.15	38.15
Puttalam	41.87	16.82	41.31	40.44	18.42	41.15	42.08	16.59	41.33	16.59	41.33	41.33
Anuradhapura	44.94	16.02	36.04	37.98	20.18	41.84	49.28	15.47	35.25	15.47	35.25	35.25
Polonnaruwa	45.17	17.74	37.09	34.91	24.92	40.17	45.73	17.34	36.93	17.34	36.93	36.93
Badulla	44.02	18.81	37.17	39.23	20.56	40.21	44.39	18.68	36.93	18.68	36.93	36.93
Moneragala	49.26	14.70	36.04	41.84	15.73	42.43	49.45	14.67	35.88	14.67	35.88	35.88
Ratnapura	41.90	18.66	39.44	36.68	22.26	43.34	42.16	18.48	39.36	18.48	39.36	39.36
Kegalle	42.58	18.28	39.13	38.84	19.68	41.48	42.70	18.24	39.05	18.24	39.05	39.05

Source: Census of Ceylon 1946.

CHAPTER VII
 TABLE VII
 Percentage Shares of Population In The Urban & Rural Sector For 1971

Age Groups	TOTAL		URBAN		RURAL	
	Population	%	Population	%	Population	%
0 - 14 Years	4,997,716	39.31	1,039,674	36.55	3,958,047	40.11
15 - 24 Years	2,607,511	20.51	614,815	21.61	1,992,696	20.19
25 Years & Over	5,107,050	40.18	1,189,996	41.84	3,917,054	37.70
TOTAL	12,712,277	100.00	2,844,485	100.00	9,867,792	100.00

Source: Census of Population 1971. Preliminary Report

CHAPTER I

TABLE IX
POPULATION PROJECTIONS FOR DISTRICTS

District	1978			1988		
	0 - 14 Years		15 - 24 Years	0 - 14 Years		15 - 24 Years
	Total	Male	Female	Total	Male	Female
Colombo	1,053	524	529	674	353	321
Kelutara	276	142	134	163	80	83
Kandy	488	246	242	284	140	144
Matale	152	76	76	81	39	42
Nuwara Eliya	189	95	94	105	51	54
Galle	289	145	144	163	79	84
Matara	241	123	118	133	63	70
Hambantota	165	84	81	88	44	44
Jaffna	282	145	137	160	78	82
Mannar	40	20	20	20	11	9
Vavuniya	52	26	26	27	15	12
Batticaloa	144	73	71	62	31	31
Kurunegala	490	267	223	200	103	97
Amparai	150	75	75	65	33	32
Trincomalee	105	53	52	48	25	23
Puttalam	175	89	86	98	48	50
Anuradhapura	220	112	108	108	55	53
Polonnaruwa	89	45	44	42	23	19
Baddulla	289	144	145	142	69	73
Moneragala	119	60	59	50	25	25
Ratnapura	287	144	143	162	81	81
Kagalle	291	145	146	134	68	66
SRI LANKA	5,586	2,833	2,753	3,009	1,514	1,495
				6,662	3,362	3,300
						1,747

Note: These projections are based on 1971 population and 1963-1971 growth rates. The district populations so calculated have been adjusted to tally with the medium projection total for Ceylon given in the "population projections 1968-1998" - Selvaratnam, Wright & Jones.

CHAPTER I

TABLE X
AGE SPECIFIC BIRTH RATES

Year	All ages (a)	Under 15 (b)	15 - 19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 & Over (c)
1965	116.5	0.2	50.0	218.9	269.2	220.7	153.6	41.9	5.9
1966	113.6	0.2	47.9	211.9	262.5	214.9	151.9	44.3	6.5
1967	113.0	0.2	47.6	211.2	254.7	202.1	151.1	44.1	6.4
1968	112.6	0.2	49.2	216.0	255.1	204.8	152.1	44.2	6.5
1969	107.3	0.2	46.1	212.0	249.8	190.5	137.9	40.4	6.1
1970*	103.6	0.2	44.6	204.0	236.8	183.1	129.9	45.0	7.1

- (a) Based on number females 10-49 years of age.
- (b) Based on number females 10-14 years of age.
- (c) Based on number females 45-49 years of age.

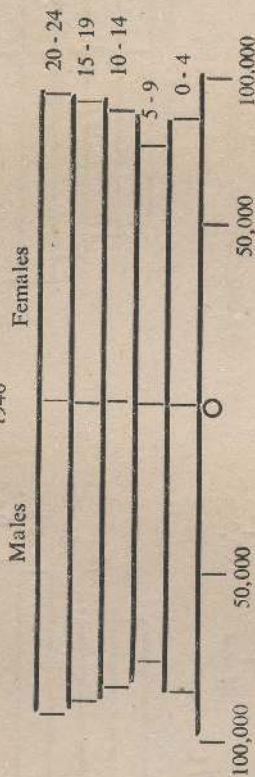
*Provisional figures.

TABLE XI
AGE SPECIFIC DEATH RATES

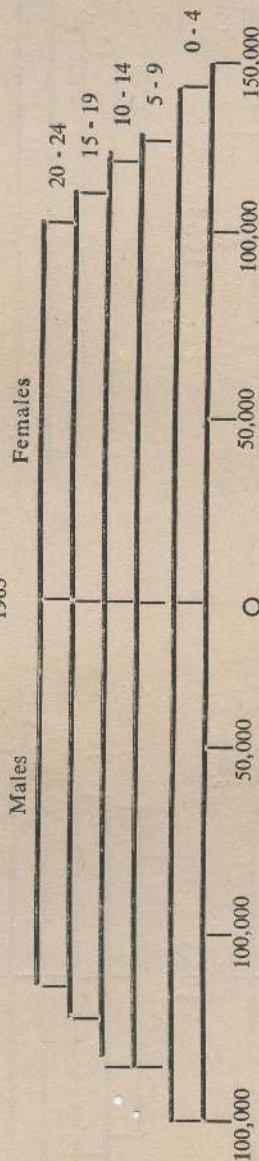
Year	All ages	0-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 & over
1965	8.2	16.8	2.2	1.1	1.4	2.0	2.4	2.4	3.6	4.1	6.1	7.9	13.1	17.2	37.6	54.0	80.2	139.3	308.5
1966	8.3	17.1	2.3	1.2	1.5	2.1	2.4	2.4	3.5	4.0	6.1	7.8	13.1	16.6	36.7	53.4	78.0	134.9	304.0
1967	7.5	14.4	1.8	1.0	1.4	1.9	2.4	2.4	3.4	4.0	5.8	8.2	12.5	16.1	35.4	52.7	73.5	127.5	281.7
1968	8.0	14.9	1.9	1.1	1.6	2.1	2.4	2.4	3.5	4.1	6.5	8.1	13.1	16.4	37.4	55.7	75.1	137.7	310.0
1969	8.1	15.4	2.1	1.1	1.7	2.3	2.4	2.2	3.5	4.2	6.5	8.1	13.6	17.5	39.8	57.1	82.5	124.1	306.8
1970	7.5	13.0	1.8	1.0	1.7	2.4	2.4	2.8	3.3	4.2	6.2	7.9	13.2	16.5	34.8	60.6	74.7	117.2	293.6

COLOMBO DISTRICT
Population by Sex and Age Groups between 0 - 24

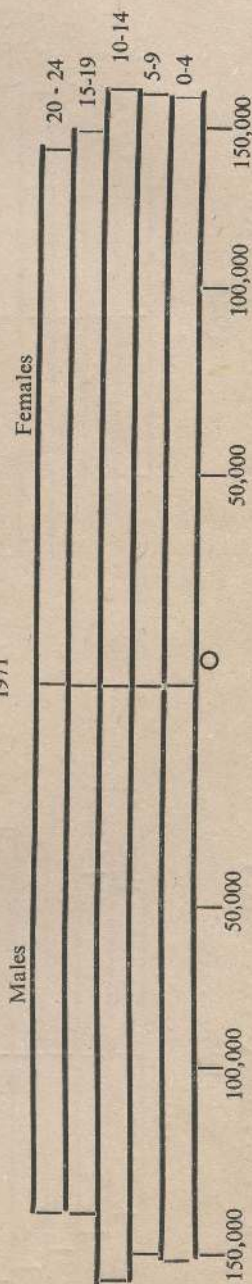
1946



1963

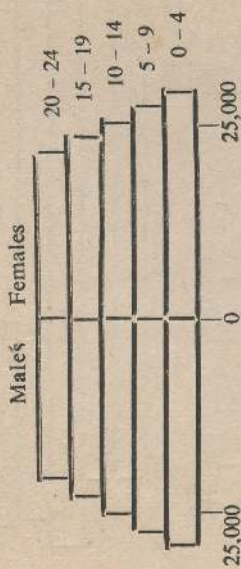


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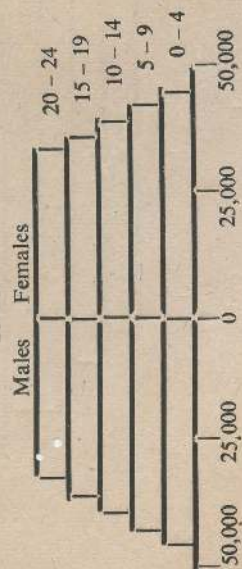


KALUTARA DISTRICT

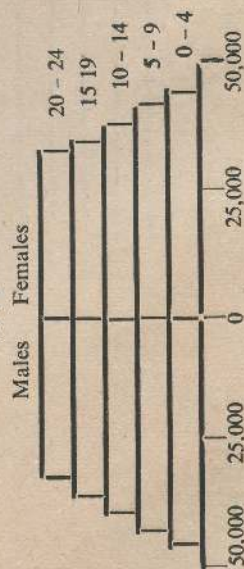
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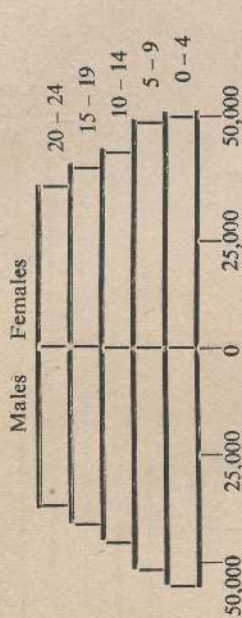


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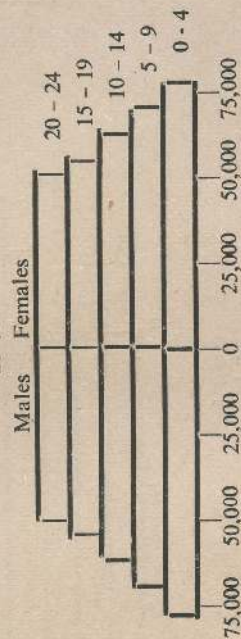


KANDY DISTRICT

1946



1963

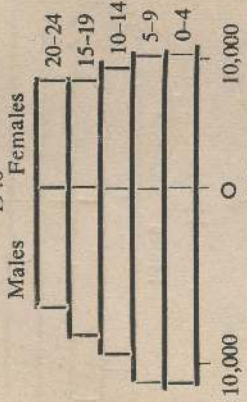


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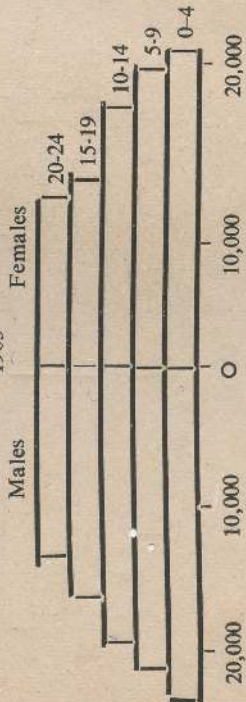


MATALE DISTRICT

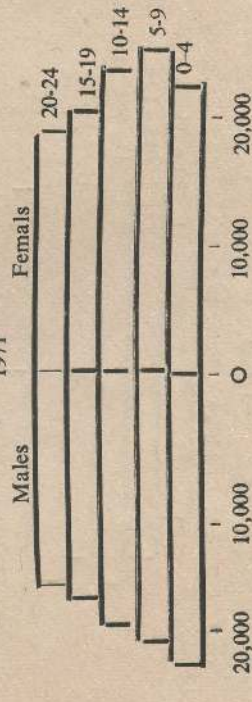
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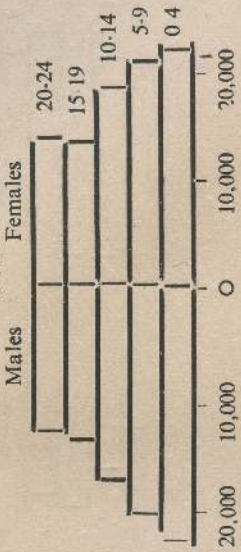


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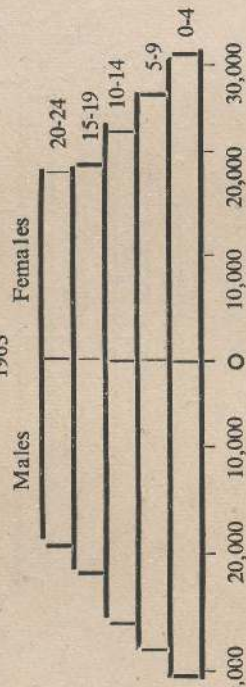


NUWARA ELIYA DISTRICT

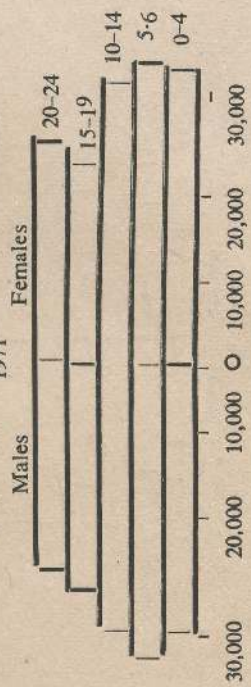
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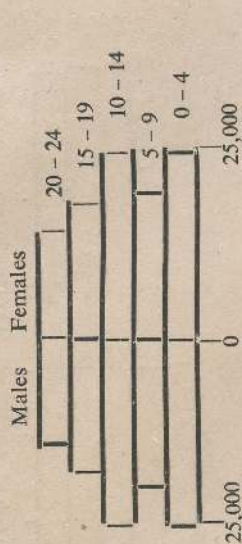


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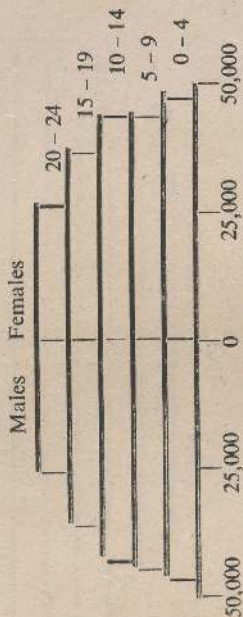


MATARA DISTRICT

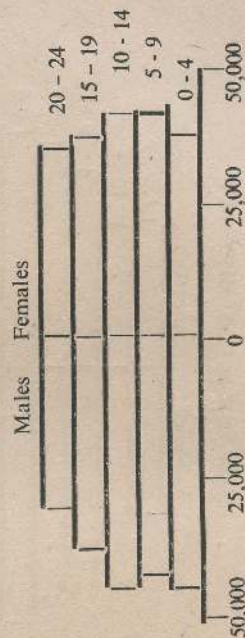
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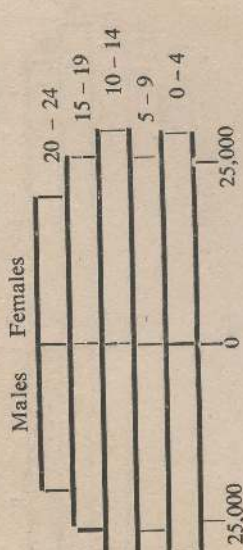


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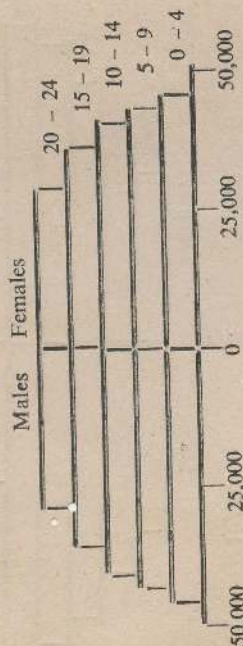


GALLE DISTRICT

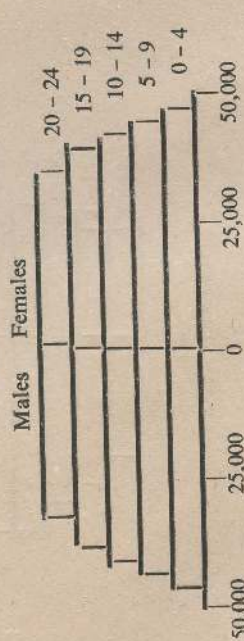
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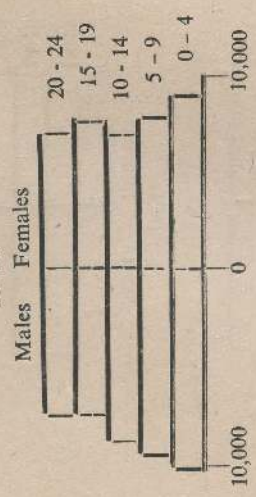


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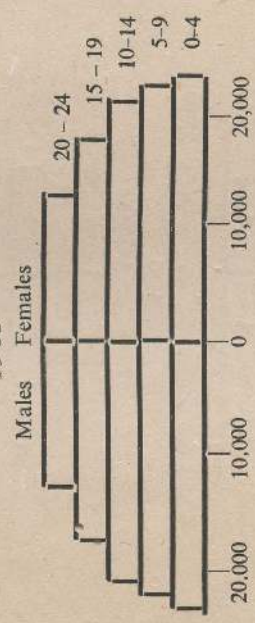


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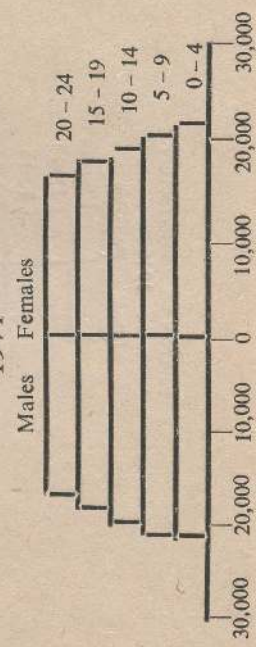
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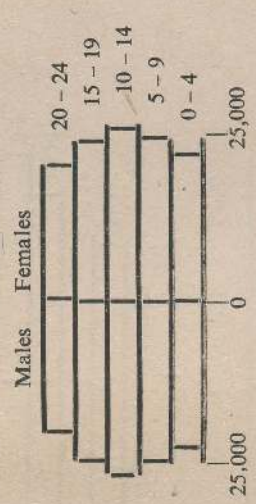


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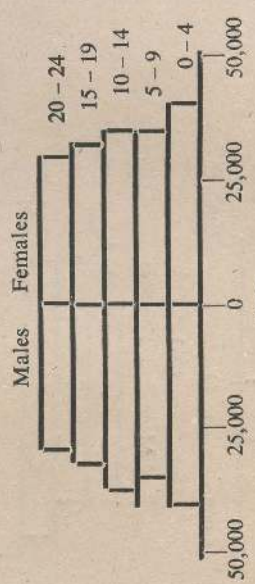


