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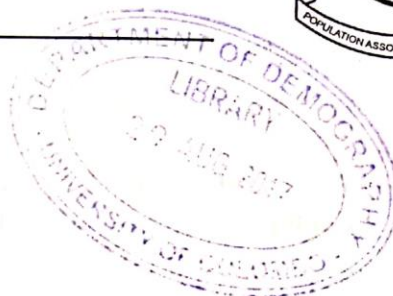
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Demographic factors influencing development planning: the case of Moneragala District

LAKSHIMAN DISSANAYAKE AND MANORI KALUTHANTIRI

Introduction

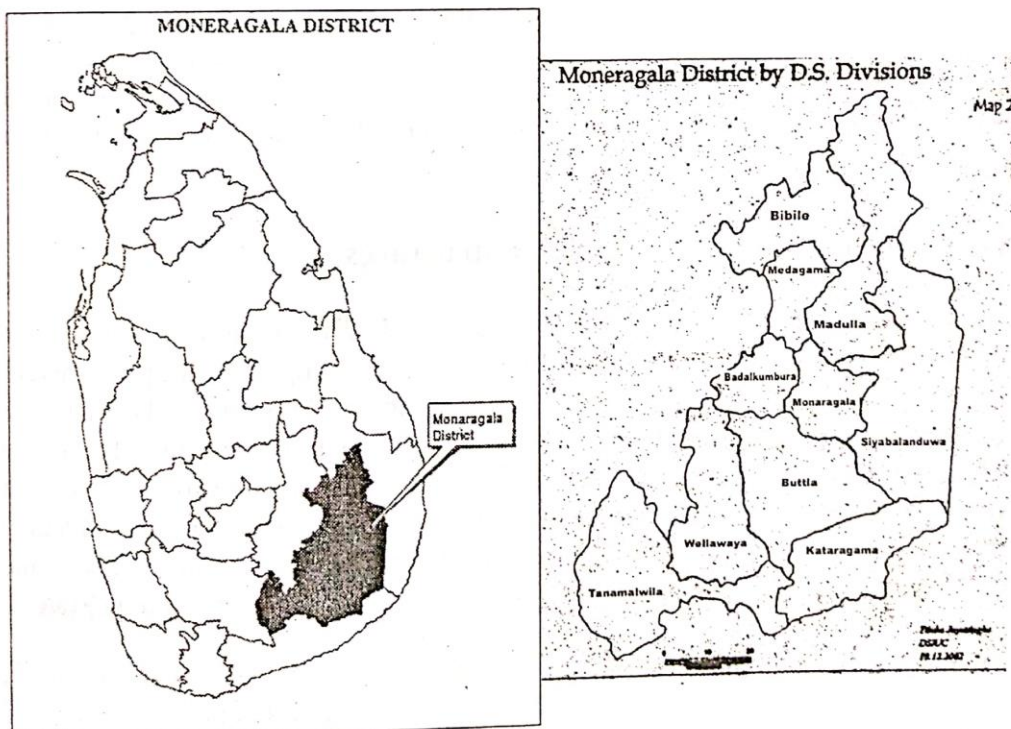
National as well as regional planners tend to ignore the importance of demographic characteristics and their influence on regional economics. Baseline surveys normally gather information on various demographic characteristics, which are generally used to highlight the basic socio-demographic environment. However, it is equally important to collate information on people's behavioral patterns along with their characteristics because their characteristics and their behavioral pattern may be primarily determined by their demographic characteristics. For instance, if the villagers that we study are recent immigrants from coastal fishing areas, we may not adopt the same plans and strategies that are used for farmers whose main livelihood is paddy cultivation. In addition, it is important to investigate the pattern of age and sex structure of the population because the needs, requirements and productive capacity of the people mainly depend on their age and gender.

The results of a conference on Demography and Poverty held in Florence, Italy in 1995 indicate that poverty can influence demographic outcomes in many ways. Traditionally, the studies that focus upon demography and poverty concentrate on how population growth may cause poverty. Population growth can hold down returns to labour relative to capital and other factors of production, decrease wages and worsen the income distribution. In the context of development in an initially small, but expanding, modern sector within a larger economy like in Moneragala, population growth can swell the traditional and informal labour force, and delay the time at which modern sector capital accumulation exhausts the supply of subsistence level workers.

A well-designed documentation of demographic and related socio-economic characteristics in terms of their spatial distribution can provide the planners and policy makers with a better understanding of the development problems as well as the development potentialities in a district. For example, if we can map the actual demographic characteristics in a district, and relate the spatially depicted unemployment situation to this, one will be in a better position to determine where the

problems are most acute and who the marginalized groups are. If there are also resource maps, we may be able to interpret the disadvantaged position of those people compared to other groups of people in the district living in different localities.

The facts discussed above suggest the importance of studying the spatial context of demographic issues in the Moneragala district in order to understand the problems associated with socio-economic development, and to examine whether the population dynamics in the district function as a constraint or as an opportunity to development in the district. Furthermore, data and information about the population dynamics in the district can provide the regional planners and policy-makers with baseline-information and possible future scenarios regarding changing income-earning opportunities in the district and the structure of the labour force.



Methodology

There are a number of secondary data sources available in order to obtain demographic data and information for the Moneragala district. In this respect, the Demographic Survey of 1994 can be regarded as one of the major sources, because demographic scenarios do not change significantly during a short period. In order to capture the demographic situation at present, the data are analyzed using the *cohort approach*.

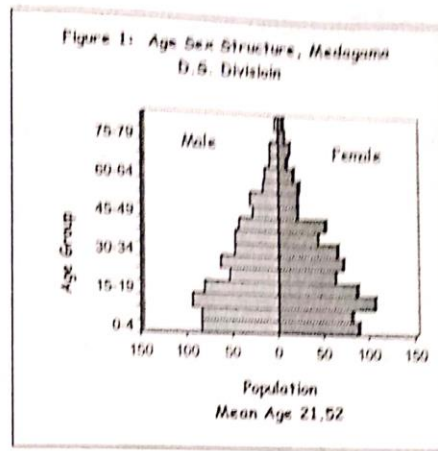
A sample of 92,180 housing units distributed throughout Sri Lanka except in the Northern and Eastern Provinces, was picked for this survey. Stratification was done at sectoral level, and all the Divisional Secretary Divisions (DSD) were taken as domains. A minimum sample of 300 housing units was selected from each DSD in order to provide proper estimates at these levels. In addition, at national level, 21,360 housing units (23 percent) were allocated to the urban sector and 70,820 housing units (77 percent) were allocated to the rural sector. A stratified two-stage sample design was used with a Grama Niladhari Division or a part of the Grama Niladhari Division as the primary sample unit (PSU), and housing unit as the secondary sampling unit (SSU) in the rural sector. The rural sector covers about 219 DS Divisions. 3541 PSU's have been selected from this sector and 20 housing units have been selected from each PSU.