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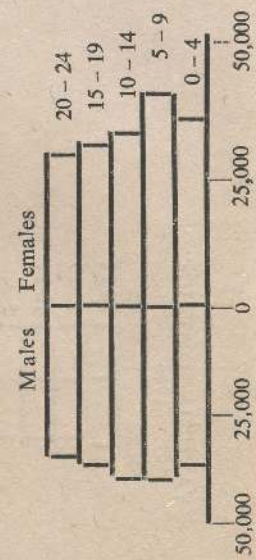
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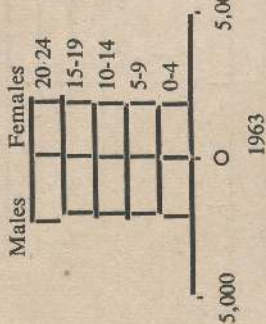
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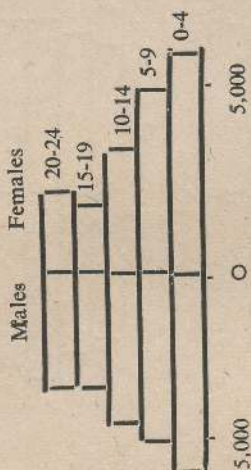
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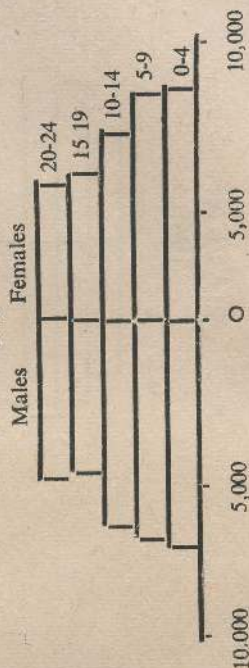
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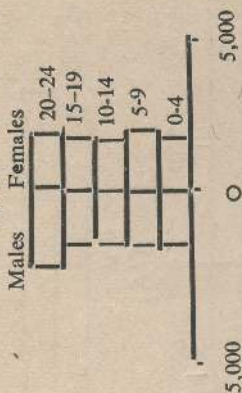
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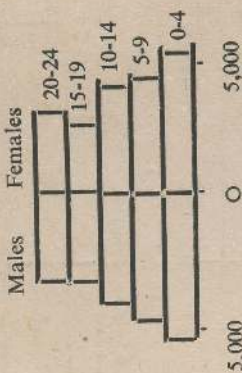
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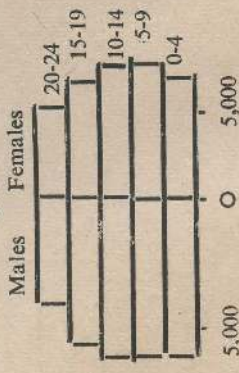
MANNAR DISTRICT
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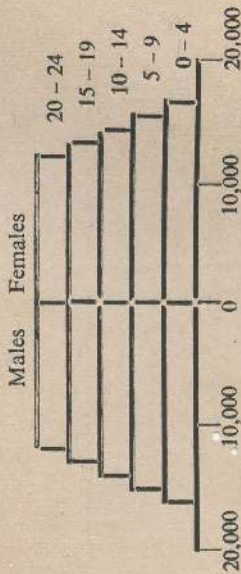


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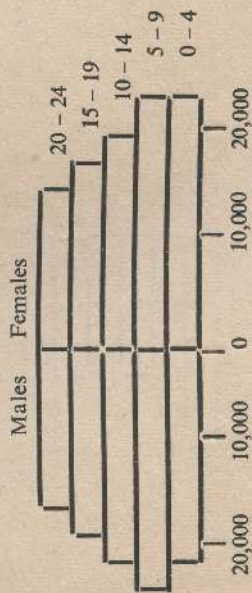


BATTICALOA DISTRICT

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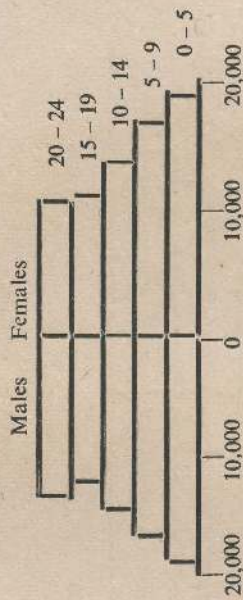


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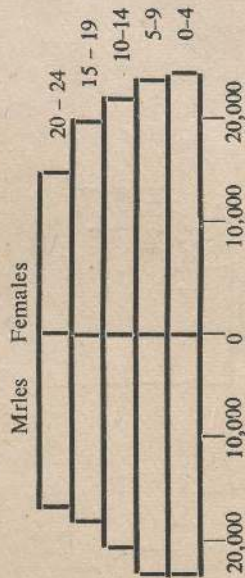


AMPARAI DISTRICT

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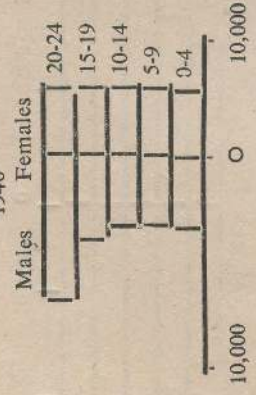


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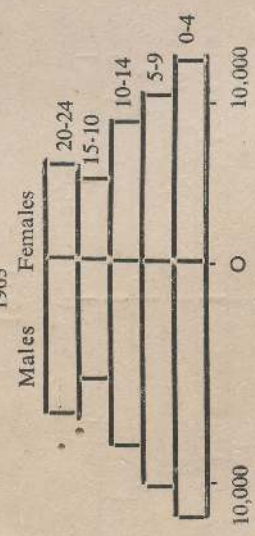


TRINCOMALEE DISTRICT

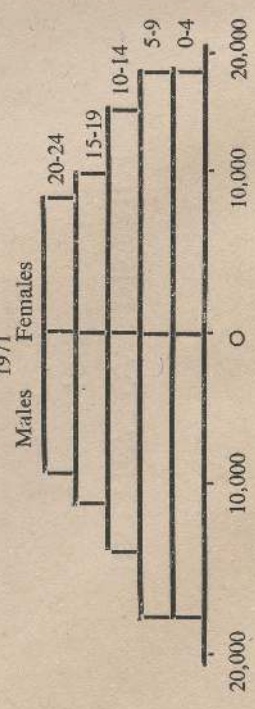
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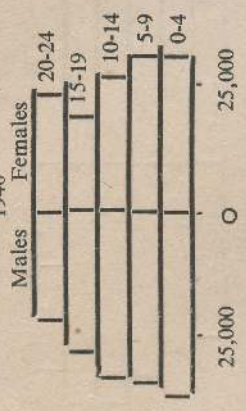


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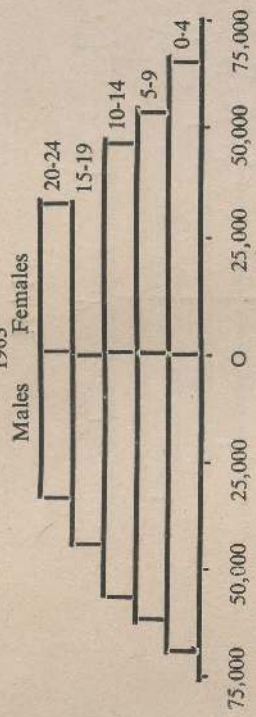


KURUNEGALA DISTRICT

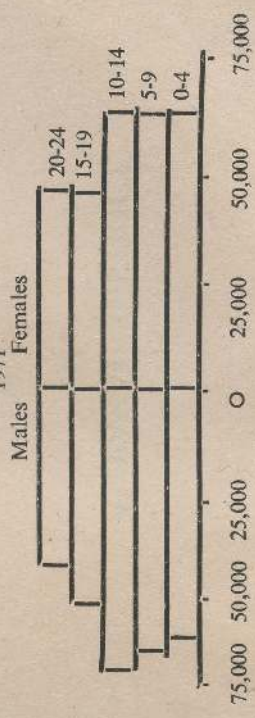
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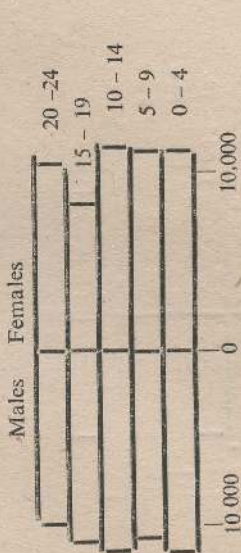
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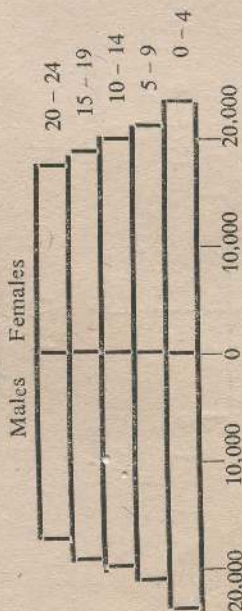
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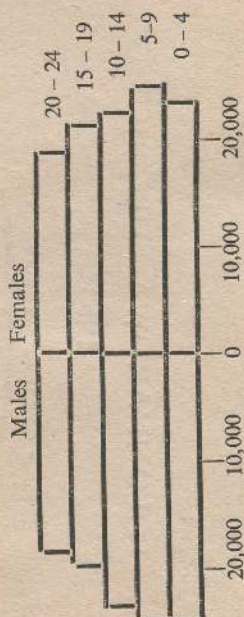
PUTTALAM DISTRICT 1946



1963

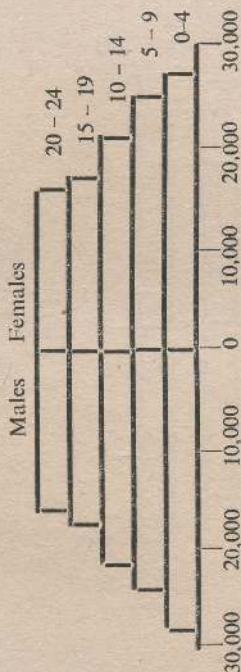


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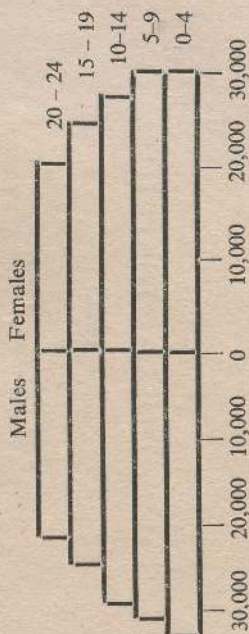


ANURADHAPURA DISTRICT

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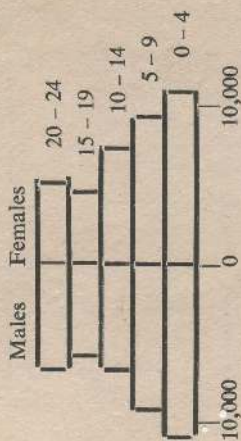


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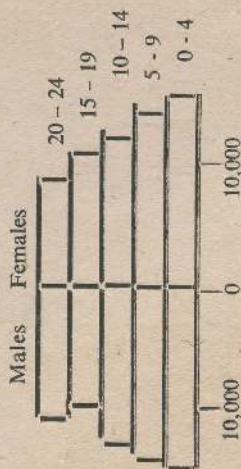


POLONNARUWA DISTRICT

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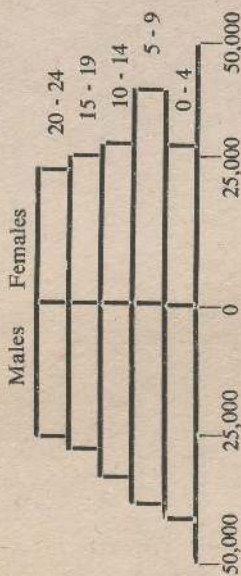


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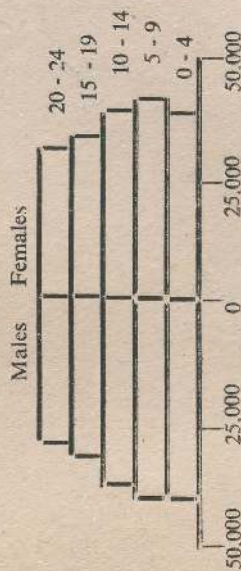


BADULLA DISTRICT

1963



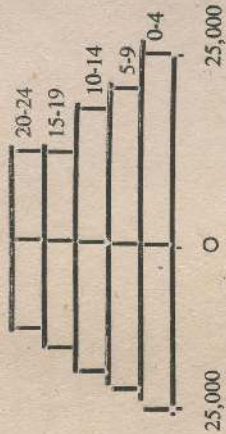
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RATNAPURA DISTRICT

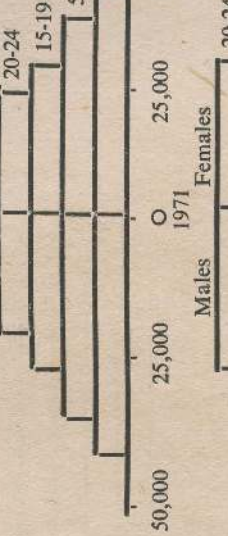
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Males Females



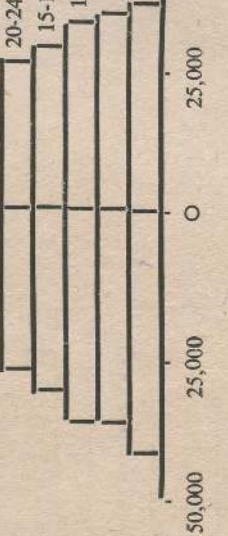
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Males Females



1971

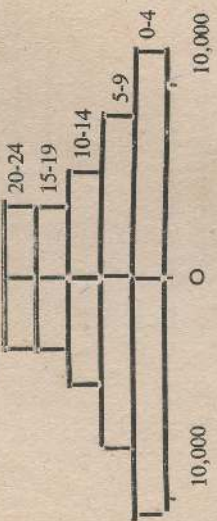
Males Females



MONERAGALA DISTRICT

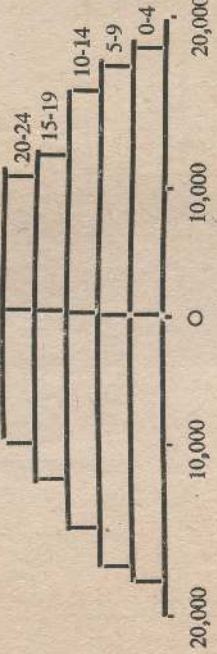
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Males Females



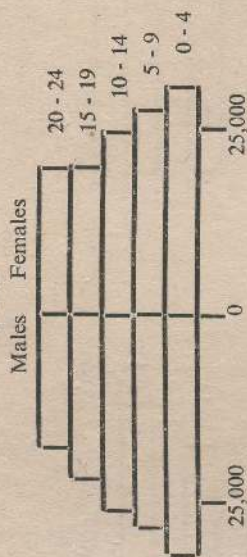
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Males Females

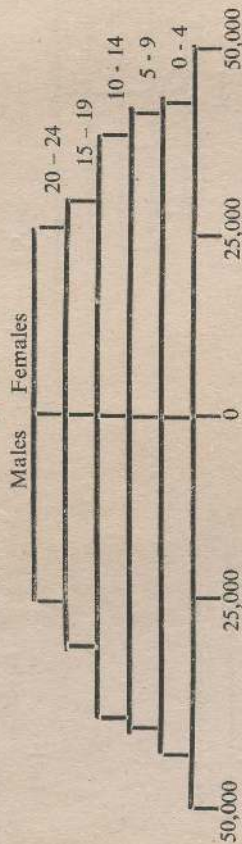


KEGALLE DISTRICT

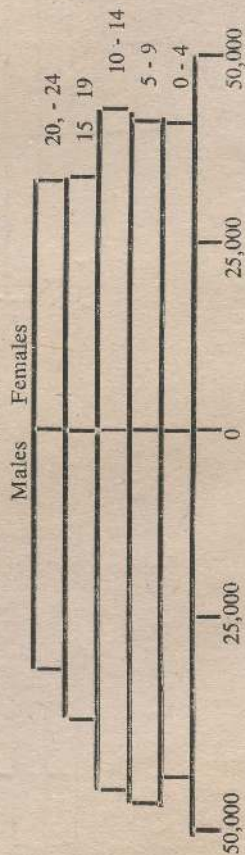
1946



1963



1971



Government Schools Classified According to Administrative Districts—1971

DISTRICT	Madya Maha Vidyalayas or Central Schools			Maha Vidyalayas			Vidyalayas or Colleges/Schools			TOTAL		
	B	G	H	Total	B	G	H	Total	B	G	H	Total
Colombo	—	—	10	304	25	44	235	62	50	75	106	778
Kalutara	—	1	4	78	5	4	69	19	15	20	24	362
Kandy	—	—	5	136	10	10	116	14	9	19	24	485
Matale	—	—	1	33	2	3	28	—	1	3	3	203
Nuwara Eliya	—	—	3	53	1	2	50	1	1	2	3	189
Galle	1	—	3	116	7	12	97	13	13	21	25	407
Matara	—	—	4	93	3	3	87	8	5	8	11	584
Hambantota	—	—	4	93	3	3	87	8	5	8	11	584
Jaffna	2	1	10	84	4	9	71	9	8	14	19	464
Mannar	—	—	1	14	1	2	11	2	—	1	4	88
Vavuniya	—	—	—	15	—	—	15	—	—	—	—	164
Batticaloa	—	—	2	26	3	4	19	9	9	12	13	203
Amparai	—	—	—	28	—	—	26	3	3	4	4	202
Trincomealee	—	—	—	21	1	4	14	33	3	6	7	128
Kurunegala	—	—	6	100	2	2	96	1	1	3	5	584
Puttalam	—	—	1	56	2	3	51	13	12	14	16	423
Anuradhapura	—	—	2	59	1	1	57	—	—	1	1	478
Polonnaruwa	—	—	1	19	—	—	18	—	—	1	1	117
Badulla	—	—	1	47	—	—	40	2	1	5	5	227
Moneragala	—	—	1	23	—	—	23	—	—	—	—	134
Ratnapura	—	—	3	74	—	—	68	—	—	3	—	417
Kegalle	—	—	3	92	2	2	88	2	3	5	4	459
TOTAL	3	2	61	1471	79	113	1325	164	134	216	279	7048
												8585

Compiled by Marga Institute from Publications of the Ministry of Education.

CHAPTER II
 TABLE II
 Schools per 1000 School-Age Population in Administrative Districts, 1971.

DISTRICT	Estimated Population 5-19 years.	No. of Junior Schools (Vidyalyayas)	Junior Schools per 1000 Population 5-19 years	Rank	N. of M. V. and M. M. V.	M. V. & M. M. V. per 1000 Population 5-19 years	Rank	Total Sq. Mileage per District (Approx.)
Ratnapura	241,000	118	1.74	12	77	0.32	11	1,251
Badulla	241,200	230	0.95	19	48	0.20	19	1,088
Nuwara Eliya	167,000	191	1.14	17	56	0.34	9	474
Kandy	440,700	485	1.10	18	141	0.31	12	913
Batticaloa	98,800	203	2.05	5	28	0.28	15	951
Moneragala	72,600	134	1.84	10	34	0.46	3	2,754
Colombo	882,400	778	0.88	20	314	0.35	8	792
Kalutara	238,700	362	1.51	16	83	0.34	9	620
Matale	123,800	203	1.63	14	34	0.27	18	770
Galle	251,300	407	1.62	15	120	0.47	2	646
Matara	327,700	584	1.78	11	97	0.29	14	1,483
Hambantota	243,300	464	1.90	8	97	0.39	6	965
Jaffna	29,400	88	2.99	2	15	0.51	1	958
Mannar	35,100	164	4.67	1	15	0.42	4	1,432
Vauniya	97,900	202	2.06	4	28	0.28	15	1,152
Amparai	73,200	128	1.74	12	21	0.28	15	1,011
Trincomalee	510,100	1,007	1.97	7	159	0.31	12	2,992
Kurunegala	144,000	419	2.91	3	61	0.42	4	2,752
Puttalam	58,100	117	2.01	6	20	0.34	9	1,314
Anuradhapura	247,000	464	1.88	9	95	0.38	7	642
Pothonaruwa								
Kegalle								

Compiled by Marga Institute.

Government Schools, Class Room Accommodation per Pupil, 1972

Administrative District	School Population	No. of Schools	CLASSROOM SPACE — SQ. FT.				Perm. Space per child sq. ft.	Semi-perm. space per child	Temporary space per child	Total Space per child	Rank
			Permanent	Semi-Perm.	Temporary	Total					
Colombo	524,348	1,061	5,322,669	36,677	12,174	5,371,520	10.20	0.06	0.02	10.28	17
Kalutara	139,009	441	1,512,749	23,208	19,137	1,555,094	10.90	0.17	0.13	11.20	11
Kandy	217,005	243	2,327,477	47,977	50,937	2,426,391	10.70	0.20	0.23	11.13	12
Matale	62,976	624	690,673	6,656	6,388	703,717	11.00	0.11	0.10	11.21	10
Nuwara Eliya	76,926	249	692,166	34,149	28,577	754,892	9.00	0.44	0.37	9.81	18
Galle	158,479	521	1,861,783	73,424	32,782	1,967,989	11.70	0.40	0.21	12.31	4
Matara	207,463	679	1,908,520	128,428	109,482	2,146,430	9.20	0.62	0.53	10.35	16
Hambantota	155,983	557	2,013,681	169,979	83,977	2,267,637	12.90	1.09	0.50	14.49	2
Jaffna	15,000	104	198,090	3,130	6,036	207,256	13.20	0.21	0.40	13.81	3
Manner	19,105	178	279,396	6,342	13,144	298,882	14.60	0.30	0.69	15.59	1
Batticaloa	44,666	233	475,172	22,791	23,328	521,291	10.60	0.51	0.25	11.63	8
Amparai	53,400	231	583,098	11,148	37,278	631,524	10.90	0.21	0.70	11.81	7
Trincomalee	37,500	157	377,352	13,794	16,565	407,711	10.10	0.36	0.44	10.90	14
Kurunegala	298,935	1,170	2,942,717	221,250	406,702	3,570,669	9.80	0.74	1.40	11.94	6
Puttalam	85,708	487	967,506	47,003	32,761	1,047,270	11.30	0.54	0.38	12.22	5
Anuradhapura	33,798	120	356,868	5,440	6,896	369,204	10.60	0.16	0.20	10.96	13
Polonnaruwa	74,583	283	750,466	30,100	11,925	792,491	10.10	0.40	0.16	10.66	15
Badulla	33,270	161	295,439	5,820	14,637	315,896	8.90	0.17	0.44	9.51	20
Moneragala	116,742	494	1,057,222	30,137	62,818	1,150,177	9.10	0.26	0.50	9.86	19
Ratnapura	137,852	558	1,485,249	37,021	36,733	1,559,003	10.80	0.27	0.27	11.34	9
TOTAL	2,492,754	8,551	26,098,293	954,474	1,012,277	28,065,044	10.50	0.38	0.41	11.29	

Source: Ministry of Education, School Census, 1972.

CHAPTER II
 TABLE IV
 Number of Government Schools per 2 Mile Radius

ADMINISTRATION DISTRICTS	Number of Schools per District	Sq. Miles per District (Approx)	No. of Schools Per 12.57 sq. Miles (i. e. 2 Mile radius)	Rank
Ratnapura	485	1250.50	4.90	10
Badulla	264	1089.56	3.01	15
Nuwara Eliya	293	474.00	7.66	6
Kandy	574	914.00	7.79	5
Batticaloa	138	1016.63	1.63	14
Moneragala	155	2785.31	0.62	20
Colombo	1,122	808.25	17.44	1
Kalutara	453	623.75	9.05	4
Matale	228	770.38	3.64	11
Galle	553	652.25	10.55	3
Matara	668	94.00	5.53	8
Hambantota	574	998.63	7.16	7
Jaffna	100	964.00	1.25	18
Mannar	171	1466.75	1.38	17
Vavuniya	222	1177.66	2.26	16
Amparai	221	1048.00	2.63	12
Trincomalee	1,179	3016.12	4.90	9
Kurunegale	502	2808.63	2.13	13
Puttalam	112	1331.63	1.00	19
Anuradhapura	599	642.00	11.69	19
Polonnaruwa				2
Kegalle				
TOTAL	8,613	26,332	4.27	

Source: Department of Census and Statistics, Statistical Abstract of Ceylon, 1969.

CHAPTER II. TABLE V
RATIOS OF SENIOR SCHOOLS TO ALL SCHOOLS (GOVERNMENT). 1971

Administrative District.	A				B			C				D			Proportion of D to Total Govt. Schools						
	Central Schools and Maha Vidyalayas				Total Govt. Schools			% of Gen. & Maha Vidyalayas to total Schools.				Private, Night and Estate schools									
	Boys	Girls	Mixed	Total	Boys	Girls	Total	Boys	Girls	Mixed	Total	Boys	Girls	Mixed		Total					
Colombo	25	44	245	314	75	106	911	1092	33.3	41.5	37.2	28.8	1	18	17	58	30.6	16.9	18.6	26.4	
Kalutara	5	5	73	83	20	24	401	445	25.0	20.8	18.2	18.7	5	4	50	54	20.0	—	12.4	12.1	
Kandy	10	10	121	141	19	24	583	626	52.6	41.6	20.8	22.5	4	3	144	147	15.7	—	24.7	23.4	
Matale	2	3	29	34	3	3	231	237	66.6	100.0	12.6	14.3	13	—	32	32	—	—	13.8	13.5	
Nuwara Eliya	1	2	53	56	2	3	242	247	50.0	66.6	21.9	22.7	2	1	—	305	50.0	—	126.3	123.1	
Galle	8	12	100	120	21	25	481	527	38.1	48.0	20.8	22.7	2	1	—	13	12.5	—	2.7	2.7	
Matara	3	3	91	97	8	11	662	681	37.5	27.3	13.7	14.2	14	—	1	12	—	—	9.9	1.8	1.9
Hambantota	6	10	81	97	14	19	528	561	42.8	52.6	15.3	17.3	6	4	3	1	8	28.5	15.7	0.2	1.4
Kaifna	1	2	12	15	1	4	98	103	100.0	50.0	12.2	14.5	11	—	—	—	—	—	—	—	—
Mannar	1	2	15	17	—	—	179	179	—	—	8.4	8.4	20	—	—	—	—	—	—	—	—
Vavuniya	3	4	21	28	12	13	206	231	25.0	30.8	10.1	12.1	18	—	—	—	—	—	—	—	—
Batticaloa	1	1	26	28	4	4	222	230	25.0	25.0	11.7	12.2	19	—	—	—	—	—	—	—	—
Amparai	1	1	14	21	6	7	136	149	50.0	57.1	10.3	14.0	15	—	—	—	—	—	—	—	—
Trincomalee	3	4	14	21	6	7	136	149	50.0	57.1	10.3	14.0	15	—	—	—	—	—	—	—	—
Kurunegala	4	5	154	163	17	21	1132	1170	23.5	23.8	13.6	13.9	16	—	2	3	5	—	9.5	0.3	0.4
Puttalam	1	1	59	61	1	1	478	480	100.0	100.0	12.3	12.7	17	—	—	—	—	—	—	—	—
Anurachapuram	1	1	19	20	—	1	136	137	—	100.0	13.9	14.5	11	—	—	—	—	—	—	—	—
Polonnaruwa	4	3	41	48	5	5	268	278	80.0	60.0	15.2	17.2	7	1	—	130	20.0	—	48.5	47.1	
Badulla	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Moneragala	3	3	24	24	—	—	158	158	—	—	15.2	15.2	10	—	7	7	—	—	—	—	—
Ratnapura	3	3	71	77	3	4	488	495	100.0	75.0	14.5	15.6	9	—	—	82	—	—	16.8	16.5	
Kegalle	2	2	91	95	5	4	550	559	40.0	50.0	16.5	16.9	8	—	—	60	—	—	10.9	10.7	
Total	82	115	1340	1537	216	279	8050	8585	37.9	41.2	15.7	17.9	—	37	24	856	917	17.11	8.6	10.6	10.7

Source: Compiled by Marga Institute from publications of the Ministry of Education.

Chapter II Table VI
 Additional Floor Space Required Assuming 60%
 Student Participation Rate Per District

DISTRICT	Population 5 - 19 years 1971*	Classroom Space		Additional Sq. ft. required
		Total Sq. ft.** available 1972	Total sq. ft.*** required	
Colombo	909,211	5,371,520	5,455,266	83,746
Kalutara	246,528	1,555,094	1,479,168	—
Kandy	435,939	2,426,391	2,615,634	189,243
Matale	122,979	703,717	737,874	34,157
Nuwara Eliya	165,845	754,892	995,070	240,178
Galle	258,994	1,967,989	1,553,964	—
Matara/Hamban.	358,261	2,146,430	2,149,566	3,136
Jaffna	257,566	2,267,637	1,545,396	—
Mannar	30,647	207,256	183,882	—
Vavuniya	36,799	298,882	220,794	—
Batticaloa	105,014	521,291	630,084	108,793
Amparai	108,052	631,524	648,312	16,788
Trincomalee	76,549	407,711	459,294	51,583
Kurunegala/P'lam	541,759	3,570,669	3,250,554	—
Anuradhapura	159,177	1,047,270	955,062	—
Polonnaruwa	64,570	369,204	387,420	18,216
Badulla	239,992	792,491	1,439,952	647,461
Moneragala	79,311	315,896	475,866	159,970
Ratnapura	239,243	1,150,177	1,435,458	285,281
Kegalle	237,672	1,559,003	1,426,032	—

* Provisional. Department of Census & Statistics

** Compiled by Marga Institute from publications of Ministry of Education, School Census 1972.

*** The total space (sq. ft.) required is computed on the assumption that the student participation rate is 60% in each district and the space necessary for each student being 10 sq. ft.

CHAPTER II
TABLE VII
AGE SPECIFIC SCHOOL PARTICIPATION RATES - 1971

DISTRICTS	(Provisional) Total Population			School Population*			Participation Rates		
	5-9 Years	10-14 Years	15-19 Years	5-9 Years	10-14 Years	15-19 Years	5-9 Years	10-14 Years	15-19 Years
	Colombo	309,958	317,154	282,099	296,294	255,373	47,965	95.6	80.5	17.0
Kalutara	86,977	85,270	74,281	76,912	64,330	12,576	88.4	75.4	16.9
Kandy	156,729	150,527	128,683	128,831	90,617	17,758	82.2	60.2	13.8
Matale	45,157	42,903	34,919	34,830	28,680	5,343	77.1	66.8	15.3
Nuwara Eliya	62,053	56,911	46,881	51,007	34,260	6,470	82.2	60.2	13.8
Galle	91,010	90,553	77,431	82,711	74,372	15,098	90.9	82.1	19.5
Matara	77,446	77,422	65,401	70,927	63,546	12,533	91.6	82.0	19.2
Hambantota	48,791	48,279	40,922	40,232	33,219	6,204	82.5	68.8	15.2
Jaffna	93,114	89,030	75,422	84,077	75,952	13,619	90.3	85.3	18.1
Mannar	12,045	10,065	8,537	8,212	6,290	1,141	68.2	62.4	13.4
Vavuniya	13,970	12,629	10,200	11,153	8,025	950	79.8	63.5	9.3
Batticaloa	42,316	36,445	26,253	23,484	21,089	2,535	55.5	57.8	9.7
Ampara	44,233	37,033	26,786	30,682	22,316	3,257	69.4	60.2	12.2
Trincomalee	31,506	25,576	19,467	20,289	16,501	2,137	64.4	64.5	11.0
Kurunegala	140,840	141,371	118,399	120,136	94,153	24,153	85.3	66.6	20.4
Puttalam	52,959	46,413	41,772	45,174	30,911	8,522	85.3	66.6	20.4
Anuradhapura	59,161	55,312	44,704	41,576	40,339	6,005	70.3	72.9	13.4
Polonnaruwa	25,997	21,485	17,088	19,021	14,633	2,107	73.2	68.1	12.3
Badulla	90,811	84,173	65,008	74,646	50,673	8,971	82.2	60.2	13.8
Moneragala	32,257	27,511	19,543	19,787	13,437	2,085	61.3	48.8	10.7
Ratnapura	85,279	82,529	71,435	70,018	52,249	9,744	82.1	63.3	13.6
Kegalle	83,719	84,110	69,843	74,767	64,769	13,484	89.3	77.0	19.3
SRI LANKA	1,686,331	1,622,708	1,365,077	1,424,766	1,155,736	222,657	84.5	71.2	16.3

* The school population has been adjusted taking into account repetition rates and late entries. As the Educational Districts of Kandy, Nuwara Eliya and Badulla do not coincide with the Administrative Districts, they have been combined and Participation Rates found. Likewise Kurunegala and Puttalam too have been combined.

Chapter II Table VIII
Age Specific School Participation Rates - 1971, Classified by Sex.

DISTRICTS	5 - 9 years		10 - 14 years		15 - 19 years	
	M	F	M	F	M	F
	Colombo	98.8	92.4	79.9	81.2	15.7	18.4
Kalutara	91.5	85.3	72.7	78.4	12.1	21.9
Kandy	85.3	79.0	60.7	59.7	14.1	13.5
Matale	80.3	74.0	66.0	67.6	15.4	15.2
Nuwara Eliya	89.0	75.3	64.3	55.9	14.1	13.6
Galle	95.1	86.5	83.2	81.1	17.4	21.5
Matara	99.3	83.6	77.6	86.7	15.0	23.1
Hambantota	86.5	78.2	61.1	77.4	13.1	17.3
Jaffna	93.8	86.9	87.4	83.0	21.7	14.4
Mannar	71.9	64.5	72.3	53.2	24.3	—
Vavuniya	83.9	75.9	64.1	63.0	8.1	10.7
Batticaloa	57.7	53.2	62.5	52.9	7.0	7.0
Amparai	73.8	64.8	68.5	51.8	13.8	10.5
Trincomalee	67.8	60.9	67.5	61.5	10.3	11.8
Kurunegala	88.3	82.2	62.5	71.0	18.1	22.8
Puttalam	86.7	83.8	69.1	64.0	20.7	20.1
Anuradhapura	75.3	65.4	69.2	77.0	14.9	14.9
Polonnaruwa	75.9	70.5	62.3	74.6	12.7	12.0
Badulla	87.7	76.7	67.0	57.4	14.6	13.0
Moneragala	65.6	57.1	47.3	50.8	11.9	9.4
Ratnapura	88.0	76.3	60.0	66.7	11.0	16.4
Kegalle	92.3	86.1	73.0	81.1	15.0	23.6
Sri Lanka	88.4	80.5	70.5	72.0	15.2	17.4

Participation Rates of School — Age Population — 1971 and 1974

DISTRICTS	5—19 Population		5—19 School Population		Participation rates		
	1971	1974	1971	1974	1971	1974	Rank
Colombo	909211	864131	599632	513172	66.0	59.4	4
Kalutara	246528	237293	153818	137424	62.4	58.0	6
Kandy	435939	420586	237206	182514	54.4	43.4	20
Matale	122979	119756	68853	62274	56.0	52.0	13
Nuwara Eliya	165845	161783	91737	70814	55.3	43.8	19
Galle	258994	249523	172181	153665	66.5	61.6	3
Matara	220269	211111	147006	130203	66.7	61.7	2
Hambantota	137992	133066	79655	75133	57.7	56.5	8
Jaffna	*257566	246380	173648	156784	67.4	63.6	1
Mannar	30647	30143	15643	15678	51.0	52.0	13
Vavuniya	36799	36550	20128	19291	54.7	52.8	12
Batticaloa	105014	105757	47108	45405	54.9	42.9	21
Amparai	108052	109904	56255	57114	52.1	52.0	13
Trincomalee	76549	77396	38927	38143	50.9	49.3	16
Kurunegala	400610	383075	238442	214535	59.5	55.3	10
Puttalam	141144	136734	84607	78257	60.0	57.2	7
Anuradhapura	159177	154998	87920	86135	55.2	55.6	9
Polonnaruwa	64570	65229	35763	35531	55.4	54.5	11
Badulla	239992	236562	134290	103852	56.0	44.0	18
Moneragala	79311	80943	35309	34209	45.0	42.3	22
Rainapura	239243	232574	132011	112913	55.2	49.5	17
Kegalle	237672	228447	153020	134088	64.4	58.7	5
Sri Lanka	4674104	4521941	2803159	2457184	60.0	54.3	

Age Specific Schools Participation Rates - 1974

DISTRICTS	Population Projection 1974			School going Population			Participation Rates		
	6-9 years	10-14 years	15-19 years	6-9 years	10-14 years	15-19 years	6-9 years	10-14 years	15-19 years
	Colombo	249,006	312,375	302,750	203,894	235,832	73,446	81.9	75.5	24.3
Kalutara	70,355	86,166	80,772	57,583	61,590	18,251	81.8	71.4	22.6
Kandy	124,956	154,019	141,611	74,348	80,552	27,614	59.5	52.3	19.5
Matale	35,907	44,189	39,660	26,612	27,290	8,372	74.1	61.7	21.1
Nuwara Eliya	49,044	59,906	52,833	29,181	31,331	10,202	59.5	52.3	19.5
Galle	73,633	90,693	85,197	63,264	66,461	23,990	85.9	73.3	28.2
Matara	61,266	77,322	72,523	52,060	57,734	20,409	85.0	74.7	28.1
Hambantota	39,272	48,515	45,279	32,828	32,568	9,737	83.6	67.1	21.5
Jaffna	71,554	91,343	83,483	64,138	69,969	22,677	89.6	76.6	27.2
Mannar	9,465	11,236	9,442	7,974	6,378	1,326	84.2	56.8	14.0
Vavuniya	11,494	13,414	11,642	9,282	8,267	1,742	80.8	61.6	15.0
Batticaloa	33,522	39,907	32,328	23,284	17,455	4,666	69.5	43.7	14.4
Amparai	35,720	41,290	32,894	28,921	22,874	5,319	81.0	55.4	16.2
Trincomalee	25,202	29,090	23,104	19,386	15,066	3,691	76.9	51.8	16.0
Kurunegala	110,216	140,843	132,016	94,014	92,534	27,987	85.3	65.7	21.2
Puttalam	41,969	50,264	44,501	35,800	33,023	9,434	85.3	65.7	21.2
Anuradhapura	48,253	55,739	51,006	40,380	35,633	10,122	83.7	63.9	19.8
Polonnaruwa	21,373	24,155	19,701	17,011	14,930	3,640	79.6	61.8	18.5
Badulla	72,126	88,024	76,412	42,915	46,037	14,900	59.5	52.3	19.5
Moneragala	26,337	30,312	24,294	16,098	14,382	3,729	61.1	47.4	15.3
Ratnapura	70,529	84,053	77,992	49,106	49,158	14,649	69.6	58.5	18.8
Kegalle	66,390	83,751	78,306	53,170	60,105	20,813	80.1	71.8	26.6
SRI LANKA	1,347,589	1,656,606	1,517,746	1,041,249	1,079,169	336,816	77.3	65.1	22.2

As the Educational Districts of Kandy, Nuwara Eliya and Badulla do not coincide with the Administrative Districts, they have been combined and Participation Rates found. Likewise Kurunegala and Puttalam too have been combined.

Chapter II

Table XI

RETENTION RATES AT GRADES 2 to 12, 1955 - 1969
(Base Grade 1 - 100)

Class of 1955		Class of 1956	Class of 1957	Class of 1957	Class of 1957	Class of 1957	Class of 1957	Class of 1957	Class of 1957
1A	339.2	100.0	1A	349.5	100.0	1A	390.0	100.0	
1B	253.3	74.68	1B	279.4	79.94	2B	296.1	75.92	
2	243.0	71.64	2	258.7	74.02	2	270.5	69.36	
3	224.3	66.13	3	239.2	68.44	3	248.1	63.62	
4	201.8	59.49	4	212.5	60.8	4	233.4	59.85	
5	177.4	52.3	5	189.5	54.22	5	198.3	50.85	
6	160.7	47.38	6	169.2	48.41	6	172.7	44.28	
7	138.6	40.86	7	141.4	40.46	7	149.5	38.33	
8	116.2	34.26	8	135.8	38.86	8	139.0	35.64	
9	117.1	34.52	9	119.3	34.13	9	118.1	30.28	
10	174.9	51.56	10	184.1	52.68	10	186.1	47.72	
11	20.0	5.9	11	23.0	6.58	11	22.1	5.67	
12	22.8	6.72	12	24.0	6.87	12	23.3	5.97	

Compiled by Marga Institute from Ministry of Education School Census.