In addition to the Demographic Survey, currently available data from the 2001 Census are also used. Various reports gathered from the DS divisions as well as from the district level were also useful in mapping and analyzing the demographic situation in the Moneragala district. Officers in the Department of Census and Statistics, both in the regional, as well as in the Head Office, were consulted regularly for various issues related to the data used.

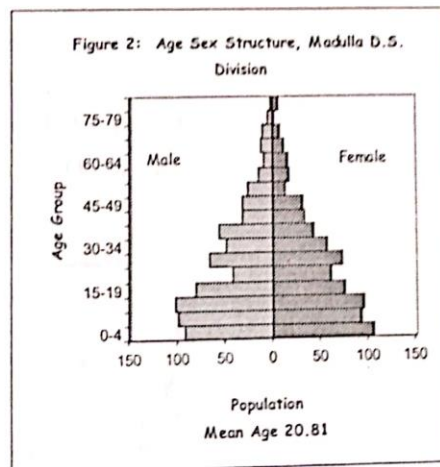
Characteristics of the Age and Sex Structures

A cursory glance at the sex structure of Medagama DS division shows that two larger cohorts have been entering into the labour force recently compared to the past. This DS division has one of the highest illiteracy-rates in the Moneragala District. The unemployment rate in Medagama is about 10 percentage points higher than in the Moneragala District as a whole. Therefore, it seems that the large cohorts that have been entering into the labour force in Medagama have been to a large extent illiterate. This in many respects is similar to the older cohorts. Unemployment among the youth therefore remains high, mainly due to poor education and a high illiteracy rate.

However, the projected fertility decline in the division is expected to reduce the size of the cohorts entering the labour force after 2004. This can to a certain extent reduce the unemployment burden. Another important aspect of the age and sex structure of this DS division is the significant out-migration of the youth. This is the case both for males and females.

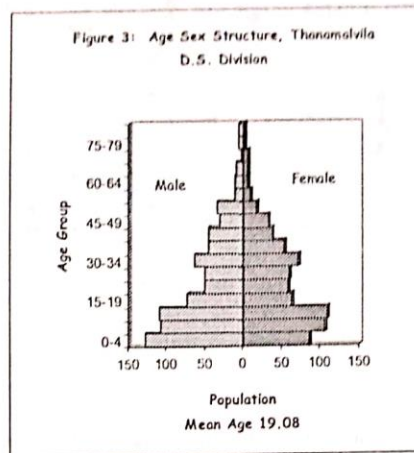


The age and sex structure of Madulla DS division shows that two large birth cohorts have entered into the labour force after 1999. Since fertility decline in this division is not significant there is not much deviation in the size of the younger age cohorts. The unemployment rate is below the average district unemployment rate. Madulla has the highest illiteracy rate in the district. This suggests that there is an inverse association between the unemployment level and illiteracy.

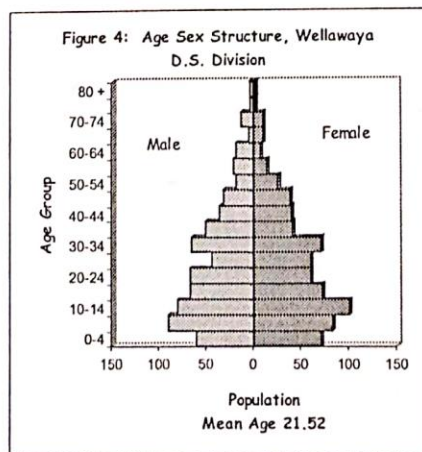


After 1999, three large male cohorts and two large female cohorts have entered into the labour force in Thanamalwila DS division. Although the cohorts entering during the period 1999-2009 are similar in their sizes, the cohorts entering after 2009 will consist of more males than females. However, the existing age and sex structure shows that the females outnumber the males in the labour force. Since Thanamalwila has the second

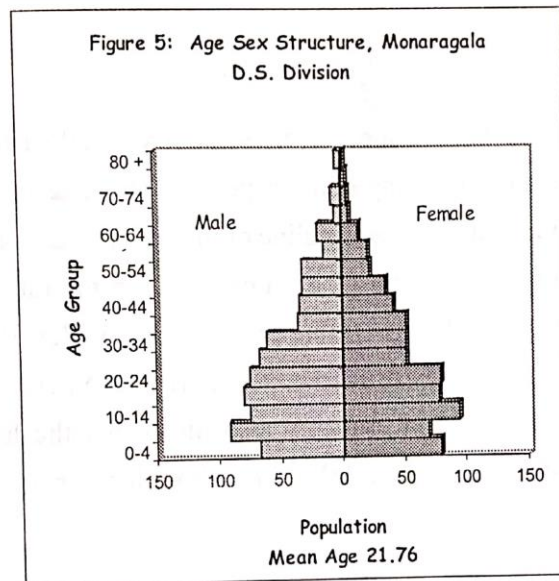
highest pre-school attendance, and higher school attendance than the district average, one can expect Thanamalwila to have more literate youth entering into the labour force ages in the future.



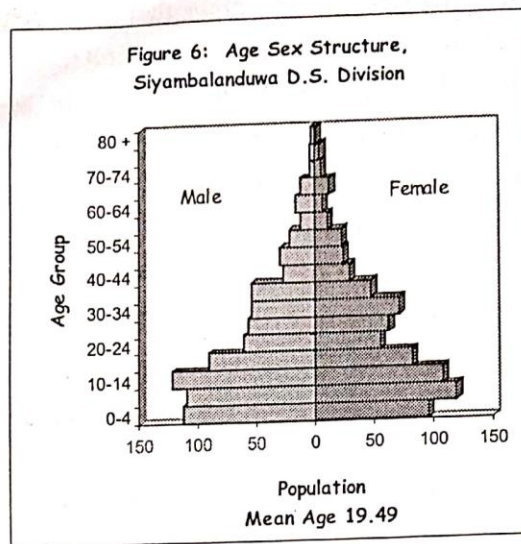
In the case of Wellaway DS division, two large male and female cohorts have entered into the labour force after 1999. One significant difference in terms of gender is that the cohort that entered between 1999 and 2004 has larger number of females compared to the number of females in the cohort entering during 2004-2009. After 2009, the size of the cohorts get smaller because of the significant decline in fertility, and thus the burden of unemployment may be expected to be reduced to a certain extent. A significant male out-migration from this DS Division is also apparent in the younger age groups.