Chapter II

Table XII

Percentage of school leavers by grades and districts - 1973

Educational District	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8
Colombo South	2.1	0.2	7.0	6.6	8.4	9.0	8.7	11.8
Homagama	2.8	1.6	5.6	7.1	8.4	10.4	11.4	17.9
Colombo North	1.9	4.5	5.6	8.5	10.3	12.7	10.6	14.9
Kalutara	3.2	3.5	7.6	9.6	11.3	11.5	10.7	17.3
Kandy	5.4	6.2	9.9	11.2	13.0	13.9	12.9	14.4
Matate	5.2	4.1	13.3	12.9	16.5	14.4	12.6	13.3
Nuwara Eliya	3.7	6.0	12.6	14.5	12.0	18.4	16.8	19.0
Galle	4.5	2.5	9.7	11.3	13.4	13.3	11.2	14.9
Matara	3.7	1.1	8.7	8.9	11.7	12.3	10.1	1.6
Tangalle	5.5	5.5	10.1	12.8	14.0	15.0	12.2	12.9
Jaffna	1.1	2.6	8.8	9.0	12.2	10.5	10.1	9.8
Mannar	3.4	5.2	10.1	13.5	20.1	17.4	17.3	11.7
Vavuniya	1.9	4.4	9.7	10.1	21.9	16.5	17.0	15.8
Batticaloa	4.0	11.2	15.0	16.4	21.2	13.4	10.8	10.2
Amparai	4.1	0.9	10.8	9.4	12.9	14.7	11.3	10.5
Trincomalee	4.8	9.7	12.3	13.7	14.7	14.0	10.3	14.9
Kalmunai	5.0	11.6	13.5	16.3	20.6	16.3	10.8	13.0
Kurunegala	5.5	5.9	10.7	12.2	14.6	14.0	12.1	13.2
Chilaw	4.0	7.2	12.8	14.7	19.9	17.9	13.2	13.6
Anuradhapura	2.8	6.0	13.9	11.5	17.6	15.4	12.4	12.2
Polonnaruwa	0.7	7.2	10.1	12.4	12.2	16.0	12.8	15.1
Bandarawela	6.4	8.1	11.6	12.0	9.7	16.8	16.2	17.1
Moneragala	4.1	8.6	13.8	14.4	17.6	19.5	16.9	14.1
Ratnapura	6.0	4.5	11.9	13.1	16.1	16.1	14.9	17.2
Kegalle	4.3	0.9	8.1	10.4	12.9	12.9	12.1	13.6
SRI LANKA	3.9	4.3	9.8	10.9	13.2	13.5	11.8	14.1

Drop out Rates

DISTRICTS	School Population 1974		Drop-outs 1973/74		Drop-outs as a percentage of school population	
	10-14 years	15-19 years	10-14 years	15-19 years	10-14 years	15-19 years
Colombo	235,832	73,466	35,205	32,817	14.93	44.7
Kalutara	61,590	18,251	7,204	9,532	11.70	52.2
Kandy	92,466	31,651	13,460	13,930	14.56	44.0
Matale	27,290	8,372	4,515	3,418	16.55	40.8
Nuwara Eliya	33,396	10,616	5,360	5,572	16.05	52.5
Galle	66,461	23,990	10,930	9,169	16.45	38.2
Matara	57,734	20,409	6,384	7,691	11.06	37.7
Tangalle	32,568	9,737	5,053	3,864	15.52	39.7
Jaffna	69,969	22,677	8,049	8,289	11.50	36.5
Mannar	6,378	1,326	1,303	550	20.43	41.5
Vavuniya	8,267	1,742	1,355	874	16.39	50.2
Batticaloa	17,455	4,666	4,486	1,190	25.70	25.5
Amparai	8,496	1,980	1,285	1,718	15.13	36.3
Trincomalee	15,066	3,691	2,347	1,306	15.58	35.4
Kurunegala	80,399	26,042	12,862	10,505	16.00	40.3
Chilaw	45,133	11,363	8,996	4,977	19.93	43.8
Anuradhapura	14,930	10,122	7,151	4,322	20.07	42.7
Polonnaruwa	32,121	3,640	2,236	1,571	14.98	43.2
Bandarawela	14,382	10,581	4,913	5,354	15.30	50.6
Moneragala	49,158	3,729	2,586	1,335	17.98	35.8
Ratnapura	60,105	14,649	8,279	7,492	16.84	51.1
Kegalle	14,378	20,813	6,798	9,304	11.31	44.7
Kalmunai	1,079,207	3,339	3,051	811	21.22	24.3
Sri Lanka		336,832	163,808	144,591	15.18	42.9

CHAPTER II
 TABLE XIV
 The 1974 Grades as a Percentage of the same cohort in 1971

DISTRICTS	Grade 1 (1971)	Grade 1 (1974)	Grade 4 %	Grade 2 (1971)	Grade 2 (1974)	Grade 5 %	Grade 3 (1971)	Grade 3 (1974)	Grade 6 %
Colombo	75110	64037	85.3	68509	56460	82.4	68633	51708	75.3
Kalutara	21582	17884	82.9	18360	15074	82.1	18380	13241	72.0
Kandy	34757	25564	73.6	30155	22410	74.3	28501	19336	67.8
Matale	11503	7894	68.6	9425	6837	72.5	8813	5530	62.7
Nuwara Eliya	13126	9126	69.5	10916	7883	72.2	10335	7309	70.7
Galle	23976	18707	78.0	20847	16192	77.7	20855	14134	67.8
Matara	20413	15605	76.4	18239	13878	76.1	18164	12519	68.9
Tangalle	13597	9549	70.2	11672	8237	70.6	10991	6750	61.4
Jaffna	24498	19504	79.6	22455	16879	75.2	21206	14541	68.6
Mannar	3588	2115	58.9	2778	1712	61.6	2423	1260	52.0
Vavuniya	4404	2629	59.7	3276	2235	68.2	2943	1589	54.0
Batticaloa	11224	5760	51.3	8758	4353	49.7	6925	3114	45.0
Amparai	3953	2595	65.6	3241	2235	69.0	2829	1799	63.6
Trincomalee	10110	4870	48.2	6314	3709	58.7	5430	2868	54.7
Kalmunai	8996	5070	56.4	6565	3535	53.8	5453	2538	46.5
Kurunegala	31289	23059	73.7	25990	19591	75.4	26196	16646	63.5
Chilaw	22898	13969	61.0	17912	11826	66.0	16853	8318	49.4
Anuradhapura	17778	10999	61.9	13241	9234	69.7	12270	6808	55.5
Polonnaruwa	7180	4763	66.3	5723	4064	71.0	5022	3099	61.7
Bandarawela	11752	8788	74.8	10787	7585	70.3	9841	7000	71.1
Moneragala	7337	4641	63.3	5788	3738	64.6	5320	2810	52.8
Ratnapura	20611	14482	70.3	17270	12170	70.5	16511	10306	62.4
Kegalle	20272	16591	81.8	18895	14646	77.5	17488	12225	69.9
SRI LANKA	419954	308201	73.4	357116	264483	74.1	341382	225548	66.1

Cont.

The 1974 Grades as a Percentage of the same cohort in 1971

DISTRICTS	Grade 4 Grade (1971)	Grade 7 %	Grade 5 Grade (1971)	Grade 8 %	Grade 6 Grade (1971)	Grade 9 %
Colombo	66478	72.9	59868	38204	48542	39241
Kalutara	15954	74.2	15055	9405	12952	9970
Kandy	26238	66.6	22290	13868	19881	16038
Matale	7626	62.9	6342	3639	5518	4469
Nuwara Eliya	9278	68.7	7832	4580	7457	5543
Galle	19842	64.4	16885	10454	14199	11878
Matara	16634	65.7	14755	8560	12273	10131
Tangalle	9357	59.3	7521	4295	6245	5052
Jaffna	18928	69.2	16393	10783	14236	12012
Mannar	2033	45.7	1534	672	1102	759
Vavuniya	2503	49.7	1900	931	1512	960
Batticaloa	5354	48.4	3355	1859	2770	2182
Amparai	2491	55.0	1962	1119	1532	1141
Trincomalee	4667	49.9	3112	1645	2568	1847
Kalmunai	4099	47.1	2741	1302	1958	1764
Kurunegala	23751	63.6	19191	11440	17870	14237
Chilaw	14623	55.2	11318	6315	8865	6294
Anuradhapura	9785	59.2	7960	4904	6419	4991
Polonnaruwa	4072	60.0	3359	1858	2710	2068
Bandarawela	8922	69.5	7858	4554	7198	5162
Moneragala	4026	55.2	2959	1638	2420	1762
Ratnapura	14157	61.8	11645	6902	10484	7800
Kegalle	16458	68.7	14688	9034	12762	10636
SRI LANKA	307276	65.6	260323	157971	221473	175937
				60.7		79.4

Cont.

The 1974 Grades as a Percentage of the same cohort in 1971

DISTRICTS	Grade 7 Grade 10 % (1971)	Grade 8 Grade 11 % (1971)	Grade 9 Grade 12 % (1971)	Grade 10 Grade 13 % (1974)
Colombo	45155	59817	132.5	14.1
Kalutara	12315	16326	132.5	12.0
Kandy	19514	25232	129.3	15.9
Matale	4881	6250	128.0	15.7
Nuwara Eliya	6500	7341	112.9	20.6
Galle	14049	19553	139.2	11.8
Matara	11716	15752	134.4	33.1
Tangalle	5533	7417	134.1	33.6
Jaffna	12451	18164	145.9	23.2
Mannar	805	869	107.9	36.7
Vavuniya	1233	1367	110.9	16.7
Batticaloa	2331	3133	134.4	50
Amparai	1425	1628	114.2	17.8
Trincomalee	2009	2575	128.2	8.8
Kalmunai	1564	2391	152.9	10.6
Kurunegala	15602	20007	128.2	13.9
Chilaw	7381	8687	117.7	17.1
Anuradhapura	6025	8008	132.9	18.2
Polonnaruwa	2410	3051	126.6	20.4
Bandarawela	5984	7585	126.8	14.6
Moneragala	2093	2553	122.0	10.4
Ratnapura	9502	11751	123.7	8.7
Kegalle	12025	16882	140.4	18.8
	202503	266339	131.5	10.5
SRI LANKA		182423	28330	18.0
				15.5
				24.4

CHAPTER II

TABLE XV

GOVERNMENT SCHOOLS
GRADES 9 TO 12 ENROLLMENTS CLASSIFIED WITH ARTS, SCIENCE AND COMMERCE - 1971

Administrative District	GRADE 9		GRADE 10		GRADE 11		GRADE 12		TOTAL						
	Arts	Science Comm.	Arts	Science Comm.	Arts	Science Comm.	Arts	Science Comm.	Arts	Science Comm.					
Colombo	15,521	6,605	22,160	10,277	9,403	2,243	347	2,365	2,709	561	42,181	21,834	17,776		
Kalutara	5,028	1,576	7,048	2,633	1,329	906	300	1,062	456	68	14,044	4,965	2,706		
Kandy	6,907	2,758	11,650	3,911	2,558	1,602	541	1,536	733	210	21,695	7,943	4,771		
Matale	1,700	715	396	2,446	583	296	107	285	172	8	4,727	1,965	1,005		
Nuwara Eliya	2,507	822	597	3,352	1,096	841	283	52	253	23	6,395	2,006	1,483		
Galle	5,463	2,149	1,714	8,579	3,300	1,888	1,572	537	302	98	17,318	6,433	4,002		
Matara	6,929	2,137	1,532	10,803	3,254	1,927	1,761	372	96	2,149	412	120	21,642	6,175	3,675
Hambantota	2,811	4,382	779	5,074	6,903	1,121	540	1,002	42	506	1,953	34	8,931	14,240	1,976
Jaffna	231	62	30	320	79	51	—	—	—	—	—	—	551	141	81
Mannar	262	160	41	453	248	55	63	3	—	14	—	—	792	411	96
Vavuniya	696	863	186	873	1,037	188	118	104	—	48	26	—	1,735	2,030	374
Batticaloa	721	598	357	1,110	728	348	103	34	2	60	9	—	1,994	1,369	707
Amparai	825	469	150	839	439	109	82	12	—	29	7	—	1,775	927	259
Trincomalee	8,829	2,668	2,586	13,652	4,007	3,616	2,312	446	169	2,180	563	170	26,973	7,684	6,541
Kurunegala	2,366	629	516	3,357	850	646	380	43	35	355	48	29	6,458	1,570	1,226
Puttalam	863	263	256	1,029	330	205	92	20	6	68	10	4	2,052	623	471
Anuradhapura	6,793	837	582	336	1,249	616	321	48	12	258	81	11	10,739	2,215	1,221
Polonnaruwa	818	130	89	952	155	138	108	6	7	67	—	—	1,945	291	234
Badulla	4,049	1,038	879	5,521	1,455	1,240	633	85	45	671	112	58	10,874	2,690	2,225
Moneragala	4,767	1,559	1,529	8,074	2,272	1,880	1,081	185	50	1,128	213	56	15,050	4,229	3,512
Ratnapura	78,086	30,420	22,724	110,659	45,194	28,742	14,388	6,140	1,425	14,738	7,987	1,450	217,871	89,741	54,341
Kegalle															
Total															

Source: Ministry of Education School Census

CHAPTER II
 TABLE XVI
 ENROLMENT FIGURES — MINISTRY OF EDUCATION
 TECHNICAL INSTITUTES 1969/70

Technologists Course	C.C.T. Katurbedde	x H.S.T.I. Amparai	+ C.T.C. Colombo	J.T.I. Galle	J.T.I. Kandy	J.T.I. Jaffna	J.T.I. Kegalle	J.T.I. Anuradhapura	J.T.I. Badulla	J.T.I. Kurunegala	J.T.I. Ratmalana	Total
Engineering	542	—	—	—	—	—	—	—	—	—	—	542
Professional Commerce	—	—	609	—	—	—	—	—	—	—	—	609
Technicians Engineering	1228	417	—	89	105	425	—	—	—	92	—	2,416
Commerce	—	—	514	207	125	386	120	—	—	453	—	1,805
Craft Engineering	—	—	—	—	75	178	128	238	471	209	388	1,767
Others	313	54	101	21	30	45	100	—	39	57	388	700
	2143	471	1224	317	335	1034	288	238	510	891	388	7,838

* Ceylon College of Technology. X Hardy Senior Technical Institute + Ceylon Technical College

Source: Ministry of Education - Report on Technical Education to I. B. R. D. Mission.

CHAPTER II
TEACHERS - CLASSIFIED ACCORDING TO SEX AND QUALIFICATIONS,
DISTRICT - WISE, 1971

TABLE XVII
GRADUATES

DISTRICT	TRAINED		ARTS		SCIENCE		TRAINED TEACHERS				TEACHERS CERT.		SPECIALIST TEACHERS	
	M	F	M	F	M	F	M	F	M	F	Notany more		M	F
											M	F		
Colombo	214	168	779	886	131	163	3636	5977	799	3966			431	521
Kalutara	53	26	230	161	16	26	1016	1337	253	1071			156	108
Kandy	63	40	521	233	36	31	2100	1458	393	1165			198	113
Matale	16	4	129	61	13	6	673	335	97	256			47	28
Nuwara Eliya	14	1	194	57	10	5	924	326	129	168			54	31
Galle	53	23	397	208	32	17	1072	1158	339	1312			135	85
Matara														
Hambantota	33	5	481	197	15	16	1837	1101	329	1067			140	77
Jaffna	109	36	215	210	302	286	1926	1333	278	351			131	169
Mannar	5	2	6	8	3	2	215	113	9	21			7	—
Vavuniya	6	1	22	5	5	3	257	149	22	21			20	6
Batticaloa	12	2	34	23	22	14	664	374	30	59			49	13
Anparai	6	2	57	19	14	4	912	233	41	59			22	5
Trincomalee	4	1	44	22	15	13	395	190	18	48			15	19
Kurunegala	42	10	449	175	33	16	1906	1131	417	856			161	74
Puttalam	9	—	208	68	14	8	1211	632	206	489			92	44
Anuradhapura	18	2	205	93	8	2	1144	298	98	207			70	17
Polonnaruwa	2	1	84	34	9	1	394	71	51	59			29	4
Badulla	11	3	183	69	8	4	912	338	110	222			50	35
Moneragala	3	—	100	10	—	—	496	67	38	44			17	3
Ratnapura	13	2	252	115	5	5	1060	583	220	479			92	50
Kegalle	36	9	285	130	14	7	1486	903	259	701			143	54
TOTAL	722	338	4875	2734	705	629	23939	18107	4136	12651			2059	1456

Source: Ministry of Education School Census, 1971

(Continued)

CHAPTER II
TEACHERS - CLASSIFIED ACCORDING TO SEX AND QUALIFICATIONS,
DISTRICT - WISE, 1971
GRADUATES

DISTRICT	UNCERTIFIED TEACHERS		PUPIL TEACHERS		TOTAL		GRAND TOTAL
	M	F	M	F	M	F	
Colombo	618	1833	66	294	6674	13808	20482
Kalutara	260	790	2	15	1986	3534	5520
Kandy	526	1050	13	58	3850	4148	7998
Matale	146	301	—	—	1121	991	2112
Nuwara Eliya	273	328	2	7	1600	923	2523
Galle	288	954	10	43	2326	3800	6126
Matara							
Hambantota	405	1191	44	138	3284	3792	7076
Jaffna	134	328	10	22	2808	2735	5543
Mannar	49	63	—	1	294	210	504
Vavuniya	56	82	—	—	388	267	655
Batticaloa	171	128	4	12	986	625	1611
Amparai	226	128	11	26	1289	476	1765
Trincomalee	185	141	—	1	676	435	1111
Kurunegala	493	1077	5	15	3506	3334	6840
Puttalam	329	591	8	23	2077	1855	3932
Anuradhapura	416	444	4	8	1963	1071	3034
Polonnaruwa	81	135	3	5	653	310	963
Badulla	222	330	6	38	1502	1039	2541
Moneragala	83	84	8	43	745	251	996
Ratnapura	279	690	8	32	1929	1956	3885
Kegalle	309	990	17	65	2549	2859	5408
TOTAL	5549	11658	221	846	42206	48419	90625

TEACHER PUPIL RATIOS - 1971

	Pupils in 'O' & 'A' levels as a ratio of total number of graduate teachers		Pupils in all grades as a ratio of total number of teachers		Ratios of 'O' and 'A' level arts and science students to total number of arts and science graduate teachers respectively.						
	Total Number of graduate teachers	Ratio	Total Number of teachers	Ratio	Arts Graduate teachers	Science Graduate teachers	Arts 'O' & 'A' level students	Science 'O' and 'A' level students	Arts Ratio	Science Ratio	
Colombo	2341	81776	20482	556606	27.2	1665	294	42181	21834	25.3	74.3
Katutura	512	22128	5520	149148	27.0	391	42	14044	4965	35.9	118.2
Kandy	924	34409	7993	232801	29.1	754	67	21695	7943	28.8	118.6
Matale	229	7691	2112	65753	31.1	190	19	4727	1965	24.9	103.4
Nuwara Eliya	281	9899	2523	81118	32.2	251	15	6395	2006	25.5	133.7
Galle	726	27570	6126	170149	27.8	605	49	17318	6433	28.6	131.3
Hambantota	747	30477	7076	224434	31.7	678	31	21642	6175	31.9	199.2
Matara	1158	26060	5543	167095	30.1	425	588	8931	14240	21.0	24.2
Jaffna	26	878	504	15643	31.0	14	5	551	141	39.4	28.2
Mannar	42	1523	655	20128	30.7	27	8	792	411	29.3	51.4
Vavuniya	107	4230	1611	47108	29.2	57	36	1735	2030	30.4	56.4
Batticaloa	102	4113	1765	56255	31.9	76	18	1994	1360	26.2	76.1
Amparai	99	2680	1111	38927	35.0	66	28	1775	927	26.9	33.1
Trincomalee	982	41218	10772	321000	29.8	850	71	26973	7684	31.7	108.2
Puttalam	328	9247	3034	87920	29.0	298	10	6458	1570	21.7	157.0
Kurunegala	131	3146	963	25763	26.8	118	10	2052	623	17.4	62.3
Anuradhapura	278	9626	2541	77377	30.5	252	12	10739	2215	42.6	184.6
Polonnaruwa	113	2505	996	34637	34.8	110	—	1945	291	17.7	—
Badulla	392	16048	3885	124339	32.0	367	10	10874	2690	29.6	26.9
Moneragala	481	23989	5408	148226	27.4	415	21	15050	4229	36.3	201.4
Ratnapura	10003	359213	90625	2654427	29.3	7609	1334	217871	89741	28.6	67.3
Kegalle											
TOTAL											

SOURCE: MINISTRY OF EDUCATION SCHOOL CENSUS - 1971

Cont.

TEACHER PUPIL RATIOS - 1971

Pupils in all grades as a ratio of trained and certified teachers, specialist teachers and uncertified and pupil teachers respectively

	Pupils all Grades	Trained & certified Teachers	Ratio of pupils to trained & certified teachers	Specialist Teachers	Ratio of pupils to specialist Teachers	Uncertified and pupil teachers	Ratio of pupils to uncertified and pupil teachers
Colombo	556606	14378	38.7	952	584.7	2811	198.0
Kalutara	149148	3677	40.6	264	565.0	1067	139.8
Kandy	232801	5116	45.5	311	748.6	1647	141.3
Matale	65753	1361	48.3	75	876.7	447	147.1
Nuwara Eliya	81118	1547	52.4	85	954.3	610	133.0
Galle	170149	3881	43.8	220	773.4	1295	131.4
Hambantota }	224434	4334	51.8	217	1034.3	1778	126.2
Matara	167095	3888	43.0	300	557.0	494	338.2
Jaffna	15643	358	43.7	7	2234.7	113	138.4
Mannar	20128	449	44.8	26	774.2	138	145.9
Vavuniya	47108	1127	41.8	62	759.8	315	149.5
Batticaloa	56255	1245	45.2	27	2083.5	391	143.9
Anparai	38927	651	59.8	34	1144.9	327	119.0
Trincomalee	321000	6878	46.7	371	865.2	2541	126.3
Puttalam	87920	1747	50.3	87	1010.6	872	100.8
Kurunegala	25763	575	44.8	33	780.7	224	115.0
Anuradhapura	77377	1582	48.9	85	910.3	596	129.8
Polonnaruwa	34637	645	53.7	20	1731.9	218	158.9
Badulla	124339	2342	53.1	142	875.6	1009	123.2
Moneragala	148226	3349	44.3	197	752.4	1381	107.3
Batnapura							
Kegalle							
TOTAL	2654427	59130	44.9	3515	755.2	18274	145.3

SOURCE: MINISTRY OF EDUCATION, SCHOOL CENSUS - 1971

RATIOS OF GRADE 10 AND GRADE 12 ENROLMENTS TO
TOTAL ENROLMENTS—GOVERNMENT SCHOOLS—1971

	1	2	3		4	5	
DISTRICTS	Total Enrolment All Grades	Enrolment in Grade 10	Percentage of 2 to 1	Rank	Enrolment in Grade 12	Percentage of 4 to 1	Rank
Colombo	557,536	41,480	7.5	5	5,635	1.01	6
Kalutara	147,700	11,010	7.5	5	1,586	1.08	4
Kandy	232,807	18,119	7.8	3	2,479	1.06	5
Matale	65,824	4,000	6.1	11	465	0.71	9
Nuwara Eliya	80,730	5,289	6.6	8	312	0.39	13
Galle	170,097	13,767	8.1	2	2,249	1.32	2
Matara	224,547	15,984	7.1	7	2,681	1.19	3
Hambantota							
Jaffna	166,872	13,098	7.8	3	2,493	1.49	1
Mannar	15,535	450	2.9	20	—	—	—
Vavuniya	20,026	756	3.8	17	14	0.07	19
Batticaloa	46,908	2,098	4.5	14	74	0.16	16
Amparai	55,304	2,186	4.0	16	69	0.12	17
Trincomalee	38,731	1,387	3.6	18	36	0.09	18
Kurunegala	321,100	21,275	6.3	10	3,093	0.96	7
Puttalam							
Anuradhapura	87,912	4,853	5.5	13	432	0.49	11
Polonnaruwa	35,754	1,564	4.4	15	82	0.23	14
Badulla	81,836	5,232	6.4	9	350	0.43	12
Moneragala	34,211	1,245	3.6	18	67	0.20	15
Ratnapura	124,349	8,216	6.1	11	841	0.68	10
Kegalle	146,724	12,226	8.3	1	1,397	0.95	8
Total	2,654,503	184,695	7.0		24,175	0.91	

Source: Compiled by Marga Institute from School Census, 1971.