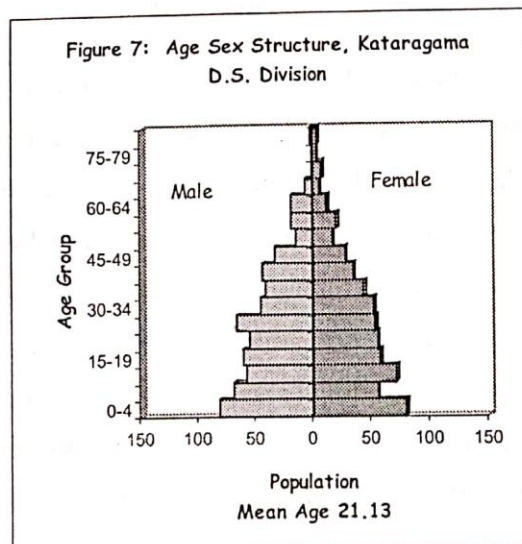
The Data for the Moneragala DS division shows that larger female and male cohorts were entering into the labour force age group in the period from 1999-2004. The cohort that will be entering the labour force in 2009 is smaller in size, and the sex ratio is around 100, which indicates that there is no gender difference in the size of the respective populations. When looking at the current status of attendance at school/ educational institution, we find that 67.5 percent does not attend any educational institution, and Moneragala DS division has the second lowest school attendance. This indicates that Moneragala DS division probably will continue to have relatively low literate people among its labour force, at least in the near future. Female out-migration is visible in the youth ages while male out-migration is dominant in the adult ages.



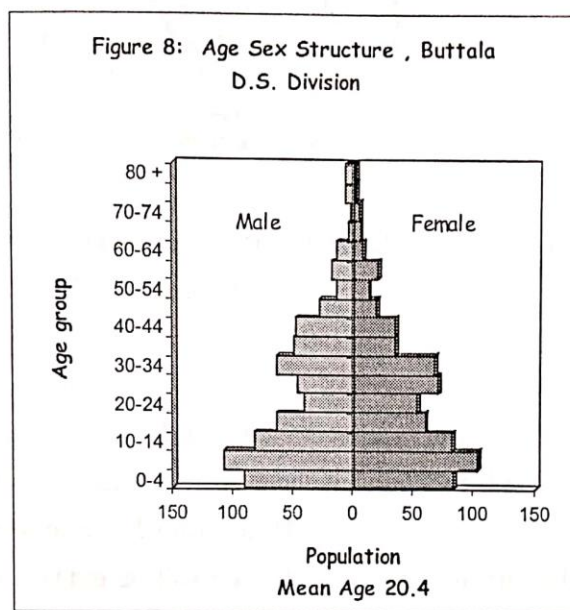
In the case of Siyambalanduwa DS division, one larger male cohort entered into the labour force in 1999 while two larger female cohorts entered in 1999 and 2004, respectively. Siyambalanduwa shows the highest percentage of school attendance, and hence more literate youth will be entering into the labour force ages. Another important demographic aspect in Siyambalanduwa is the relatively high fertility rate in the DS division. The result of this is that the younger cohorts are not smaller in this DS division. A significant feature observed in Siyambalanduwa is the relatively high number of females in the age groups when the persons are potentially labour-active. One notable feature of the Siyambalanduwa DS division is that it has the lowest unemployment rate recorded in the district.



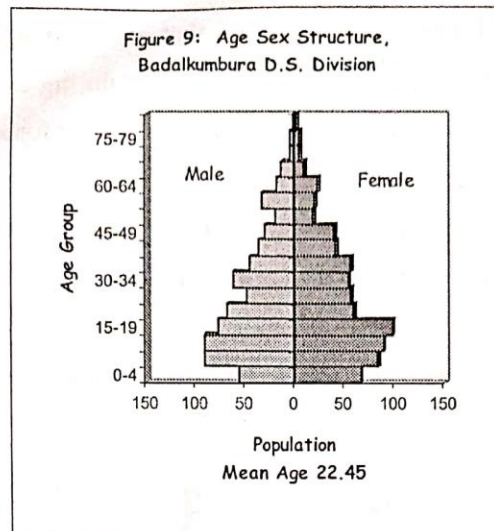
Kataragama DS division exhibits a relatively small age-sex distribution compared to the other DS divisions. One important aspect in the age-sex structure of the Kataragama population is the gradual decline of the cohort sizes of the females in the labour force ages compared to that of the males. Male in-migration may be a factor, which has resulted in unequal age distribution among the males. Kataragama has the highest recorded literacy rate in the district. It is more than 5 percentage points above the district average. This would probably also mean that the labour force in the Kataragama DS division is more literate than the labour force in the other DS divisions in the district.



Buttala DS division exhibits an age-structure that has been influenced by migration during a long period of time, as well as high fertility during the recent years. Larger cohorts of males and females already entered into the labour force in 1999 and this will continue until 2004. Literacy rate in the division is the third highest, and one can therefore expect that this trend will continue in the future as well. The unemployment rate is 9.0 percent and close to the average rate in the district.



In Badalkumbura DS division, the fertility rate has come down in the recent years, and this has resulted in a relatively small cohort of children during the period 1990-1994, compared to the period 1975-90. Therefore, it is expected that the size of the cohorts entering into the labour force will be considerably reduced after 2004. This will of course reduce the burden of providing employment to relatively literate youth in the future. When looking at the population who are aged 5 years and above by level of education, one can clearly see that secondary school attendance is highest in the Badalkumbura DS division compared to the other DS divisions in the district. This suggests that Badalkumbura also has more literate people.



It seems that Bibile DS division has started its fertility control programme before the other DS divisions. This is discernible since the cohorts of children who were born during the period between 1985 and 1994 are smaller compared to the earlier cohorts of Bibile as well as in the other DS divisions. This means that Bibile will have relatively smaller cohorts of youth entering into the labour force after 1999. The unemployment rate in Bibile is below the average rate in the district and the labour force participation is the second highest. Hence, with the decrease in the cohort sizes, we can expect that the unemployment burden will be reduced further in this DS division. In addition, Bibile is not a very attractive destination for migrants.

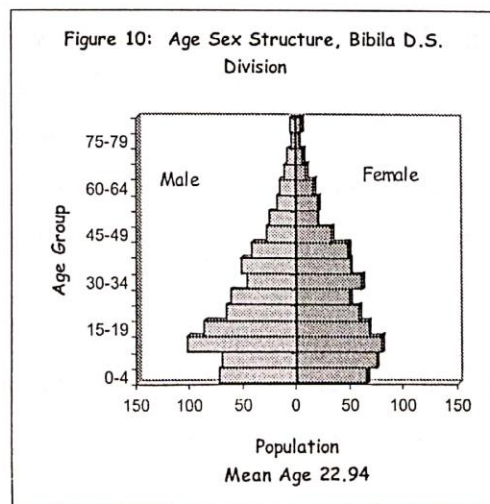


Table 1

Population (age 10 years & over) by literacy level (Percentages) for Divisional Secretary Divisions

Divisional Secretary Division	Literacy Rate
Moneragala District	84.1
Badalkumbura	85.5
Bibile	84.5
Buttala	85.4
Kataragama	89.7
Madulla	81.4
Medagama	84.8
Moneragala	84.2
Siyambanduwa	81.8
Thanamalwila	84.8
Wellawaya	82.4

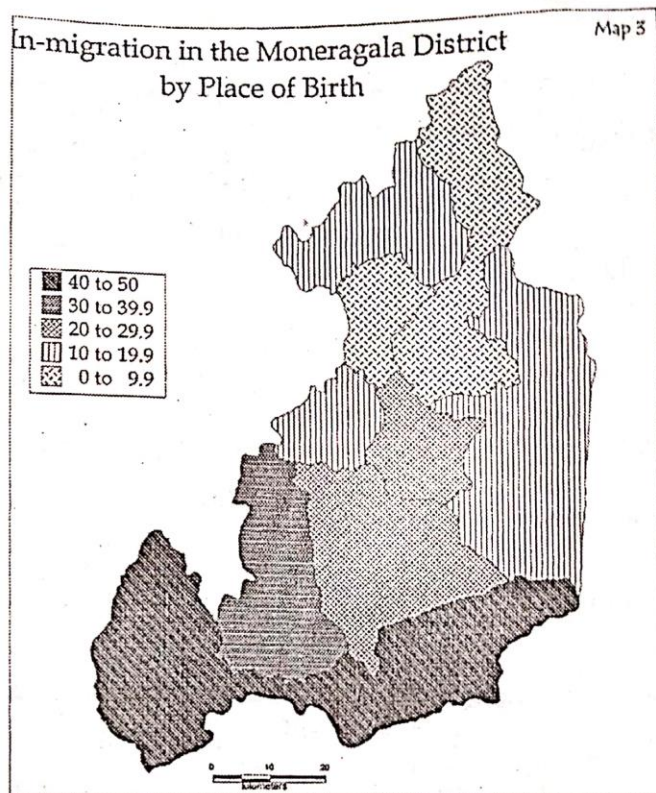
Migration Patterns

As indicated earlier, migration plays a dominant role in shaping the age and sex distribution of the population in the DS divisions in Moneragala. This is more discernible if one looks at the in and out migration patterns of the district at DS divisional level. Table 2 indicates that about 24 percent of the Moneragala district population is life-time migrants. Thanamalwila, Kataragama and Wellawaya DS divisions exhibit more than 30 percent of life-time migration. All these three divisions are located in the southern part of the Moneragala district. This shows that these three DS divisions have been the most attractive destinations for migrants. When one further examines the in-migration among the DS divisions within the district, mobility is not so high, because only about 4 percent have migrated among DS divisions within the district. Buttala, Medagama, Moneragala and Siyambanduwa have been the most attractive destinations since they have more than 5 percent life-time migration.

Table 2

Population by place of birth and usual residence (percentages) for Divisional Secretary Divisions

Divisional Secretary Division of Common Residence	Place of Birth	
	Outside the DSD but within the District	Other District
Moneragala District	4.0	24.3
Badalkumbura	3.3	19.8
Bibile	3.0	14.1
Buttala	6.7	22.9
Kataragama	4.5	42.9
Madulla	3.9	8.5
Medagama	6.2	9.0
Moneragala	6.0	24.0
Siyambalanduwa	5.3	16.3
Thanamalwila	0.3	47.2
Wellawaya	3.2	32.9

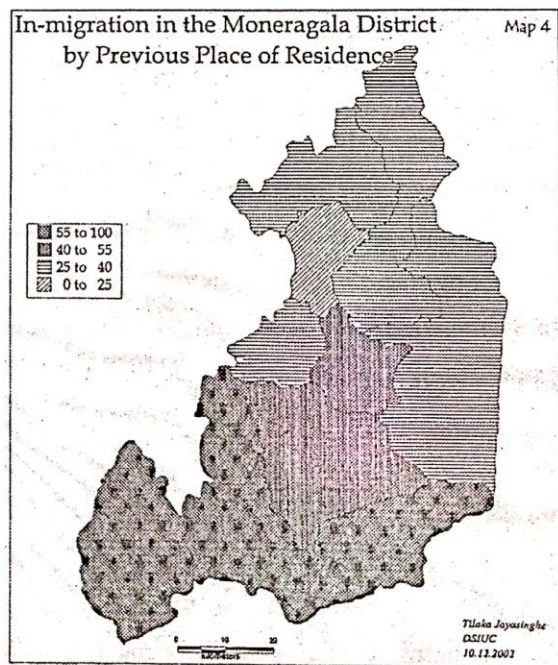


It appears that the mobility is substantial in the Moneragala District when intra-district in-migration is analyzed by considering the place of residence before moving to the present residence. According to Table 3, we find that about 44 percent of the population in the district has moved into the district after residing in another district. Both Wellawaya and Thanamalwila show more than 61 percent of intra-district in-migration while Kataragama, Buttala and Moneragala DS divisions exhibit 50 to 55 percent intra-district in-migration. These data clearly indicate that intra-district in-migration is stemming from the southern part of the Moneragala district. Since the intra-district in-migration flow is substantial, one cannot easily disregard its impact on any regional planning strategy, to be adopted for the district. When mobility patterns within the district are examined, Madulla, Moneragala and Buttala DS divisions are the most attractive DS divisions in the Moneragala district.