EXPENDITURE ON LIBRARY AND SPORTS PER CHILD
GOVERNMENT SCHOOLS - 1971.

	Rs.*	Rs.		Rs.	
DISTRICTS	Total Collection for Sports & Library	Total spent on Sports and Library	Total School Population (Govern- ment)	Amount spent on Sports & Library per student (Approx.)	Rank
Colombo	1,274,054	1,020,867	557,536	1.83	2
Kalutara	126,772	108,292	147,700	.73	10
Kandy	470,938	324,959	232,807	1.40	4
Matale	97,989	93,534	62,824	1.43	3
Nuwara Eliya	75,408	51,288	80,730	.64	11
Galle	276,714	210,979	170,097	1.24	7
Matara	124,595	108,622	224,547	.48	14
Hambantota					
Jaffna	1,040,479	881,205	166,872	5.28	1
Mannar	15,546	13,504	15,535	.87	8
Vavuniya	9,429	9,640	20,026	.48	14
Batticaloa	88,731	63,149	46,908	1.35	5
Amparai	33,750	23,041	55,304	.42	17
Trincomalee	65,462	49,078	38,731	1.27	6
Kurungala	338,784	270,018	321,100	.84	9
Puttalam					
Anuradhapura	58,210	56,052	87,912	.64	11
Polonnaruwa	13,538	10,477	35,754	.29	19
Badulla	50,344	43,118	81,836	.53	13
Moneragala	8,756	2,917	34,211	.09	20
Ratnapura	64,886	48,395	124,349	.39	18
Kegalle	96,016	62,865	146,724	.43	16
TOTAL	4,330,401	3,452,000	2,654,503	1.30	

* Amount collected from facilities fees are used for sports and library facilities and sports equipment.

Source: Compiled by Marga Institute from Publications of the Ministry of Education.

RATES OF REPETITION GRADES I - 10 1971

DISTRICTS	Gr. 1	Gr. 2	Gr. 3	Gr. 4	Gr. 5	Gr. 6	Gr. 7	Gr. 8	Gr. 9	Gr. 10
Colombo	19.92	16.08	16.06	13.54	10.22	9.87	8.70	2.43	3.59	38.48
Kalutara	22.50	18.89	17.35	14.89	14.19	10.84	7.26	2.07	2.46	47.92
Kandy	27.48	20.77	19.79	16.73	16.08	13.97	7.69	3.04	5.99	41.01
Matale	34.23	24.74	21.33	19.33	17.23	15.68	8.24	4.40	4.06	48.20
Nuwara Eliya	30.39	21.75	20.84	18.99	15.42	14.13	8.71	3.02	5.48	49.40
Galle	22.89	18.64	16.84	14.11	14.55	10.11	7.15	3.89	4.78	36.45
Matara	26.87	20.66	20.60	17.99	14.61	12.19	6.30	2.54	1.31	44.35
Hambantota	29.35	22.56	22.65	20.17	16.00	13.00	9.33	2.80	2.41	42.42
Jaffna	29.61	18.60	14.61	13.85	12.99	3.41	6.14	5.97	3.02	39.83
Mannar	37.35	29.23	25.88	22.77	24.51	21.23	13.29	5.01	10.22	46.67
Vavuniya	36.47	23.32	19.16	16.86	17.58	12.96	7.46	3.14	7.34	32.94
Batticaloa	41.41	32.63	28.46	23.83	22.80	10.25	7.81	5.31	2.92	31.55
Amparai	35.79	28.15	22.83	20.33	16.05	15.16	6.42	1.81	13.25	37.42
Trincomalee	43.67	28.94	26.80	19.46	18.22	12.77	10.54	5.77	3.46	43.98
Kurunegala	23.87	18.77	17.64	16.86	14.37	11.73	7.84	3.35	3.98	42.40
Puttalam	30.11	21.08	18.35	16.17	13.79	11.55	8.05	3.39	7.37	49.62
Anuradhapura	49.63	22.26	22.67	21.01	16.93	11.34	7.52	1.99	7.86	42.12
Polonnaruwa	28.80	23.01	19.26	17.83	15.00	7.90	7.26	0.89	8.54	39.13
Badulla	35.30	24.72	22.87	19.13	14.71	11.03	7.42	1.45	2.05	43.10
Moneragala	32.07	22.98	21.11	20.00	15.11	11.82	9.46	2.72	1.16	53.90
Ratnapura	27.60	19.98	17.57	15.78	13.47	12.94	6.74	2.05	2.61	46.81
Kegalle	24.82	17.79	18.58	15.52	13.29	11.43	7.93	1.70	4.46	46.68
SRI LANKA	27.54	20.35	18.19	16.32	13.88	11.21	7.79	2.90	4.19	42.10

Source: Ministry of Education School Census, 1971.

CHAPTER II
TABLE XXII
UNIVERSITY ADMISSIONS 1970/71 by PROVINCE

Campus	UNIVERSITY ADMISSIONS 1970/71 by PROVINCE									
	Colombo Kalutara	Kandy Matale	Jaffna Manner Vavuniya	Anuradhapura Polonnaruwa	Galle Matale Hambantota	Batticaloa Amparai Trinco'e	Ratnapura Kegalle	Badulla Moneragala	Kurunegala Puttalam	
Peradeniya	331	260	210	15	173	34	88	22	88	
Colombo	438	43	139	11	200	34	53	21	95	
Vidyodaya	221	52	17	19	133	1	86	31	86	
Vidyalkankara	193	27	—	16	151	2	72	19	96	
Total-3477	1183	382	366	61	657	71	299	93	365	
	UNIVERSITY ADMISSIONS 1971/72 by PROVINCE									
Peradeniya	355	210	194	20	264	29	105	37	103	
Colombo	460	101	86	8	155	13	69	9	115	
Vidyodaya	33	16	—	6	9	—	14	2	19	
Vidyalkankara	259	88	4	11	182	5	83	16	119	
Katubedde	58	12	44	—	14	5	1	1	4	
Total-3338	1165	427	328	45	624	52	272	65	360	
	UNIVERSITY ADMISSIONS 1973 by PROVINCE									
Peradeniya	292	227	240	143	192	23	54	24	68	
Colombo	379	55	102	7	162	18	62	7	82	
Vidyodaya	221	64	12	16	110	6	80	29	104	
Vidyalkankara	158	56	6	6	129	7	61	14	56	
Katubedde	68	9	32	3	15	4	9	—	10	
Total-3421	1118	411	392	175	608	58	266	74	319	

SRI LANKA POPULATION 5--19 YEARS CLASSIFIED BY
NUMBER OF EMPLOYED UNEMPLOYED

Age Group	Total Population	Employed	Un-Employed
5— 9	1,686,329	—	—
10—14	1,622,697	53,984	31,157
15—19	1,365,081	310,316	202,523
20—24	1,242,437	534,532	277,996

Source: Census of Population 1971.

CHAPTER III TABLE II
ORGANISATIONS FOR SERVICE TO YOUTH

FIELDS	NEEDS AND SERVICES	AGENCIES AND INSTITUTIONS
A PHYSICAL	Physical Exercise, Recreation Games &c. (team spirit, spirit of healthy rivalry, and leadership training).	National Sports Council* Sports Education & Sports Research Institution.* Private Sports & Recreation Club.
B RELIGIOUS	Religious Education	Sunday Schools* Poya Day Classes* Dhamma Schools* Church of Ceylon Youth Movement*** Muslim Ahadiya Schools** Quran Madrasas***
C CULTURAL	Contact with and Participation in Cultural Activities.	Department of Cultural Affairs* B Arts Council*** Moors Islamic Cultural Home*** B
D MORAL	Inculcation of Desirable Moral Values (Leadership Training, Character Formation—inculcation of a sense of discipline, self-reliance, loyalty, honesty, civic consciousness; Socio-psychological attributes which are essential requirements for development).	Boys Scouts Movement* E Girl Guides Movement* E Y.M.C.A.* B C E F Y.W.C.A.* B C E Y.M.B.A.* B C B F Y.M.M.A.* B C E Y.M.H.A.* B C E
E SOCIAL	Relationships and contacts that will promote socialisation and participation in social activities. (Community Development : Self-help).	Mahila Samithi** D. F. Rural Development Societies** D F Sarvodaya Movement** D. F. Jaycees Clubs*** D F Leo Clubs*** D Red Cross Society* D St. John's Ambulance Brigade* D West Ceylon Youth Council*** D F Rotary Clubs*** D Saukyadana Movement* D Kantha Samithi** D F

* Mixed

** Rural

*** Urban and semi-urban

FIELDS	NEEDS AND SERVICES	AGENCIES AND INSTITUTIONS
F VOCA- TIONAL	Non-formal Vocational education and training. Vocational Guidance and placement services. (Formation of skills for civic participation).	Young Farmers Clubs** D E Practical Farm Schools** School of Agriculture** Vocational Training Centres of Department of Labour*** Vocational Training Centres of Department of Small Industries*** Vocational Training Schools of Department of Probation & C.C.S.*** D E National Youth Service Council** DE National Apprenticeship Board*** Youth Settlement Schemes** D E Divisional Development Councils** D E Diyagala Boys' Town** D E Yahapath Endera Farm** D E Navajeevanam*** B D E Radio & Electronic Laboratory*** E C.T.B. Ceylon—German Training School*** Hotel School*** Trinity College Farm** E

** Rural

*** Urban and semi-urban

YOUTH SETTLEMENT SCHEME
DISTRIBUTION ACCORDING TO REVENUE DISTRICTS

KALUTARA	1. Delmella (D) 2. Kelinkade (D) 3. Peniyawela (D) 4. Ihala Hewessa (H)	
KANDY	1. Kaludala (C) 2. Mahapatana (C) 3. Campbell's Land (C)	
MATALE	1. Bellana Oya (A) 2. Hill Crest (C) 3. Nalanda (C)	
NUWARA ELIYA	1. Ragala (C) 2. Galpalana (C) 3. Kuda Oya (C)	
GALLE	1. Mandalapura (D) 2. Pituwela (E) 3. Hiyare (E)	
JAFFNA	1. Thiruvani Aru (B) 2. Mirusuvil (C) 3. Viswamadakulam (B)	
VAVUNIYA	1. Muttu Iyankaddu—Right Bank I (A) 2. Muttu Iyankaddu—Right Bank II (A) 3. Muttu Iyankaddu—Left Bank I (A)	
BATTICALOA	1. Gal Oya III (A)	
AMPARAI	1. Gal Oya I (A)	
TRINCOMALEE	1. Veppankulam (B) 2. Mangalawewa (B)	
KURUNEGALA	1. Kalugalla (A) 2. Wilgamdematewe (A) 3. Wellangiriya (A)	
PUTTALAM	1. Kikulkelle (F) 2. Atavillu (F)	
ANURADHAPURA	1. Rajangane (B) 2. Maha Ehetuwewa (B)	
POLONNARUWA	1. Konduruwewa (A) 2. Bakamuna (A) 3. Manampitiya (A)	
BADULLA	1. Galponayaya (E) 2. Bathmidilla (C)	
MONERAGALA	1. Thanamalwila (A)	
RATNAPURA	1. Ayagama (D) 2. Pedikande (E)	

INDEX

- (A) Lift-irrigated Subsidiary Food-crops.
(B) Reservoir-irrigated Subsidiary Food-crops.
(C) Vegetable and mixed farming.
(D) Tea
(E) Cinnamon
(F) Coconut
(G) Cardamoms.
(H) Fruits.

CHAPTER III

DIVISIONAL DEVELOPMENT COUNCILS

TABLE IV.

PROJECTS APPROVED, FUNDED & UNDER WAY AS AT MARCH 1973

	PROJECTS APPROVED AND FUNDED					PROJECTS UNDER WAY	EMPLOYMENT PROVIDED IN PROJECTS UNDER WAY				
	No. of D.D.Cs	Agricultural	Industrial	Fisheries	Mixed		TOTAL	Agricultural	Industrial	Fisheries	Miscellaneous	TOTAL
Colombo	48	17	81	—	4	102	111	725	—	11	847
Kalutara	25	13	31	1	—	45	16	201	20	—	237
Kandy	45	25	37	—	4	66	328	252	—	—	580
Matale	21	16	28	—	1	45	129	184	—	—	313
Nuwara Eliya	20	8	14	—	—	22	76	231	—	—	307
Galle	44	15	41	1	—	58	221	415	—	—	636
Matara	25	9	23	—	2	34	59	36	—	—	95
Hambantota	10	16	18	—	4	38	207	48	—	—	255
Jaffna	50	6	16	—	—	22	25	128	—	—	153
Mannar	17	—	4	—	1	5	—	20	—	—	20
Vavuniya	17	10	5	1	1	17	65	34	—	—	99
Batticaloa	20	14	5	—	2	22	167	4	—	—	195
Amparai	18	9	2	—	2	13	39	35	—	24	74
Trincomalee	26	21	1	—	1	23	814	—	—	—	814
Kurunegala	49	30	67	—	2	99	276	572	—	—	848
Puttalam	24	8	15	—	1	24	160	118	—	—	278
Anuradhapura	32	47	20	—	1	68	634	226	—	4	864
Polonnaruwa	8	2	4	—	—	6	67	47	—	—	114
Badulla	32	15	13	1	10	38	149	109	—	—	238
Moneragala	13	16	3	—	1	20	187	8	—	—	195
Ratnapura	24	26	22	—	3	51	157	24	—	—	181
Kegalle	20	18	72	—	2	82	93	487	—	—	580
TOTAL:	588	341	512	4	43	910	3980	3904	20	39	7943

RURAL DEVELOPMENT SOCIETIES & KANTHA SAMITHI

			Present strength of active societies	Societies Selected for intensive development
Colombo	...	...	574	48
Kalutara	...	...	293	30
Kandy	...	..	658	41
Matale	...	...	244	21
Nuwara Eliya	...	...	110	14
Galle	...	...	379	50
Matara	...	...	236	17
Hambantota	...	...	229	15
Jaffna	...	...	266	34
Vavuniya	...	...	136	16
Mannar	...	...	86	9
Batticaloa	...	...	143	16
Trincomalee	...	...	97	25
Kurunegala	...	...	572	26
Puttalam	..	...	197	25
Anuradhapura	...	...	591	37
Polonnaruwa	...	...	99	7
Badulla	...	...	365	18
Ratnapura	...	...	418	22
Kegalle	...	...	630	23
Moneragala	...	...	176	19
Amparai	...	...	181	20
			<hr/> 6,680	<hr/> 535

CHAPTER III TABLE VI
**PRACTICAL FARM SCHOOLS OF
 THE DEPARTMENT OF AGRICULTURE**

KALUTARA	Horana (Boys)
MATALE	Pelwehera, Dambulla (Boys)
GALLE	Labuduwa (Girls' Farm School) Walpitakola, Deniyaya (Girls and Boys)
JAFFNA	Thinnaveli (Girls and Boys) Kilinochchi (Boys)
AMPARAI	Sammanthurai (Boys)
KURUNEGALA	Wariyapola (Boys)
ANURADHAPURA	Maha Illupalama (Boys)
BADULLA	Binduunuwewa, (Boys)
MONERAGALA	Bibile (Boys)
RATNAPURA	Karapincha, Kuruwita (Boys)
KEGALLE	Ambepussa (Girls and Boys) Wagolla, Rambukkana (Boys)

CHAPTER III TABLE VII

PROBATION & CHILD CARE SERVICES DEPARTMENT
LIST OF CERTIFIED SCHOOLS

COLOMBO	1. Girls' Certified School, Ranmutugala.
	2. Woodford School, Makola.
GALLE	3. Lake School, Hikkaduwa.
	4. Camp School, Koggala.
JAFFNA	5. Fornham School, Atchvely.
ANURADHAPURA	6. Camp School, Senapura.
BADULLA	7. Certified School, Keppetipola.

Approved School

St. Vincent's School, Maggona.

LANKA JATIKA SARVODAYA SHRAMADANA SANGAMAYA

	Grama Mandalaya Stage	Gramo- daya Stage	Shrama- dana Stage	Prelim- inary Stage	Total
1. Colombo	—	5	8	33	45
2. Kalutara	—	—	2	13	15
3. Kandy	2	1	3	25	31
4. Matale	—	—	—	4	4
5. Nuwara Eliya	—	1	—	5	6
6. Galle	1	1	11	29	42
7. Matara	—	—	4	19	23
8. Hambantota	—	—	—	16	16
9. Jaffna	—	—	—	2	2
10. Mannar	—	—	—	—	—
11. Vavuniya	1	—	—	8	9
12. Batticaloa	—	1	1	2	4
13. Amparai	—	—	1	1	2
14. Trincomalee	—	—	—	1	1
15. Kurunegala	2	6	9	51	68
16. Puttalam	—	1	—	7	8
17. Anuradhapura	1	1	3	10	15
18. Polonnaruwa	—	—	—	10	10
19. Badulla	—	3	4	16	23
20. Moneragala	—	2	1	6	9
21. Ratnapura	—	6	—	12	18
22. Kegalle	2	2	15	29	48
	<hr/> 9	<hr/> 30	<hr/> 62	<hr/> 299	<hr/> 400

CHAPTER III TABLE IX

BOY SCOUTS ASSOCIATION OF CEYLON
SCOUTS DIVISIONS ACCORDING TO REVENUE DISTRICTS

<i>Districts</i>	<i>Divisions</i>
COLOMBO	1. Colombo
	2. Avissawella
	3. Gampaha
	4. Homagama
	5. Wattala-Jaela
	6. Moratuwa
	7. Negombo
	8. Panadura
KALUTARA	9. Kalutara
KANDY	18. Kandy
	11. Hanguranketa
	12. Nawalapitiya
MATALE	13. Matale
NUWARA ELIYA	14. Nuwara Eliya
GALLE	15. Galle
MATARA/HAMBANTOTA	16. Matara/Hambantota
JAFFNA	17. Jaffna
MANNAR	18. Mannar
VAVUNIYA	19. Vavuniya
	20. Mullaitivu
BATTICALOA	21. Batticaloa
	22. Akkaraipattu/Kalmunai
AMPARAI	23. Amparai
TRINCOMALEE	24. Trincomalee
KURUNEGALA	25. Kurunegala
PUTTALAM	26. Puttalam
	27. Chilaw
	28. Wennappuwa
ANURADHAPURA	29. Anuradhapura
POLONNARUWA	30. Polonnaruwa
BADULLA	31. Badulla
MONERAGALA	32. Moneragala
RATNAPURA	33. Ratnapura
KEGALLE	34. Kegalle

CHAPTER III TABLE X
GIRL GUIDES ASSOCIATION OF CEYLON.

REVENUE GUIDE DISTRICT DIVISION		Commiss- ioners	Guiders	Secre- taries	Adult Leaders	Rangers	Guides	Little Friends	Handi- capped	TOTAL
	Headquarters	16	1	—	—	—	—	—	—	17
	Avissawella/ Hanwella	2	30	1	—	50	300	75	—	458
	Colombo	10	165	1	65	130	2010	835	40	3256
COLOMBO	Gampaha	1	20	—	—	—	305	54	—	380
	Jaala/Kandana Wattala	3	20	—	—	10	242	54	—	329
	Mount Lavinia/ Moratuwa/Panadura	4	38	—	—	25	452	227	50	796
	Negombo	1	33	—	—	10	280	130	—	454
KALUTARA	Kalutara	4	45	1	60	—	475	150	—	735
	Matugama	3	10	—	—	18	370	7	—	408
KANDY	Dickoya/Hatton	1	1	—	—	—	25	—	—	27
	Gampola/ Nawalapitiya	1	6	—	45	—	150	25	—	227
	Kandy	4	27	1	45	42	450	222	—	791
	Matale	1	12	—	—	—	204	20	—	257

(Cont.)