Table 3

Population by place of residence before moving to present usual residence (percentages) for Divisional Secretary Divisions

Divisional Secretary Division of Usual Residence	Place of residence before moving to present usual residence	
	Outside the DSD but within the District	Other District
Moneragala District	9.7	43.9
Badalkumbura	5.1	25.6
Bibile	10.2	32.4
Buttala	18.7	53.9
Kataragama	4.7	55.1
Madulla	19.0	27.7
Medagama	11.6	20.5
Moneragala	17.8	53.3
Siyambalanduwa	11.3	25.5
Thanamalwila	1.0	61.9
Wellawaya	9.5	62.5



After examining the pattern of in-migration in the Moneragala district, it is very essential to investigate the reasons for the move into the district as well as to the DS divisions in the district. Table 4 indicates that the 'other' category has the highest percentages due to several reasons. The present analysis is mainly directed towards finding out the importance of two main reasons for migrating to Moneragala:

- i) moving to live in own house; and
- ii) employment.

About 18 percent of the migrants have moved into Moneragala district to live in their own house. In other words, it appears that it is cheaper to obtain land and build a house in the DS divisions such as Badalkumbura and Kataragama. On the other hand, Buttala and Thanamalwila have the ability to generate more employment opportunities than the other DS divisions in the district because about 14 to 16 percent of the respondents in the survey state that they have migrated to those two DS divisions for employment.

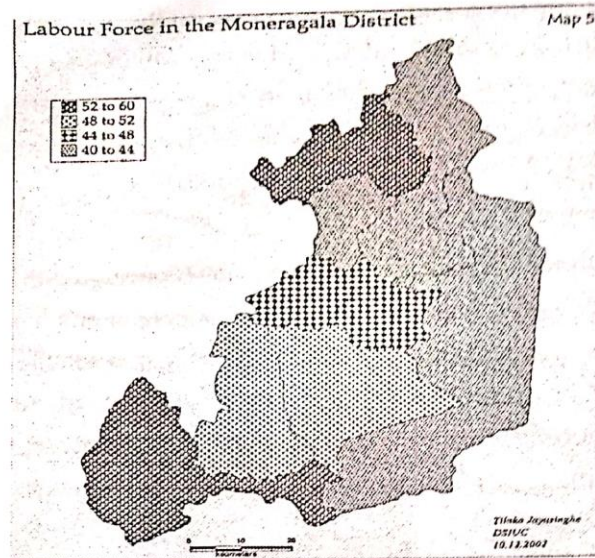
Table 4

Percentage distribution of population by reason for moving to present usual residence according to Divisional Secretary Divisions

Divisional Secretary Division of Usual Residence	Reason for moving			
	To live in own house	Employment	Displaced due to disturbance in the area	Other
Moneragala District	18.1	8.5	2.3	71.1
Badalkumbura	28.3	3.6	2.3	65.8
Bibile	20.6	5.8	1.6	72.0
Buttala	15.3	16.2	0.2	68.4
Kataragama	28.4	7.9	0.0	63.8
Madulla	15.6	5.4	5.4	73.6
Medagama	19.9	2.7	3.6	73.8
Moneragala	15.2	9.6	1.8	73.4
Siyambalanduwa	17.3	5.1	3.1	74.5
Thanamalwila	10.6	14.0	0.9	74.6
Wellawaya	19.1	8.9	4.9	67.1

Labour Force Status

In the Moneragala District, only 48.5 percent of the population who are aged 10 years and above are economically active which is very similar to the national average of 48.4 percent. In other words, the majority of the population in the potentially economically active age groups is economically inactive in the district. Among them, the majority, that is about 26 percent, is engaged in studies. Among those who are active in the labour force ages, 90.1 percent are employed while 9.9 percent are unemployed.



The highest unemployment rate (19.8) is observed in the Medagama DS division while the lowest (5.8) is recorded for Siyambalanduwa DS division. The difference between the highest and the lowest unemployment is quite remarkable. Moneragala, Wellawaya and Kataragama are the other three DS divisions which show more than 10.0 percent of unemployment, and are above the district average. One might think that there can be a strong correlation between the unemployment rate and the prevailing illiteracy levels in the respective DS divisions. However, it is quite interesting to note that the data do not indicate a strong association between the two variables in the context of the Moneragala district. What is seen in the Moneragala district is the opposite; that is, we find an inverse relationship between the unemployment and the illiteracy level. The Pearson Correlation Coefficient for the two variables is only -0.109 (see Table 5). The negative sign of the coefficient indicates that the unemployment decreases as illiteracy level increases at least to a very limited extent. This is considered to be mainly due to the engagement of the more illiterate labour force in farm agriculture. This might be suggesting that it is important to improve the productivity of the farm agriculture, particularly in the DS divisions where the unemployment rate is relatively low, such as is the case in Siyambalanduwa, Badalkumbura and Thanamalwila DS divisions, while promoting the non-farm employment activities in the DS divisions where unemployment levels are relatively high.

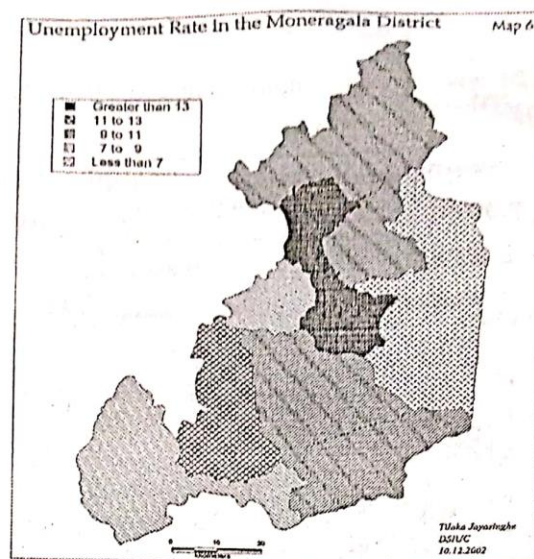


Table 5

Correlation coefficients between the variables, unemployment, Illiteracy, in-migration, studying at present and engaged in household activities

	Illiteracy	In-migration	Studying	Household work
Unemployment	-.109	-.103	.168	.198
Illiteracy		-.288	.546	-.295
In-migration			-.881	.038
Studying				-.212

It was indicated earlier that about 26 percent of the economically inactive population in the Moneragala district are engaged in studies. Divisional level correlational analysis indicates that more people in the labour force ages tend to engage in studies, particularly in the areas where illiteracy levels are relatively high. Pearson Correlation Coefficient for the illiteracy rate and 'engaged in studies' category among the economically active is .546. This means that there is a possibility for the unemployment level to increase in the future, especially where the illiteracy levels and unemployment levels are negatively correlated, since the educated youth may not like to engage in farm agriculture. The association between in-migration and 'those engaged in studies' category by the economically active population is significantly high, as indicated by the correlation coefficient of -0.881 . This suggests that intra-district in-migration is taking place in the DS divisions where the majority is not engaged in studies. Since the majority of the intra-district in-migrants themselves are illiterate, they may be looking for destinations where they can engage in farm agriculture.

Table 6

Labour force (age 10 years & over) employment and unemployment rates for Divisional Secretary Divisions

Divisional Secretary Division	Employment Rate
Moneragala District	90.1
Badalkumbura	93.1
Bibile	90.9
Buttala	91.0
Kataragama	90.0
Madulla	90.7
Medagama	80.2
Moneragala	86.9
Siyambalanduwa	94.2
Thanamalwila	91.7
Wellawaya	89.0

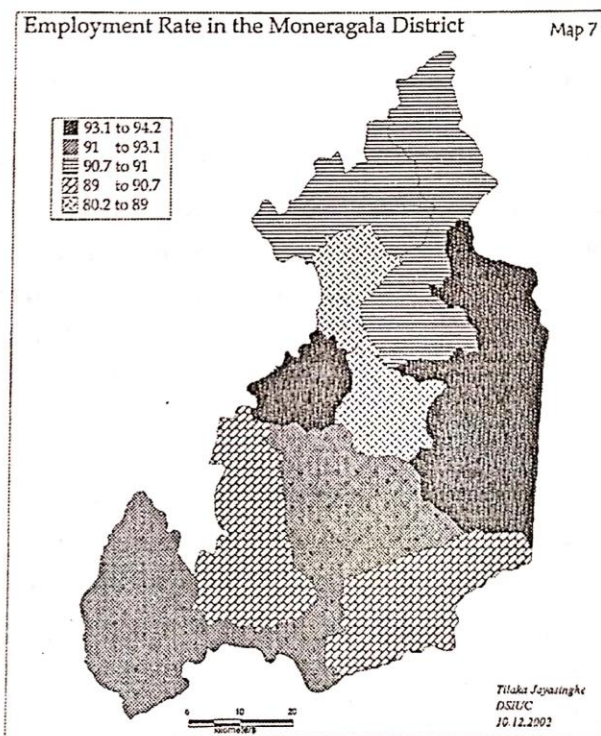
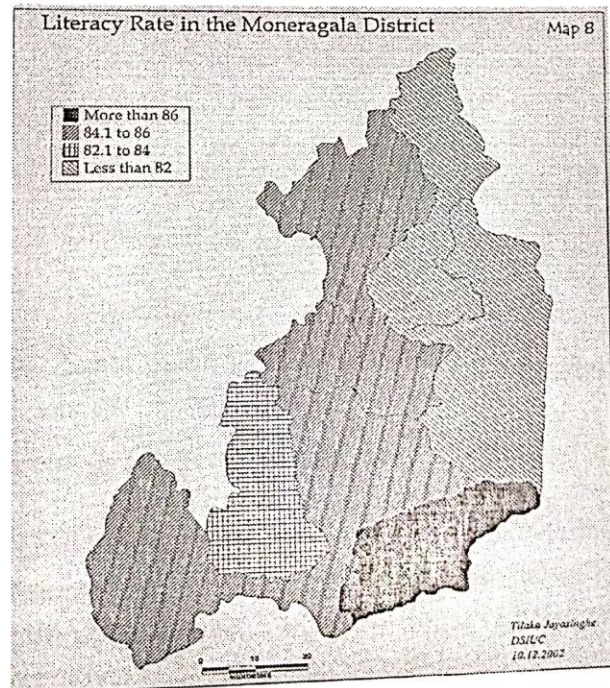


Table 7

Population (age 3 years & over) by current status of attendance at school/ educational institution (percentages) for Divisional Secretary Divisions

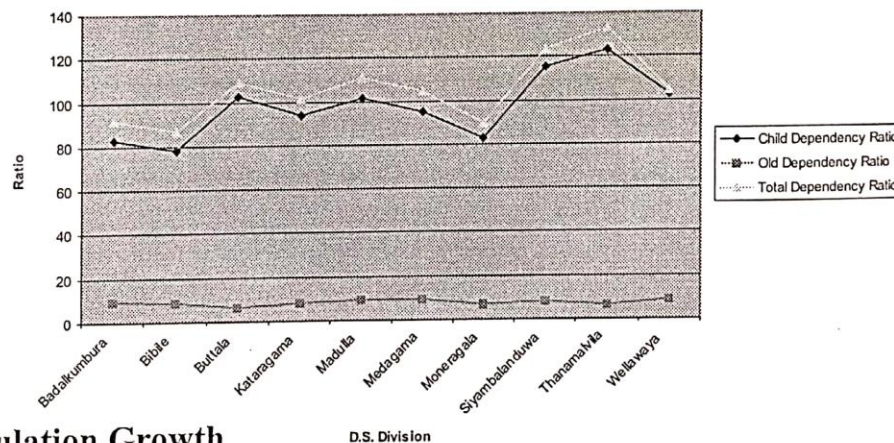
Divisional Secretary Division	Attendance at School/ Educational Institution					
	Pre School	School	University	Other Educational Institution	Vocational/ Technical Institute	Does not attend
Moneragala District	2.8	32.2	0.2	0.4	0.3	64.1
Badalkumbura	2.5	31.2	0.2	1.0	0.5	64.6
Bibile	1.9	31.9	-	0.8	0.1	65.4
Buttala	4.2	33.4	0.1	0.7	0.2	61.4
Kataragama	2.8	26.2	0.2	0.3	0.5	70.0
Madulla	2.2	33.6	0.2	0.1	0.3	63.6
Medagama	1.9	33.8	0.1	0.4	0.7	63.2
Moneragala	1.7	29.4	0.5	0.4	0.6	67.5
Siyambanduwa	2.9	35.5	0.2	0.3	0.2	60.9
Thanamalwila	4.0	33.3	0.1	0.3	0.1	62.3
Wellawaya	3.1	30.0	0.2	0.2	0.2	66.3