CHAPTER III TABLE X

GIRL GUIDES ASSOCIATION OF CEYLON

REVENUE GUIDE DISTRICT DIVISION	Commiss- ioners	Guiders	Secre- taries	Adult Leaders	Rangers	Guides	Little Friends	Handi- capped	TOTAL
NUWARAELIYA NowaraEliya	2	12	—	—	—	120	72	—	206
GALLE Ambalangoda	1	6	—	—	—	150	70	—	227
Galle	4	21	1	—	22	405	175	24	652
MATARA Matara	3	5	—	—	—	200	60	—	268
HAMBANTOTA Tangalle	3	6	—	—	—	65	30	—	104
JAFFNA Jaffna	4	90	1	95	30	980	572	20	1792
BATTICALOA Batticaloa	5	30	1	65	22	300	274	—	697
TRINCOMALEE Trincomalee	2	4	1	—	—	80	25	—	112
KURUNEGALA Kurunegala	4	15	—	—	46	405	125	—	595
PUTTALAM Chilaw/Puttalam	1	12	—	—	—	160	60	—	233
ANURADHAPURA A.pura	3	25	—	—	—	355	92	—	475
BADULLA Badulla	3	20	—	—	5	230	40	—	298
RATNAPURA Ratnapura	4	38	—	—	30	242	40	—	354
KEGALLE Kegalle	3	20	—	—	42	191	60	—	316
TOTAL:	93	711	8	375	482	9146	3494	134	14,427

YOUNG MEN'S BUDDHIST ASSOCIATION
DISTRIBUTION OF BRANCHES ACCORDING TO DISTRICTS

COLOMBO	Kotte Wellampitiya Gampaha Angoda Kelaniya Maharagama Udugampola Nawala Dehiwela Kadawata
KANDY	Nawalapitiya Pussellawa Kandy Wilanagama, Kandy Alawatugoda Gurudeniya
NUWARA ELIYA	Nuwara Eliya
GALLE	Galle Habaraduwa Karadewela Morawaka Balapitiya
MATARA	Matara Bengamuwa Devinuwara
HAMBANTOTA	Tissamaharama Ambalantota Walasmulla
BATTICALOA	Kalmunai
TRINCOMALEE	Kantalai
KURUNEGALA	Kurunegala Monnekulame Melsiripura
ANURADHAPURA	Talawa Maha Willachchiya
POLONNARUWA	Hingurakgoda
BADULLA	Badulla Kandegedera
RATNAPURA	Embilipitiya Parakaduwa
KEGALLE	Ambanpitiya

YOUNG MEN'S CHRISTIAN ASSOCIATION
DISTRIBUTION OF BRANCHES ACCORDING TO DISTRICTS

COLOMBO	1. Colombo
	2. Mount Lavinia
	3. Dehiwela
	4. Moratuwa
KANDY	5. Kandy
MATALE	6. Matale
GALLE	7. Galle
MATARA	8. Matara
JAFFNA	9. Jaffna
	10. Jaffna College
	11. Navalay
	12. Paranthan
	13. Pandathiruppu
AMPARAI	14. Amparai
TRINCOMALEE	15. Trincomalee
KURUNEGALA	16. Kurunegala
BADULLA	17. Badulla
	18. Bandarawela
	19. Welimada

TABLE XIII

YOUNG WOMEN'S CHRISTIAN ASSOCIATION
DISTRIBUTION OF BRANCHES ACCORDING TO DISTRICTS

COLOMBO	1. Colombo
	2. Panadura
	3. Negombo
	4. Moratuwa
	5. Katunayake
	6. Kotte
	7. Kelaniya
KANDY	8. Kandy
MATALE	9. Matale
GALLE	10. Galle
MATARA	11. Matara
JAFFNA	12. Jaffna
	13. Point Pedro
	14. Vembadi
KURUNEGALA	15. Kurunegala
BADULLA	16. Bandarawela
NUWARA ELIYA	17. Nuwara Eliya
HAMBANTOTA	18. Tangalle

YOUNG MEN'S MUSLIM ASSOCIATION
DISTRIBUTION OF BRANCHES ACCORDING TO DISTRICTS

COLOMBO	Central Y.M.M.A. Maligawatte Hulftsdorf Mutwal Slave Island Akbar Town, Wattala Maharagama Avissawella Yatihena, Malwana Atulgama, Bandaragama Kelaniya Pugoda Thotawatte, Panadura Padukka Grandpass Thihariya Makola
KALUTARA	Dharga Town China Fort, Beruwala Naligahena, Beruwala
KANDY	Nawalapitiya Illanganwatte, Gampola Galhinna, Katugastota Gampola Kandy Geli-Oya Akurana Hatton/Dickoya Katugastota Udispattu Peradeniya Avidiyakadawatte, Gampola Murutalawa
MATALE	Matale
NUWARA ELIYA	Padiyapelella Nuwara Eliya
GALLE	Elpitiya
JAFFNA	Jaffna
VAVUNIYA	Vavuniya Mullaitivu
BATTICALOA	Maruthamnai Eravur Sammanthurai Akkarai pattu Kattankudi Pottuvil Valaichenai

TRINCOMALEE	Nilaweli Kantalai
KURUNEGALA	Ibbagamuwa Katupotha Polgahawela Narammala Weuda Galgamuwa Kurunegala
PUTTALAM	Madurankuli Puttalam
ANURADHAPURA	Nachchaduwa Anuradhapura Ikirigollewa Kahatagasdiliya
POLONNARUWA	Polonnaruwa
BADULLA	Demodera Boragas Badulla
RATNAPURA	Rakwana Kahawatte Pelmadulla
KEGALLE	Kegalla Yatiantota Mawanella Hemmatagama

CHAPTER III TABLE XV
JAYCEES — DISTRIBUTION OF CHAPTERS

COLOMBO DISTRICT	1. Colombo 2. Colombo South 3. Colombo North 4. Wellawatte 5. Dehiwela/Mount Lavinia 6. Ratmalana 7. Moratuwa 8. Panadura 9. Kotte/Nugegoda 10. Maharagama 11. Wattala 12. Kohuwela 13. Ganemulla
GALLE DISTRICT	14. Galle
<i>Chapters in the Process of Formation</i>	
COLOMBO	1. Kollupitiya 2. Negombo
RATNAPURA	3. Ratnapura

TABLE XVI

LEO CLUBS

COLOMBO DISTRICT	1. Colombo
	2. Wattala
	3. Gampaha
	4. Moratuwa/Ratmalana
	5. Wellawatte
	6. Nugegoda
	7. Dehiwela/Mount Lavinia
	8. Negombo
	9. Colombo South
	10. Colombo North
KANDY DISTRICT	11. Kandy
NUWARA ELIYA DISTRICT	12. Nuwara Eliya

CHAPTER III TABLE XVII

THE ST. JOHN'S AMBULANCE ASSOCIATION

List of Ambulance Divisions According to Revenue Districts.

<i>Districts</i>	<i>Divisions</i>
COLOMBO	1. Kelaniya/Delgoda
	2. Gampaha
	3. Ingiriya
	4. Negombo
	5. Warakapola
	6. Colombo City Corps
	7. Ceylon Police Corps
	8. Colombo Nursing Division
	9. Boy Scouts Division
	10. Port Patrolling Service Division
GALLE	11. Galle
MATARA	12. Matara
JAFFNA	13. Jaffna
VAVUNIYA	14. Vavuniya
MANNAR	15. Mannar
ANURADHAPURA	16. Anuradhapura
BATTICALOA	17. Batticaloa
	18. Akkaraipattu

CHAPTER III TABLE XVIII
WEST CEYLON YOUTH COUNCIL

List of Affiliate Clubs

Colombo 1 — Fort

Toc 'H' Boys Club, Galle Face.
City Girls Club, Baillie Street.

Colombo 2 — Slave Island

Toc 'H' Boys Club, Vauxhall Street
Salvation Army Youth Club, Union Place.

Colombo 3 — Kollupitiya

St. Michael's Youth Fellowship, Polwatte.

Colombo 4 — Bambalapitiya

Ceylon American Youth Society, St. Peter's Place.

Colombo 5 — Havelocktown, Kirilapone

Sri Ubhayaratha Sadaka Samithiya, Kirula Road.
Theresian Youth Club, Thimbirigasyaya.

Colombo 7 — Cinnamon Gardens

Girl Guides Association, Edinburgh Crescent.

Colombo 8 — Borella

Manning Town Youth Club, Victoria Road.
Black Diamonds S.C., Serpentine Road.
St. Luke's Youth Fellowship, Gnanaratha Pradeepa Mawatha.
United Youth Club, Prisons Department.
Youngsters S.C., Narahenpita.

Colombo 10 — Maradana

Fatima Young Men's Association, Deans Road.
Maradana Boys Club, Maradana Road.
Three 'S' Youth Club, Devanampiyatissa Road.

Colombo 11 — Pettah

Colombo City Mission, Dam Street.
Toc 'H' Boys Club, Pettah.
Pettah Boys Club, Norris Road.

Colombo 12 — Hulftsdorf

Don Bosco S.C., Mihindu Mawatha.
Harmony Association, Hussenie Street.

Colombo 13 — Kotahena

Weera Balika Samithiya, Bloemendhal Road.

Colombo 15 Mutwal

Mutwal Young Library Club, Aluthmawatha Road.
St. Mary's S.C., Mattakkuliya.

OUTSTATION — WEST COAST

Dehiwela

United S.C., Frazer Avenue.

Angulana

Youth Welfare League, Station Road.

Paiyagala

Jolly Rangers S.C., Kuda Paiyagala.

Beruwela

United S.C., Katukurunda Road.

Moratuwa

Lakshapathiya Lama Samajaya.
Angulana United Cricket Club, Sea Beach Road.
Silvereen S.C., Uyana Road North.
Ranmuthu S.C., Rawatawatte.
Youth Welfare League, Egoda Uyana.

Alutgama

Ittapana Youth League, Sri Sunandaramaya.

NORTH WEST COAST

Negombo

Fatima Boys Orphanage, Kochchikade
Boy Scouts Association, Negombo.
Children's Library, Temple Road.
Negombo Cricket & Football Club, Negombo.

Madampe

Progressive Youth Club, Madampe.

COLOMBO—KANDY ROAD

Kelaniya

Bodiruksharama Buddhist Society, Galborella.
Dalugama Catholic Club.
United Youth League, Sinharamulla.
United S.C., Pamunuwila.
Young Physical Culture Club, Daramaduwa Junction.
Kelaniya Youth Movement, Kelaniya.
Little Flower Youth League, Biyagama Road.

OTHER OUTSTATION CLUBS

Ragama

St. Lucia's Singing Club, Welisara.

Hendala

Immaculate Conception Club, Nayakakande.

Kandana

Nagoda S.C., Nagoda.

Kotte

Welfare Centre, Rajagiriya.
United Youth Welfare Association, Rajagiriya.
Gangodawila-Nugegoda Muslim Association, Gangodawila.

Talangama

Young Farmers Club, Talangama South.

Maharagama

United S.C., Devala Road.

Piliyandala

United Sports Organisation, Thumbowila.
Anura S.C., Piliyandala.

EDUCATION AND TRAINING PROGRAMMES OF A
 VOCATIONAL CHARACTER NOT CLASSIFIED ELSEWHERE

Colombo	Jaffna	Kandy
1. The Sri Lanka Hotel School & School of Training.	1. Navajeevanam	1. The Trinity Farm.
2. The Diyagolla Boys' Town, Ragama.	2. The Paranthan Boys Town.	2. The Mahalpe Sericulture Project.
3. The Yahapath Endera Farming Centre, Halgashena, Hanwella.	3. The Yogeswaram Memorial Farm Killinochchi.	3. The Agricultural Institute at Peradeniya.
4. The Radio & Electronics Laboratory.		4. The School of Co-operation at Polgolla.
5. The Ceylon-German Training School, C.T.B.		5. The School of Agriculture at Kundasale.
6. The Sri Lanka Youth Welfare Home, Moratuwa.		
7. Convent of the Conocle.		
8. St. Euphrahia's Re-Education Centre, Nayakkkande.		
9. Marists Brothers' Farm & Training Centre, Ja Ela.		
10. Maria Nirmala Centre, Negombo.		
11. Good Shepherd Convent, Kongodamulla.		
12. The Mirigama Pilot Development Project of the Y.M.C.A.		
13. The Sarvodaya Training Centre at 'Meth Medura' Moratuwa.		
14. Diyagolla Boys' Town Extension Project at Madampella.		
15. Diyagolla Boys' Town Extension Centre at Ekala.		
16. Labour Dept. Training Centre at Urugodawatte.		
17. Labour Dept. Training Centre at Narahenpita.		
18. The Training Centre of the West Ceylon Youth Council at Talangama.		

Puttalam

1. The Muthukumaru Home.
2. Diyagolla Boys' Town Extension Project at Pallama.

Kurunegala

1. The Devasarana Ramaya Collective Farm, Ibbagamuwa

Moneragala

1. The Tanamalwila Youth Farm & Sarvodaya Training Centre.

Nuwara Eliya

1. Diyagolla Boys' Town Extension Project at Hawa Eliya.

Hambantota

1. The Residential Training Centre of the National Service Council at Uda Walawe.

CHAPTER III TABLE XX
 DISTRICT DISTRIBUTION OF TRAINING CENTRES OF THE DEPARTMENT OF SMALL INDUSTRIES

Carpentry School	Workshop Centre	Coir Centre	Pottery W/Shop Centre	Reeds	Ekel	Toys & Sports	Cane and Bamboo	Mats	Lace and Sewing
9	2	17	1	9	3	1	1	6	19
6		3	4	6		1	1	3	4
			6	1		3	1	1	1
				1			1	1	1
2									
5						2		1	2
4		22	2	18		1			3
		18	1	1		1			
1		4	5	1		1		1	1
2		9	6	5		2		1	1
1								1	1
2									
1									
1									
2		5	2		1			1	
1		2	2						
1									
1		1				1	1	6	1
5		13	11	12		1		1	3
2	6	6	3	3	1			1	
1			1	1					
						1			1
3						1		1	1
1						1			
4						1		1	
4						1		1	
		2	2	3		1			2

TABLE XXI "A"
DISTRICT DISTRIBUTION OF NON-FORMAL EDUCATIONAL PROGRAMMES,
GOVERNMENT.

DISTRICTS	Divisional Development Councils	Dept. of Agriculture	Department of Rural Development		L. and Commissioner's Department.	Probation & Child Care Services.	TOTAL
	Projects under way	Practical Farm Schools	Active Societies	Societies selected for intensive development				Youth Settlement Schemes.	Certified and approved schools
Colombo	63	—	574	48	—	2	687
Kalutara	31	1	293	30	4	1	360
Kandy	44	—	658	41	3	—	746
Matale	26	1	244	21	3	—	295
Nuwara Eliya	12	—	110	14	3	—	139
Galle	50	2	379	50	3	2	486
Matara	25	—	236	17	—	—	278
Hambantota	19	—	229	15	—	—	263
Jaffna	12	2	266	34	3	1	318
Mannar	2	—	86	9	—	—	97
Vavuniya	10	—	136	16	3	—	165
Batticaloa	16	—	143	16	1	—	176
Amparai	8	1	181	20	1	—	211
Trincomalee	21	—	97	25	2	—	145
Kurunegala	90	1	572	26	3	—	692
Puttalam	17	—	197	25	2	—	241
Anuradhapura	50	1	591	37	2	1	682
Polonnaruwa	4	—	99	7	3	—	113
Badulla	20	1	365	18	2	—	407
Moneragala	15	1	176	19	1	1	212
Rainapura	19	1	418	22	2	—	462
Kegalle	56	2	630	23	—	—	711
TOTAL	610	14	6680	533	41	8	7886

CHAPTER III
DISTRICT DISTRIBUTION OF NON-FORMAL EDUCATIONAL PROGRAMMES
V O L U N T A R Y.

DISTRICTS	Sarvodaya villages in which movement is operating.	Boy Scouts Divisions	Girl Guides Division.	St. John's Ambulance Association Division.	Lanka Mahila Samithi Active Samities	YMBA Branches	YMCA Branches	YWCA Branches	YMMA Branches	Jaycees Chapters	Leos (Junior Lions) Clubs	West Ceylon Youth Councils Affiliated Clubs	Voluntary organizations not classified elsewhere	Total	Grand Total.
Colombo	45	8	7	10	125	10	4	7	17	15	10	54	18	330	1017
Kalutara	15	1	2	—	85	—	—	—	3	—	—	3	5	109	469
Kandy	31	3	3	—	47	6	1	1	13	—	1	—	—	111	857
Matale	4	1	1	—	12	—	—	—	1	—	—	—	—	21	316
Nuwara Eliya	6	1	1	—	91	1	—	1	2	—	1	—	1	14	153
Galle	42	1	2	1	31	5	1	1	1	1	—	—	—	146	632
Matara	23	1	1	1	58	3	—	—	—	—	—	—	—	62	340
Hambantota	16	—	1	—	31	3	—	—	—	—	—	—	—	80	343
Jaffna	2	1	1	1	—	—	5	—	1	—	—	—	3	17	335
Mannar	—	1	—	1	—	—	—	—	—	—	—	—	—	2	99
Vavuniya	9	2	—	1	—	—	—	—	2	—	—	—	—	14	179
Batticaloa	4	2	1	2	—	1	—	—	7	—	—	—	—	17	193
Amparai	2	1	—	—	31	—	—	—	—	—	—	—	—	35	246
Trincomalee	1	1	1	—	—	1	1	—	—	—	—	—	—	7	152
Kurunegala	68	1	1	—	186	3	1	1	7	—	—	—	1	269	961
Puttalam	8	3	1	—	53	—	—	—	2	—	—	1	1	69	310
Anuradhapura	15	1	1	1	50	2	—	—	4	—	—	—	—	74	756
Polonnaruwa	10	1	1	—	20	1	—	—	1	—	—	—	—	33	146
Badulla	23	1	1	—	51	2	3	1	3	—	—	—	—	85	492
Moneragala	9	1	1	—	25	—	—	—	—	—	—	—	1	36	248
Ratnapura	18	1	2	—	90	2	—	—	3	1	—	—	—	116	578
Kegalle	48	1	1	—	65	1	—	—	4	1	—	—	—	120	831
TOTAL	399	34	27	18	1020	41	19	18	73	17	12	58	31	1767	9653

INFANT MORTALITY RATE - SRI LANKA.

<i>Year.</i>		<i>Infant Mortality Rate Per 1,000 Live Births</i>
1946 — 50	...	101
1951 — 55	...	75
1956	...	67
1957	...	68
1958	...	64
1959	...	58
1960	...	57
1961	...	52
1962	...	53
1963	...	55.8
1964	...	56.9
1965	...	53.2
1966	...	54.2
1967	...	47.7
1968	...	50.2
1969	...	53.0

Source : DHS Report 1966/67.