Dependency

As seen in the age-sex pyramids, Thanamalwila, Siyambalanduwa, Buttala, Madulla, and Wellawaya DS divisions show acute child dependency ratio compared to other DS divisions in the district. In this respect, it is worst in the Thanamalwila DS division because it records 123.35 as the child dependency ratio. The main reason for having relatively high child dependency ratio in the district is the prevalence of high fertility in the district from the 1950s, which was primarily associated with the in-migration of high fertility families. The lowest child dependency ratio is recorded in Bibile DS division. The relatively high level of child dependency ratio as depicted in Figure 11 can be considered as a burden to the Moneragala economy, as the consumption needs of economically non-productive members reduce the overall capacity for savings, investments and also reduce the welfare in general. An examination of old people's dependency ratios suggests that it is not going to be a severe problem in the near future due to the low old age dependency ratio (i.e. less than 10 percent) recorded for all the DS divisions. However, Madulla, Badalkumbura and Medagama are nearing the old age dependency ratio of 10.0 percent. The lowest old age dependency ratio is recorded for the Thanamalwila DS division.

Figure 11 : Dependency Ratios, Moneragala District



Population Growth

According to the population census of 2001, Moneragala had a population of 396,173. During the 20-year period 1981-2001, Moneragala added 122,603 people to its population. When the percentage increase of the population during this 20-year period is considered, we find that Moneragala district has had 44.8 percent increase, and this is the third highest increase reported for the whole country (Ampara and Gampaha districts have recorded 51.5 and 48.5 percent increase, respectively). Average annual growth rate of the district population during the 1981-2001 inter-censal period is 1.8 percent per annum, which is 0.8 percentage points higher than the national average.

Figure 12: Population Growth Rate by District, 1981-2001

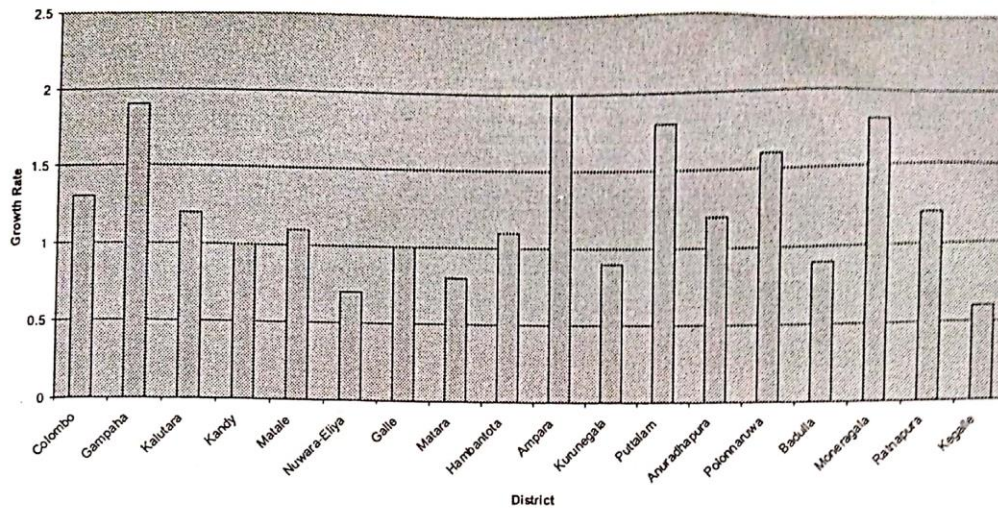
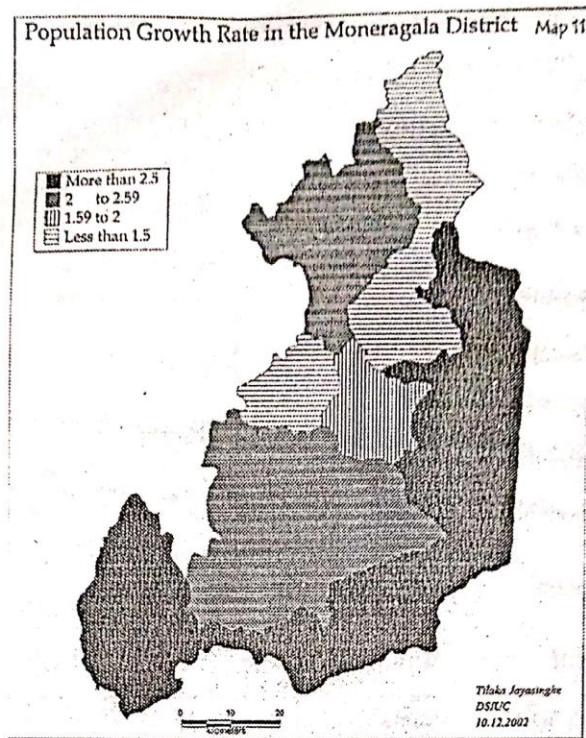


Table 8

Population growth rate (percentage)

Divisional Secretary Division	1981-2001
Badalkumbura	1.09
Bibile	2.15
Buttala	2.38
Kataragama	2.67
Madulla	1.49
Medagama	2.45
Moneragala	1.59
Siyambalanduwa	2.87
Thanamalwila	2.67
Wellawaya	2.38

The population growth rates computed for the DS divisions for the period 1981-2001 show that the highest rate was recorded for Siyambalanduwa, while the lowest was recorded for Badalkumbura. It appears that Badalkumbura population is not growing like the other divisions, although it has the highest density in the district. In fact, except for Madulla, and Moneragala, in addition to Badalkumbura, all other DS divisions had a growth rate greater than 2.00.



Population Density

Moneragala district has a land area of 5,508 square kilometers. This is the second largest district in the country in terms of land area. However, Moneragala district has one of the lowest population densities in the island. There are only about 72 persons living in one square kilometer compared to 299 people per square kilometer for the whole country. The population growth during the 1981-2001 period has caused the population density in the district to increase from 49 per square kilometer in 1981 to 72 per square kilometer in 2001.