CHAPTER IV
AGE SPECIFIC DEATH RATES IN SELECTED COUNTRIES

Country	Year	All age Groups	AGE GROUPS										
			- 1	1-4	5-9	10-14	15-19	20-24	25-29	30-34	35-39	40-44	
Developed Countries													
France	1970	10.6	15.4	0.8	0.4	0.3	0.8	1.1	1.1	1.1	1.4	2.0	3.1
U. K.	1971	11.6	17.6	0.7	0.4	0.3	0.7	0.7	0.7	0.7	0.9	1.4	2.5
Sweden	1971	10.2	11.5	0.4	0.3	0.3	0.7	0.8	0.8	0.8	1.1	1.6	2.3
U. S. A.	1970	9.5	21.2	0.8	0.4	0.4	1.1	1.5	1.5	1.8	2.5	2.5	3.7
Netherlands ¹	1971	8.4	12.0	0.8	0.4	0.3	0.7	0.7	0.7	0.9	1.3	1.3	2.2
Developing Countries													
Malasiya (West)	1970	6.7	11.8		1.5	0.9	1.2	1.6	1.7	2.6	3.0	4.8	
Philippines ¹	1970	6.4	12.8		1.6	1.0	1.3	2.0	2.5	3.2	4.3	5.0	
Thailand ³	1960	8.4	73.4	10.4	3.2	1.9	2.8	2.0	3.2	4.0	5.4	6.7	
India ²	1958-59	19.2	100.3	44.0	5.6		4.5	5.3	5.6				
Sri Lanka ^{4*}	1970	7.5	13.0		1.8	1.0	1.7	2.4	2.4	2.8	3.3	4.2	

(Continued)

CHAPTER IV
AGE SPECIFIC DEATH RATES IN SELECTED COUNTRIES

Country	Year	All age Groups	AGE GROUPS									
			45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85 +	
Developed Countries												
France	1970	10.6	4.7	7.0	10.6	16.5	25.3	39.2	62.5	102.7	193.3	
U. K.	1971	11.6	4.4	7.1	11.5	18.6	29.8	46.9	76.3	116.1	205.8	
Sweden	1971	10.2	3.5	5.3	8.3	13.7	22.3	38.2	64.6	107.1	194.9	
U. S. A.	1970	9.5	5.8	8.9	13.6	20.0	30.0	43.4	67.9	101.4	162.5	
Netherlands	1971	8.4	3.5	6.0	9.5	15.5	25.0	41.1	66.8	111.3	206.0	
Developing Countries												
Malaysia (West)	1970	6.7	6.5	11.4	13.9	27.1	33.8	48.9	47.6	124.7	392.3	
Philippines* 1	1970	6.4	6.4	8.1	11.3	16.2	25.2	41.9	82.9	88.3	124.0	
Thailand ³	1960	8.4	8.3	10.7	13.7	20.3	27.3	57.0	63.5	74.7	117.2	
India ²	1958-59	19.2	10.5	26.6	26.6	34.8	60.6	74.7	117.2	293.6		
Sri Lanka* 4	1970	7.5	6.2	7.9	13.2	16.5	34.8	60.6	74.7	117.2	293.6	

Source: United Nations; Demographic Year Book 1972, New York 1973

* Sri Lanka; Department of Census and Statistics

1 Infant mortality rate 1968 - 71.0

2 " " 1965 - 72.8

3 " " 1969 - 26.2

4 " " 1969 - 53.0

NUMBER OF PERSONS REPORTED SICK DURING THE REFERENCE PERIOD BY AGE AND SEX
ZONES

AGE GROUP	ZONE 1.			ZONE 2.			ZONE 3.			ZONE 4.		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
0-4	45.3	44.5	89.8	26.3	25.8	52.1	10.1	6.3	16.3	37.1	39.1	76.3
5-9	16.3	21.4	37.7	13.1	7.4	20.5	4.0	2.1	6.1	28.3	24.2	52.5
10-14	11.1	14.2	25.4	10.6	8.1	18.7	2.1	1.9	4.0	17.3	13.9	31.2
15-19	7.4	12.9	20.3	4.9	1.4	6.4	1.7	0.4	3.0	14.7	18.9	33.6
20-24	3.0	11.6	14.6	4.2	9.1	13.3	1.7	4.8	6.5	14.2	16.1	30.2
25-29	6.6	16.2	22.8	6.8	4.0	10.8	-	1.5	1.5	15.9	20.0	35.8
30-34	7.6	7.1	14.7	1.7	4.9	6.6	4.9	2.1	7.0	8.6	9.8	18.4
35-39	6.3	9.0	15.3	4.0	3.0	7.0	1.3	0.8	2.1	11.4	14.9	26.3
40-44	8.9	5.0	14.0	0.2	3.2	3.4	4.0	2.7	6.6	16.6	10.4	27.0
45-49	8.0	5.5	13.5	3.4	5.3	8.7	1.3	2.5	3.8	10.1	7.6	17.7
50-54	10.4	9.2	19.7	1.9	2.1	4.0	1.3	0.4	1.7	5.0	8.2	13.2
55-59	8.6	15.2	23.8	1.3	2.3	3.6	1.1	0.6	1.7	10.0	4.5	14.4
60-64	8.4	5.9	14.3	2.1	0.2	2.3	1.5	0.4	1.9	7.1	1.9	9.0
65-69	7.6	6.8	14.4	1.9	0.9	2.8	0.2	0.2	0.4	14.0	7.0	21.0
70-74	7.3	4.0	11.3	2.3	0.2	2.5	1.1	1.1	1.1	5.9	1.5	7.4
75 & over	5.3	3.6	8.9	1.9	1.9	3.8	-	0.2	0.2	7.7	2.4	10.1
TOTAL	168.2	192.3	360.5	86.7	80.0	166.7	37.4	26.2	64.0	217.0	197.2	414.2
			100.0			100.0			100.0			100.0

Source: Socio - Economic Survey 1969/70

AGE SPECIFIC DEATH RATES — BOTH SEXES — SRI LANKA

AGE/GROUP	1953	1965	1969	1970
<i>All ages</i>	10.9	8.2	8.3	7.5
0—4	37.8	16.8	15.4	13.0
5—9	3.6	2.2	2.1	1.8
10—14	1.3	1.1	1.1	1.0
15—19	1.7	1.4	1.7	1.7
20—24	2.7	2.0	2.3	2.4
25—29	3.4	2.4	2.4	2.4
30—34	3.4	2.4	2.2	2.8
35—39	4.3	3.6	3.5	3.3
40—44	4.7	4.1	4.2	4.2
45—49	6.6	6.1	6.5	6.2
50—54	10.4	7.9	8.1	7.9
55—59	13.0	13.1	13.6	13.2
60—64	19.4	17.2	17.5	16.5
65—69	32.0	37.6	39.8	34.8
70—74	52.6	54.0	57.1	60.6
75—79	78.8	80.2	82.5	74.7
80—84	137.0	139.3	124.1	117.2
85 & over	313.1	308.5	306.8	293.6

Source : Census & Statistics Dept.

DIPHTHERIA

1967 — 1971			Age Specific Attack Rate, 1971		
Year	No of cases	Rate per 100,000	Age	No. of Cases	Age Specific rate 100,000
1967	1,453	12.5	Less than 1	24	5.9
1968	1,148	9.7	1—4	82	5.4
1969	972	8.0	5—9	55	3.1
1970	986	7.9	10—14	19	1.2
1971	715	5.8	15—19	6	0.5
Average for	1,054	8.6			

Source : Department of Health.

CHAPTER IV

TABLE 3.1

INCIDENCE OF TETANUS, WHOOPING COUGH, HEPATITIS, POLIO AND
TYPHOID 1967/71 & RATE PER 100,000

Year	TETANUS		WHOOPING COUGH		HEPATITIS		POLIO		TYPHOID	
	No. of Cases	Rate	No. of Cases	Rate	No. of Cases	Rate	No. of Cases	Rate	No. of Cases	Rate
1967	1994	17.1	1218	10.5	5026	43.2	144	1.2	4368	37.6
1968	1825	15.3	1461	12.3	4707	39.5	1009	8.5	4016	33.7
1969	2013	16.5	2341	19.3	5642	46.3	186	1.5	5104	41.9
1970	2288	18.3	1651	13.2	7683	61.5	121	1.0	5478	43.8
1971	1961	15.3	1696	13.2	6304	49.2	301		4467	34.8

Source: Department of Health

CHAPTER IV

TABLE 3.2

SELECTED CHILDREN'S DISEASES BY DISTRICTS

<i>S.H.S. Area</i>	<i>Polio—All Ages 1972</i>	<i>Hepatitis 1970/71</i>	<i>Typhoid</i>
Anuradhapura	10	465	156
Badulla	25	306	347
Batticaloa	23	44	40
Colombo	51	2,197	1,493
Galle	8	122	60
Jaffna	46	348	301
Kalutara	9	321	198
Kandy	30	938	709
Kegalle	16	291	80
Kurunegala	42	470	213
Matale	5	182	105
Matara	10	78	362
Puttalam	8	251	73
Ratnapura	17	244	251
Vavuniya	1	49	79
TOTAL	301	6,306	4,467

Source: Department of Health.

CHAPTER IV

TABLE 3.3

HEPATITIS 1970/71.

* By Age distribution in 0—19 year Groups.

<i>Age</i>	<i>Total</i>	<i>As a percentage of cases in all ages.</i>
0—4	206	13.1
5—9	518	32.9
10—14	297	18.9
15—19	152	9.7

* The age distribution indicates that one—third of the cases occur in the 5—9 age group and 74% in the group under 20 years of age.

Source: Department of Health.

CHAPTER IV

TABLE 3.4

TYPHOID — BY AGE DISTRIBUTION IN THE
0—19 YEAR GROUP.

<i>Age</i>	<i>No. of cases</i>	<i>* Percent of total cases of all ages.</i>
Less than 1	3	0.2
1—4	76	5.6
5—9	230	17.0
10—14	215	15.9
15—19	195	14.4

* 67% of cases are under 25 years of age.

Source: Department of Health.

CHAPTER IV

TABLE 3.5

CENTRAL T. B. REGISTER - REGISTRATIONS FROM 1.10.1966 TO 30.9.1967 - CLASSIFICATION
BY SEX, AGE - GROUP & PROVINCE
(Continued)

PROVINCE	0 — 4			5 — 14			15 — 24			25 — 44		
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female
Northern	5	3	2	13	9	4	45	24	21	193	113	80
Scuthern	6	3	3	14	8	6	77	45	32	236	143	93
Eastern	5	3	2	17	9	8	39	14	25	151	99	52
Western	181	93	88	180	71	109	404	203	201	1075	726	349
North Western	9	6	3	13	9	4	38	23	15	187	127	60
North Central	2	1	1	8	4	4	19	9	10	74	50	24
Central	21	11	10	36	18	18	132	53	79	300	169	131
Sabaragamuwa	7	5	2	32	11	21	84	46	38	190	113	77
Uva	16	8	8	37	9	28	28	12	16	90	52	38
Grand Total	252	133	119	350	148	202	866	429	437	2496	1592	904
Percentage Male	3.9	—	—	5.4	—	—	13.4	—	—	38.7	—	—
Percentage Female	—	3.2	5.2	—	5.4	8.9	—	10.3	—	—	38.1	—
	—	—	—	—	—	—	—	—	19.2	—	—	39.8

Source : Director of Health Services Report 1966/67

CHAPTER IV

TABLE 3.5

CENTRAL T. B. REGISTER - REGISTRATIONS FROM 1.10.1966 TO 30.9.1967 -CLASSIFICATION.
BY SEX, AGE - GROUP & PROVINCE.

PROVINCE	45 — 64			65 & Over			Not Given			TOTAL	
	Total	Male	Female	Total	Male	Female	Total	Male	Female	Male	Female
Northern	192	138	54	61	52	9	1	1	—	340	170
Southern	203	143	60	57	43	14	1	1	—	386	208
Eastern	87	72	15	17	16	1	3	2	2	216	105
Western	914	683	231	210	161	49	8	5	3	1942	1030
North Western	144	111	33	36	29	7	4	4	—	309	122
North Central	79	59	20	29	27	2	1	1	—	151	61
Central	167	125	42	41	32	9	2	2	—	410	289
Sabaragamuwa	150	109	41	22	16	6	1	1	—	301	185
Uva	34	24	10	13	10	3	2	1	1	116	104
Grand Total	1970	1464	506	486	386	100	25	19	6	4171	2274
Percentage Male	30.6	—	—	7.5	—	—	0.4	—	—	—	—
Percentage Female	—	35.1	—	—	9.3	—	—	0.4	—	100.	—
	—	—	22.3	—	—	4.4	—	—	0.2	—	100

Source : Director of Health Services Report 1966/67

BALANCED DIETS FOR CEYLON

(Food in ozs. per day)

Foodstuff	1-3 Years	4-6 Years	7-9 Years	10-12 Years	13-15 Years	16-19 Years
<u>Cereals</u>						
(a) Rice	5.0	6.25	8.50	11.0	15.0	16.0
(b) Bread, wheat flour, millets and other cereals	2.0	2.0	2.0	3.0	3.0	4.0
<u>Nuts & Seeds</u>						
Coconut						
Gingelly	0.5	2.0	2.5	3.0	4.0	4.0
<u>Roots, Tubers & Yams</u>	2.0	4.0	4.0	4.0	5.0	4.0
<u>Sugar & Jaggery</u>	1.0	1.0	1.25	1.25	1.25	1.25
<u>Pulses</u>						
Cowpea						
Greengram						
Blackgram						
Dhal	0.5	0.75	0.75	0.75	1.0	0.75
<u>Animal Foods</u>						
Meat, Fish, Sprats or Eggs	1.0	1.5	2.0	3.0	3.0	3.0
<u>Milk & Milk Products</u>						
Skimmed milk, powdered or curds	10.0	8.0	8.0	5.0	5.0	5.0
<u>Vegetables.</u>						
Leaves	0.5	1.0	1.0	2.0	2.0	2.0
Fruits	2.0	3.0	3.0	4.0	4.0	4.0
<u>Fruits - Ripe</u>	1.5	1.5	2.0	2.0	2.0	2.0
<u>Miscellaneous</u>						
Tea						
Coffee	-	-	1/2	1/2	1/2	1/2
<u>Condiments & Spices</u>	1/4	1/4	1/2	1	1	1

TABLE 4.1
DAILY REQUIREMENTS OF NUTRIENTS.

GROUP	Calories	Proteins mg.	Calcium mg.	Iron mg.	Vitamin A Iu. Mg.	Thiamin mg.	Riboflavin mg.	Niacin mg.	Vitamin C Ascorbic Acid mg.
Infants 0 - 7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lactation ♦	2900.0	65.0	1000.0	30.0	1150.0	1900.0	1600.0	20.0	80.0
7 - 12 months	710.0	11.7	550.0	7.1	300.0				30.0
1 year	1200.0	17.0	450.0	17.5	250.0	600.0	700.0	8.0	40.0
2 years	1200.0	18.0	450.0	17.5	250.0	600.0	700.0	8.0	40.0
3 years	1200.0	20.0	450.0	17.5	250.0	600.0	700.0	8.0	40.0
4 - 6 years	1500.0	22.0	450.0	17.5	300.0	800.0	800.0	10.0	40.0
7 - 9 years	1800.0	33.0	450.0	17.5	400.0	900.0	1000.0	12.0	40.0
10 - 12 years	2100.0	41.0	650.0	25.0	600.0	1000.0	1200.0	14.0	40.0
Adolescents									
Male } 13-15 years	2500.0	55.0	650.0	25.0	750.0	1300.0	1400.0	17.0	40.0
Male } 16-18 years	3000.0	60.0	550.0	25.0	750.0	1500.0	1700.0	21.0	40.0
Fe- } 13-15 years	2200.0	50.0	650.0	35.0	750.0	1100.0	1200.0	14.0	40.0
Male } 16-18 years	2200.0	30.0	550.0	35.0	750.0	1100.0	1200.0	14.0	40.0
Adults									
Male	2800.0	55.0	450.0	20.0	750.0	1400.0	1500.0	19.0	50.0
Female	2200.0	45.0	450.0	30.0	750.0	1100.0	1200.0	15.0	50.0
Pregnancy	2500.0	55.0	1000.0	40.0	750.0	1700.0	1400.0	17.0	50.0

CHAPTER IV
 AVERAGE EXPENDITURE PER HOUSEHOLD FOR ONE MONTH CLASSIFIED BY MINOR EXPENDITURE GROUPS.
 (SOCIO-ECONOMIC SURVEY) ZONES.

	Total Number of Households											
	Zone 1 - 790,685			Zone 2-257,830			Zone 3-231,990			Zone 4-831,630		
	Average Expenditure Rs. c.	%		Average Expenditure Rs. c.	%		Average Expenditure Rs. c.	%		Average Expenditure Rs. c.	%	
1. Cereals & cereal preparations	52.23	14.0		55.42	19.3		60.81	18.1		53.21	19.8	
2. Condiments	21.88	5.6		16.88	5.9		21.88	6.5		17.27	6.4	
3. Pulses	4.43	1.1		2.87	1.0		2.30	0.7		4.70	1.7	
4. Vegetables	20.95	5.3		14.97	5.2		15.18	4.5		14.50	5.4	
5. Fruits & Nuts	18.00	4.6		14.08	4.9		15.06	4.5		12.52	4.7	
6. Meat	5.78	1.5		3.83	1.3		9.66	2.9		3.69	1.4	
7. Fish	27.10	6.9		19.09	6.7		22.54	6.7		12.01	4.5	
8. Milk, Milk products & Eggs	14.02	3.5		6.03	2.1		9.00	2.7		6.18	2.3	
9. Oils and Fats	5.26	1.3		4.03	1.4		7.58	2.2		4.14	1.5	
10. Beverages, non-alcoholic	5.55	1.4		4.47	1.6		5.09	1.5		3.61	1.3	
11. Sugar preserves and confectionary	17.96	4.5		14.40	5.0		15.83	4.7		12.75	4.7	
12. Meals and snacks purchased away from home	13.00	3.3		5.73	2.0		3.60	1.1		5.54	2.1	
13. Liquor	7.07	1.8		7.62	2.7		11.75	3.5		5.88	2.2	
14. Tobacco	11.98	3.0		10.28	3.6		8.54	2.5		7.97	3.0	
15. Betel & Arecanuts	3.03	0.8		4.88	1.7		3.52	1.0		4.61	1.7	
TOTAL	231.24	58.6		184.58	64.4		212.34	63.1		168.78	62.7	

PERCENTAGE OF ADEQUACY * OF SOME NUTRIENTS BY INCOME CLASSES (ALL-ISLAND)
SOCIO-ECONOMIC SURVEY 1969-70

Nutrients	Per capita Daily re- commended allowance for Ceylon	INCOME CLASSES.							All income classes
		Below Rs. 100%	Below Rs. 200%	Rs. 200 to Rs. 399 %	Rs. 400 to Rs. 599 %	Rs. 600 to Rs. 799 %	Rs. 800 to Rs. 999 %	Rs. 1000 & over %	
Calories	2200	88	94	103	111	114	116	120	103
Protein (g)	45	89	105	120	130	135	138	147	120
Calcium (mg)	519	(-)	(-)	(-)	(-)	(-)	(-)	(-)	72
Iron (mg)	23	(-)	83	86	93	94	97	97	86
Vitamin A (retinol) (meg)	642	(-)	109	109	112	121	121	131	111
Riboflavin	1220	(-)	51	56	62	69	75	82	57

(-) Detailed breakdowns not available for computing adequacy.

* The adequacy of the diet in respect of any nutrient is determined by expressing consumption of the nutrient as a percentage of the recommended allowances on a per caput per day basis. The recommended allowances for Ceylon are shown in the first column and the adequacy for each nutrient is given under each income class.

CHAPTER IV

TABLE 5.
SCHOOL HEALTH EXAMINATION.

S.H.S. Area	No. of Schools in the Island	No. of Schools Examined	% of Schools examined	No. of Total CH 5-19 year group*	No. enrolled in Schools	No. of SH CH Examined	% examined total in 5.19	% examined total in Schools	No. found defective	% defective to examine.
Anuradhapura	629	117	18.6	235,726	123,208	6,477	2.7	5.3	3,062	47.3
Badulla	436	71	16.2	319,303	125,055	6,623	2.1	5.3	3,175	48.0
Batticaloa	461	109	23.6	213,066	98,072	8,913	4.1	9.1	3,993	45.0
Colombo	1,092	302	27.6	909,211	561,515	41,004	4.5	7.3	24,475	60.0
Galle	527	126	23.9	259,994	199,908	9,474	3.6	4.7	7,378	77.9
Jaffna	561	425	75.7	257,566	161,807	25,994	10.1	16.1	13,247	51.0
Kalutara	445	230	51.6	246,528	142,334	18,752	7.6	13.2	13,734	73.2
Kandy	873	227	26.0	601,784	344,464	23,600	3.9	7.0	15,063	63.8
Kegalle	559	163	29.1	246,583	140,995	10,522	4.3	7.5	4,239	40.3
Kurunegala	690	188	27.2	383,492	190,986	13,524	3.5	7.0	6,975	51.6
Matale	374	117	31.3	187,549	99,351	7,084	3.8	7.1	4,131	58.3
Matara	681	115	16.9	358,261	209,390	10,511	2.9	5.5	4,659	44.3
Puttalam	480	108	22.5	141,144	109,937	10,893	7.7	9.9	4,981	45.7
Ratnapura	495	71	14.3	239,243	124,114	5,503	2.3	4.4	2,296	41.7
Vavuniya	282	148	52.4	67,446	34,105	5,273	7.8	1.5	2,469	46.8
TOTAL	8585	2,517	29.3	4,666,796	2,625,241	204,147	4.3	7.7	113,877	55.8

* 1971 Census 10 % sample figures. Source: Department of Health.

TABLE 7.
HOUSEHOLDS CLASSIFIED BY SIZE AND NUMBER.
ZONES

Household Size	ZONE 1.		ZONE 2.		ZONE 3.		ZONE 4.	
	Total Number of Households		Total Number of Households		Total Number of Households		Total Number of Households	
	No.	%	No.	%	No.	%	No.	%
2	50,920	6.4	16,530	6.4	24,130	10.4	58,615	7.1
3	98,135	12.4	24,130	9.4	37,810	16.3	112,195	13.5
4	110,960	14.0	40,565	15.7	35,530	15.3	117,515	14.1
5	122,265	15.5	36,765	14.3	40,280	17.4	116,945	14.1
6	119,225	15.1	39,045	15.1	26,600	11.5	107,635	12.9
7	103,455	13.1	30,495	11.8	18,430	7.9	99,940	12.0
8	73,340	9.3	25,840	10.0	15,770	6.8	87,780	10.6
9	50,730	6.4	21,660	8.4	13,300	5.7	54,530	6.6
10	28,310	3.6	11,780	4.6	11,400	4.9	38,380	4.6
11	15,580	2.0	7,980	3.1	5,130	2.2	17,100	2.1
12	10,830	1.4	950	0.4	2,850	1.2	15,580	1.9
13	2,375	0.3	1,900	0.7	190	0.1	3,420	0.4
14	2,850	0.4	190	0.1	-	-	1,235	0.1
15 and over	1,710	0.1	-	-	570	0.3	760	0.0
TOTAL	790,685	100.0	257,830	100.0	231,990	100.0	831,630	100.0
Average size of household:								
Arithmetic mean	5.8							
Median	5.0							

**CEYLON: Age Specific Fertility Rates.
1952 -- 1968**

Years	All Ages	Under 15	15-19	20-24	25-29	30-34	35-39	40-44	45-49
1952	132.9	0.45	64.6	253.3	297.8	231.1	141.3	37.3	6.4
1953	131.5	0.39	59.8	249.1	298.5	230.5	142.7	35.6	6.4
1954	121.0	0.39	58.1	227.2	272.1	211.2	131.4	35.6	6.3
1955	126.5	0.47	63.8	231.3	282.3	224.8	103.0	38.2	6.5
1956	130.6	0.41	70.4	230.5	273.4	233.4	142.9	40.7	5.8
1957	130.7	0.33	69.3	226.6	269.7	239.8	147.6	41.5	5.8
1958	128.1	0.34	67.5	220.1	261.6	241.3	144.4	41.7	5.8
1959	132.7	0.34	68.5	225.8	271.2	251.6	153.5	42.6	5.7
1960	132.3	0.42	67.9	227.5	261.8	257.5	154.7	43.9	5.9
1961	128.1	0.34	66.3	220.6	249.9	250.2	152.7	42.4	6.1
1962	127.1	0.28	62.1	215.7	244.3	255.9	154.9	47.4	6.6
1963	122.3	0.30	59.0	207.0	233.0	245.2	153.4	46.3	6.3
1964	120.6	0.31	51.2	226.7	276.1	234.6	154.8	46.6	6.7
1965	116.5	0.16	50.0	218.9	269.2	220.7	153.6	41.9	5.9
1966	113.6	0.20	47.9	211.9	262.5	214.9	151.9	44.3	6.5
1967	111.6	0.19	46.7	209.4	257.9	207.0	143.5	44.1	6.5
1968	112.6	0.24	49.2	216.0	255.1	204.8	152.1	44.2	6.5

Source: Registrar-General's Department.

NOTE: The rates from 1954 to 1963 are based on the age proportions at the 1953 Census while those from 1964 to 1968 are based on 1963 Census proportions.

MEDICAL INSTITUTIONS.

	1947	1957	1966/67	70/71	72/73
Colombo group of Hospitals	— (a)	6 (a)	9	10	11
Provincial Hospitals	115	122	11	131	9
Base Hospitals			12		12
District Hospitals			97		100
Cottage Hospitals			11		9
Peripheral Units	—	60	74	94	96
Rural Hospitals	78	65	59	72	71
Maternity Hospitals			2		
Maternity Homes	58	116	128	128	127
Mental Hospitals	30 (b)	26	3	20	3
Chest Hospitals & Sanatoria			7		15
Leprosy Hospitals			2		2
I. D. Hospitals			4		2
Cancer Hospitals			1	13	5
Childrens Hospitals			1		
Eye Hospitals			1		
Dental Hospitals			1		
Other Hospitals			12		
Central Dispensaries	281	395	324	330	345
Health Units of Molt			88		
Health Units of OIC			3		
School Medical Officers			4		
Quarantine Officers			11		
Total			856	798	814

(a) Includes Provincial, District, Base & Cottage.

(b) Colombo Group of Hospitals formed in 1955 and special institutions like Dental Institutions, De Soysa Hospital for Women, Lady Ridgeway Hospital for children and Victoria Memorial Eye Hospital were included in the Colombo Group.

Source: Department of Health.

CHAPTER IV
 TABLE 9.1
 MEDICAL INSTITUTIONS AS AT 1.5.1971.

Administrative Division	Provincial Hospitals	Base Hospitals	Special Hospitals	District Hospitals	Cottage Hospitals	Peripheral Units	Rural Hospitals	Maternity Homes	Central Dispensaries	Colombo group of Hospitals	T. B. Units	Mental Hospitals	Leprosy Hospitals	Total Bed strength	Paediatric Beds
Colombo	2	2	5	7	—	6	6	15	51	10	16	3	2	137.4	20.7
Kalutara	—	1	—	6	—	2	5	5	9	—	—	—	—	24.0	3.8
Kandy	1	1	2	18	3	11	10	13	28	—	—	—	—	24.6	3.1
Matale	—	2	—	2	2	5	2	9	16	—	—	—	—	24.1	4.3
Galle	1	—	1	5	1	6	6	5	14	—	—	—	—	22.9	2.4
Matara	—	1	1	6	1	11	7	16	13	—	—	—	—	19.3	1.4
Jaffna	—	—	1	5	1	8	4	13	21	—	—	—	—	34.2	6.0
Vavuniya	—	1	1	4	1	1	4	4	16	—	—	—	—	35.6	3.8
Batticaloa	1	—	2	3	—	9	2	4	27	—	—	—	—	22.2	4.0
Kurunegala	1	—	—	10	—	10	5	11	34	—	—	—	—	24.5	2.2
Puttalam	—	—	—	3	—	5	3	2	20	—	—	—	—	22.9	1.9
Anuradhapura	1	1	1	2	1	7	6	15	25	—	—	—	—	29.5	4.11
Badulla	1	—	—	11	2	6	3	5	26	—	—	—	—	20.5	1.7
Ratnapura	1	—	—	7	1	5	3	2	14	—	—	—	—	28.4	4.2
Kegalle	—	1	—	6	—	2	4	9	16	—	—	—	—	22.3	3.4
TOTAL	10	12	13	95	13	94	72	128	330	10	16	3	2	37.7	4.2

Source: Department of Health.

CHAPTER IV
 PROVINCIAL DISTRIBUTION OF MEDICAL AND HEALTH PERSONNEL

TABLE 9. 2.

PROVINCE	I Area in Sq. Miles	II Population +	III No. of Births 1971	IV S. H. S. Division.	V No. of MOH Arcs.	VI No. of Auxiliary Health Personnel			
						P. H.	P. H. N.	P. H. M.	Total
Colombo Municipal Council	14 13/32	607,118	41,807	Colombo M.C.	1	29	24	70	123
Colombo District	793 27/32	2,272,000	18,825	Colombo	14	130	66	338	534
Kalutara District	623 3/4	751,000	94,083*	Kalutara	5	57	36	162	255
Western Province	1432	3,428,577	61,810	Kandy & Part of Matale	20	216	126	570	912
Central Province	2158 3/4	1,977,732	47,994	Galle and Matara	13	102	22	281	405
Southern Province	2146 1/4	1,662,444	27,079	Jaffna and Vavuniya	15	114	19	321	454
Northern Province	3429 3/8	874,285	26,907	Batticaloa & part of	10	67	5	198	270
Eastern Province	3840	724,603	42,355	Anuradhapura	6	43	2	128	173
North Western Province	1016 1/8	1,411,645	18,661	Kurunegala & Puttalam	16	94	24	331	449
North Central Province	4140 1/4	538,669	27,575	Part of Matale & part of	4	42	5	116	163
Uva Province	3277 1/8	810,428	35,316	Anuradhapura	5	35	4	135	174
Sabaragamuwa	1892 1/2	1,319,372	381,780	Badulla	10	86	13	267	366
(CEYLON)	25332	12,747,755		Kegalla and Ratnapura	99	799	220	2347	3366

N. B: SHS - Supdt. of Health Services.
 MOH - Medical Officer of Health
 P. H. II - Public Health Inspectors
 P. H. MM - Public Health Midwives
 P. H. NN - Public Health Nurses

+ Census
 * Provisional

Source: Department of Health.

CHAPTER IV
IMMUNISATIONS & VACCINATIONS - 1970/71
TABLE 10.

	Anti-typhoid			Small Pox 1st Dose		Small Pox 2nd Dose	Triple Vaccine		
	1st Dose	2nd Dose	3rd Dose	1-5 years	Over 5-years		1st Dose	2nd Dose	3rd Dose
Colombo	39741	28667	9831	56063	28887	1496	28619	21641	16402
Kalutara	11448	7615	294	16201	9413	1512	5773	3737	2570
Kandy & N'Eliya	17608	14430	6742	25875	8950	104	3192	1708	175
Matale & Polonnaruwa	6400	3857	5119	9064	3642	106	215	178	—
Galle	5989	4164	3042	12670	6066	28	12645	9565	3622
Matara & Hambantota	4450	2964	1164	12656	6208	291	3887	773	—
Jaifna	20409	13002	2077	21494	12394	6635	2163	1517	633
Mannar & Vavuniya	4591	2686	1782	4566	2269	1939	236	57	18
Batticaloa & Amparai	4979	4133	416	12120	6753	870	1121	707	229
Kurunegala	23537	20357	7189	24152	8907	671	2445	1611	480
Puttalam & Chilaw	6882	5755	6046	6917	4814	397	457	248	—
Anuradhapura & Trinco	7689	5505	603	15522	4829	619	2573	1397	567
Badulla & Moneragala	16848	15884	1972	16618	7129	672	2855	2058	14
Ratnapura	10220	4199	9619	17473	8112	396	3832	2067	451
Kegalle	8694	6618	3117	11352	5995	176	1551	1018	—
All Island Total	189485	139846	59013	262743	124368	15912	71564	48282	25161

Source: Department of Health.

Cont.

CHAPTER IV
 TABLE 10.
 IMMUNISATIONS & VACCINATIONS - 1970/71.

	Booster dose	Anti-Cholera	Polio 3 months-1 year			1 year-8 years.				B. C. G.
			1st	2nd	3rd	1st	2nd	3rd		
								Infants 0-12 months	Others	
Colombo	2067	2502	27891	20781	18984	26434	19679	28088	8899	19609
Kalutara	427	—	6232	3888	2948	1816	1658	1411	281	—
Kandy & N'Elia	251	7619	10241	6396	2835	16772	13007	—	993	9138
Matale & Polonnaruwa	—	72	3345	740	43	6484	2663	1484	3451	—
Galle	4	02	10465	5188	4153	11964	8227	13611	6572	6610
Matara & Hambantota	468	12	13670	4519	1003	22079	21326	—	3078	14155
Jaffna	305	3015	8231	10692	2675	3333	10105	3347	734	11182
Mannar & Vavuniya	—	2122	5124	3619	494	8765	6747	109	247	6258
Batticaloa & Amparai	16	892	1521	708	234	1089	1343	2293	944	2677
Kurunegala	101	229	14986	13432	1272	21021	20249	17507	4529	16701
Puttalam & Chilaw	288	8786	6781	6422	3127	5349	7331	—	659	5453
Anuradhapura & Trinco	60	150	8501	4587	350	20449	13345	3539	104	1018
Badulla & Moneragala	958	765	2040	1175	676	1752	1097	578	2739	19151
Ratnapura	132	234	9685	5484	2055	11357	10456	7543	—	—
Kegalle	354	35	5968	3523	1103	9335	6486	5308	430	4260
All Island Total	5431	26435	134681	91154	42152	167999	143719	84818	33660	126212

Source: Department of Health.

CHAPTER IV
 TABLE 10.1
 NUMBER IMMUNISED AGAINST TYPHOID, SMALLPOX AND POLIO AND
 THOSE GIVEN TRIPLE VACCINE - SRI LANKA 1964/5,
 1965/6, 1966/7 1970/1

Year	Typhoid	Small Pox	Triple Vaccine	Polio
1964/1965	1st Dose	271,567	4,062	355,795
	2nd Dose	39,245	2,353	231,347
	3rd Dose	—	721	38,474
8965/66	1st Dose	281,883	11,697	177,971
	2nd Dose	20,387	8,512	139,756
	3rd Dose	—	3,075	73,276
1966/67	1st Dose	315,039	30,606	—
	2nd Dose	23,219	18,422	—
	3rd Dose	—	8,538	—
1970/71	1st Dose	387,111	71,564	302,680
	2nd Dose	15,912	48,282	234,973
	3rd Dose	—	25,161	66,970

TABLE 10.2
1970/71 SCHOOL HEALTH WORK

	% of SHS examined to total No. of SHs in the District	% of CH Examined to total SH age group 5 - 19	% of CH examined to total enrolled in SHs	% of Un-vaccinated	Detections made at S. H. Examinations as % of total examined			
					Vision	Hearing	Dental	Scabies
Anuradhapura	18.6	2.7	5.1	3.3	0.03	-	16.4	2.0
Badulla	16.3	2.1	5.8	9.1	0.05	0.1	26.8	1.03
Batticaloa	23.6	4.1	8.7	1.1	0.01	0.01	19.5	0.4
Colombo	27.7	4.5	7.4	10.1	0.8	0.1	32.1	0.9
Galle	23.9	3.6	5.6	11.9	0.6	0.2	50.0	0.7
Jaffna	75.8	10.1	15.6	13.3	0.1	0.02	21.1	1.0
Kalutara	51.7	7.6	12.7	11.1	0.7	0.3	47.0	2.2
Kandy	26.0	3.9	7.5	8.6	0.6	0.1	36.9	1.3
Kegalle	29.2	4.3	7.2	4.3	0.6	0.5	25.0	0.6
Kurunegala	27.2	3.5	6.7	10.0	0.3	0.1	24.2	0.6
Matale	31.3	3.8	7.0	11.0	0.9	1.1	17.3	1.3
Matara	16.9	2.9	4.7	4.2	0.4	0.9	22.2	1.0
Puttalam	22.5	7.7	9.2	9.2	0.1	0.1	20.5	1.0
Ratnapura	14.3	2.3	4.4	4.2	0.3	0.01	19.1	1.2
Vavuniya	52.5	7.8	14.8	8.4	0.02	0.6	14.6	0.6
TOTAL	29.3	4.4	7.7	7.8	0.4	0.2	21.8	0.9

Source: Department of Health.

CHAPTER IV

TABLE II.
MATERNITY & CHILD HEALTH WORK OF—1970/71

S. H. S. area.	No. of Health Centres	No. of Homes visited by				Home Visits				No. of Clinics held				
		P. H. M.M.		P. H. N.N.		P. H. M.M.		P. H. N.N.		P. H. M.M.		P. H. N.N.		
		Ante- Natal	Post Natal	Premature Infants	Infants	Infants	Pre-school * Pre-children	Ante- Natal	Post- Natal	Infants	Pre-school * Pre-children	Ante- Natal	Post- Natal	Infants	Pre-school
Anuradhapura	46	124,708	926	50,826	13,543	8	217	89	779	216	112	127	272	269
Badulla	92	139,883	104	66,877	13,637	37	6,686	4,113	1,371	307	269	272	272	181
Batticaloa	60	97,535	6,058	63,040	16,648	191	14,254	15,819	630	91	293	293	293	181
Colombo	179	507,970	59,310	251,369	80,935	425	28,168	23,766	2,761	71	513	878	878	513
Galle	68	219,994	5,672	102,396	26,707	25	2,359	2,453	1,322	404	15	37	37	15
Jaffna	98	210,996	-	124,741	24,510	-	-	-	1,675	-	32	405	405	32
Kandy	106	261,261	37,572	104,550	33,586	301	19,127	14,147	2,068	340	6	6	6	6
Kalutara	79	305,178	30,793	138,411	24,479	123	19,843	22,511	2,099	79	978	978	978	1,026
Kegalle	97	220,090	299	93,408	19,239	338	5,909	6,212	1,694	216	246	817	817	246
Kurunegala	176	454,264	13,389	156,002	22,267	56	10,807	8,146	1,647	290	382	413	413	382
Matale	30	74,437	3,787	62,909	15,812	2	506	572	659	179	9	272	272	9
Matara	112	241,870	-	106,345	22,748	3	3,426	8,326	1,479	274	280	578	578	280
Puttalam	62	109,791	-	47,600	10,248	-	-	-	772	116	191	351	351	191
Ratnapura	62	195,978	287	70,155	12,138	15	-	184	1,932	-	162	1,499	1,499	162
Vavuniya	102	30,902	-	29,456	2,816	-	121	-	389	-	-	334	334	-
TOTAL	1,369	3,194,877	158,197	1,468,349	339,313	1,523	122,223	106,338	21,277	2,583	3,424	7,260	7,260	3,424

Source : Department of Health. * Inclusive of New & Old

CHAPTER IV

TABLE 11.1

MATERNAL AND CHILD HEALTH WORK - 1970/71.

S. H. S. Area	Visits to Clinics		E X A M I N E D.				
	Total Attendance		Ante-Natal	Post-Natal	Infant	Pre-School	
	Mothers	Children					
Anuradhapura	13,710	49,819	13,704	328	6,595	29,431	
Badulla	28,623	71,631	28,371	3,417	14,312	18,917	
Batticaloa	16,204	27,295	17,209	1,262	12,623	14,898	
Colombo	71,387	153,946	84,981	—	41,796	42,520	
Galle	38,073	90,241	36,789	116	26,736	36,616	
Jaffna	33,560	33,359	33,209	151	21,705	11,705	
Kandy	42,526	110,933	40,261	3	18,700	14,840	
Kalutara	60,015	182,177	62,850	2,290	46,046	110,998	
Kegalle	29,627	65,480	29,721	1,247	27,633	17,516	
Kurunegala	49,639	126,327	50,553	394	48,549	51,403	
Matara	16,242	29,915	16,054	1,775	11,361	14,054	
Matara	31,411	65,559	38,980	1,348	22,281	29,648	
Puttalam	15,057	29,448	15,117	518	15,554	7,180	
Ratnapura	20,557	68,422	20,600	—	20,771	14,785	
Vavuniya	3,948	4,852	8,148	3	7,560	6,587	
TOTAL	470,579	1,109,404	496,547	12,852	342,222	421,098	

Source: Department of Health

FINALISTS IN THE INTER-PROVINCIAL TRACK AND
FIELD MEET OF THE SRI LANKA SPORTS FESTIVAL
HELD IN AUGUST, 1973.

	Southern	Sabara- gamuwa	North Central	Central	North Western	Northern	Eastern	Uva	Western	TOTAL
Men's Events.										
100 metres	3		1					1	5	10
200 metres	3							1	5	9
400 metres	1						3	5		9
800 metres					5	1				6
1500 metres	5			1	3					9
5000 metres	1			3	5					9
4 x 100 relay	5							3	7	15
4 x 400 relay	5							3	7	15
High Jump				5	1				3	9
Long Jump		1		5	3					9
Discus	3			5					1	9
Putt Shot					5	1			3	9
Triple Jump					5	3	1			9
Women's										
100 metres				1				3	5	9
200 metres				1	3				5	9
4 x 100 relay				5				3	7	15
4 x 200 relay					7			3	5	15
High Jump	1	5			3			1		10
Long Jump	1		3						5	9
Putt Shot			5	3		1				9
Discus	3			1		5				9
TOTAL	31	6	9	30	40	11	4	23	58	212
% of Total	14.5	2.8	4.2	14.1	19.2	5.1	1.9	10.8	17.2	

Source: Compiled by Marga Research Staff from data obtained from Sports Ministry.

CHAPTER V TABLE II
SURVEY OF PLAYGROUNDS IN SRI LANKA

District *	No. of local Bodies covered by Survey	No. With Play- grounds	No. without Play- grounds	Acreage of Play- grounds
1. Colombo	52	19	33	40½
2. Polonnaruwa	6	4	2	9
3. Hambantota	10	3	7	7½
4. Kandy	18	2	16	6
5. Batticaloa	10	4	6	8
6. Matale	17	6	11	7
7. Matara	25	7	18	16½
8. Nuwara Eliya	5	1	4	1
9. Galle	20	5	15	9
10. Katutura	9	5	4	14
11. Mannar	11	7	4	22½
12. Anuradhapura	25	11	14	25½
13. Amparai	11	10	1	17
14. Ratnapura	28	15	13	22½
15. Badulla	31	9	22	34½
16. Trincomalee	9	9	—	20
17. Vavuniya	9	6	3	25
18. Jaffna	5	2	3	6
19. Moneragala	13	5	8	13
20. Kurunegala	}	— Not available —		
21. Kegalle				
22. Puttalam				
TOTAL	314	130	184	303½

* excludes Municipality areas.

(Compiled by Marga Research Staff from data available at the
 Ministry of Sports)

ERRATA

Page 109 1st line date Should read data

Tables

Chapter I

Table II Ages 20 - 24 Matale District (M) 0.640
should read 9.640

Table VIII Ages 15 - 24 Kegalle District (F) 3.8
should read 8.2

Chapter II

Table XV Grade 10 Arts Anuradhapura District 3,357
should read 3,357

Grade 10 Arts Badulla District 336
should read 3,367

Table XVI J. T. I. Ratmalana. Others 388
should read nil

MARGA PUBLICATIONS

This study is one of several country studies sponsored by the United Nations Children's Fund (UNICEF) of the needs of the young age groups of the pre-school age up to and including adolescence.

It examines in particular, the regional variations in the delivery of educational, health, nutritional, and recreational services to these age groups and offers a framework for an integrated approach towards meeting the needs of children and adolescents in Sri Lanka.