The highest density (153.1) is registered for Badalkumbura, while the lowest density (20.6) is reported for Kataragama. The most interesting observation here is the negative association between the density of the population and the land area, because the Simple Linear Correlation Coefficient calculated for these variables indicates -0.74 , which is in fact, a relatively strong inverse relationship. For instance, the land area for the lowest density reported is 537 square kilometers while for the highest density, the land area is only 240 square kilometers. This suggests that the land settlement in the Moneragala district is determined by the factors other than the size of the land area.

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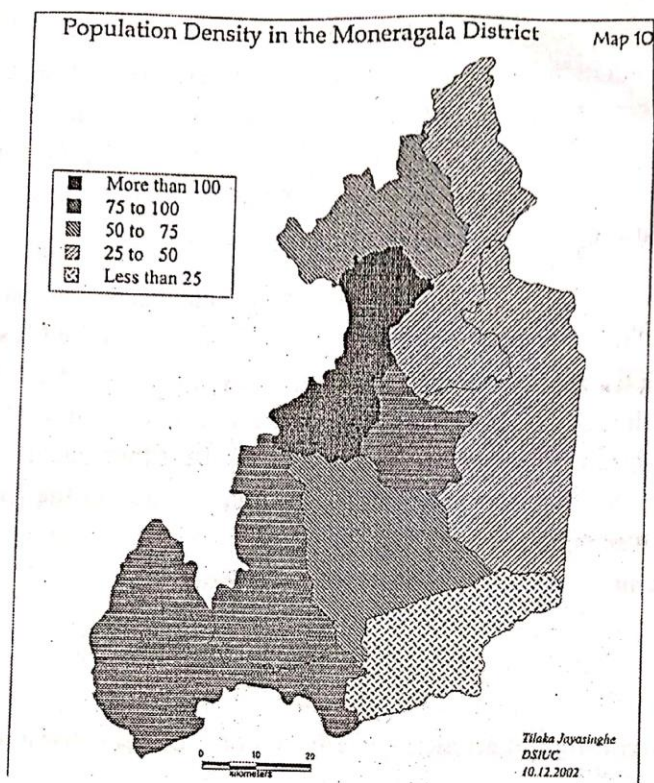


Table 9

Population density – Moneragala by Divisional Secretary Division

Divisional Secretary Division	Total Population (1994)	Square Meters	Population Density
Moneragala District	364605	5758	63.3
Badalkumbura	36744	240	153.1
Bibile	35208	473	74.4
Buttala	38350	726	52.8
Kataragama	11076	537	20.6
Madulla	26017	726	35.8
Medagama	32150	241	133.4
Moneragala	38969	479	81.35
Siyambalanduwa	44768	1075	41.6
Thanamalwila	53835	711	80.2
Wellawaya	47490	590	80.5

Ethnicity

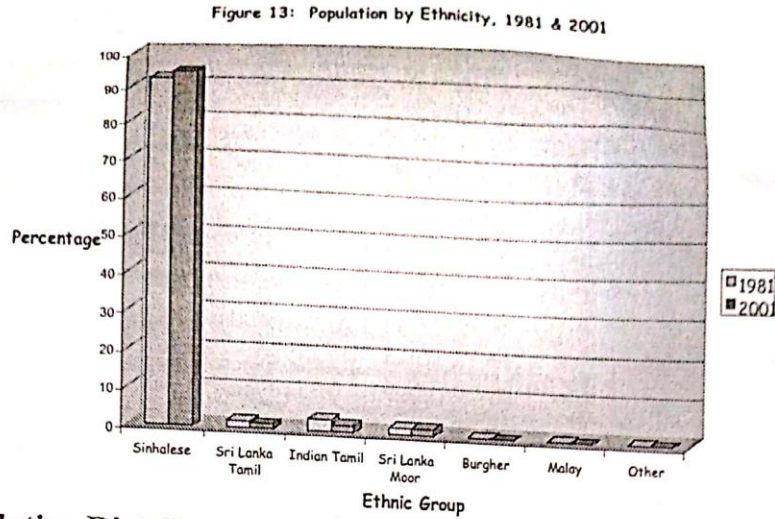
The Sinhalese population in the Moneragala district has increased from 92.7 percent in 1981 to 94.5 percent in 2001 although the national average has declined from 82.5 percent to 81.9 percent during the period 1981-2001. However, it is quite important to point out that all the other ethnic groups, except Sri Lankan Moor population, show a declining trend during the same period.

The population in Madulla, Siyambalanduwa, Thanamalwila, Wellawaya and Buttala DS divisions are almost exclusively Sinhalese. The majority of the Muslims live in Medagama DS division while the majority of the Sri Lankan Tamils are in Moneragala DS division. Although the majority of the Indian Tamils live in Bibile DS division, a substantial proportion of them are also living in the Moneragala DS division. Therefore, when development programmes are implemented in the respective DS divisions, careful consideration should be given to the minority ethnic groups so that they are brought into the development process in the district.

Table 10

Percentage distribution of ethnicity by Divisional Secretary division in Moneragala

Divisional Secretary Division	Ethnicity						
	Sinhala	Sri Lankan Tamil	Indian Tamil	Sri Lankan Moors	Burgher	Malay	Others
	%	%	%	%	%	%	%
Badalkumbura	92.0	2.8	0.6	4.6	-	-	-
Bibile	91.6	-	8.3	0.1	-	-	-
Buttala	99.6	-	-	0.4	-	-	-
Kataragama	97.9	2.1	-	-	-	-	-
Madulla	100.0	-	-	-	-	-	-
Medagama	84.8	0.7	-	13.9	-	0.1	0.5
Moneragala	88.2	5.7	5.8	0.3	0.1	-	-
Siyambalanduwa	100.0	-	-	-	-	-	-
Thanamalwila	99.8	0.1	-	-	-	0.1	-
Wellawaya	98.2	1.3	-	0.4	-	0.1	-



Population Distribution by Sector

Moneragala district does not have an urban population. The district is comprised of only rural and estate population. According to the census of 2001, 97.9 percent of the population in the district is rural, while 2.1 percent live in the estates. Although the percentage of estate population appears insignificant compared to the larger proportion of rural population which is comprised of Sinhalese people, the absolute number of estate people in the context of Moneragala district is significant in terms of development. There are 8,224 people living in the estates and they need special care.

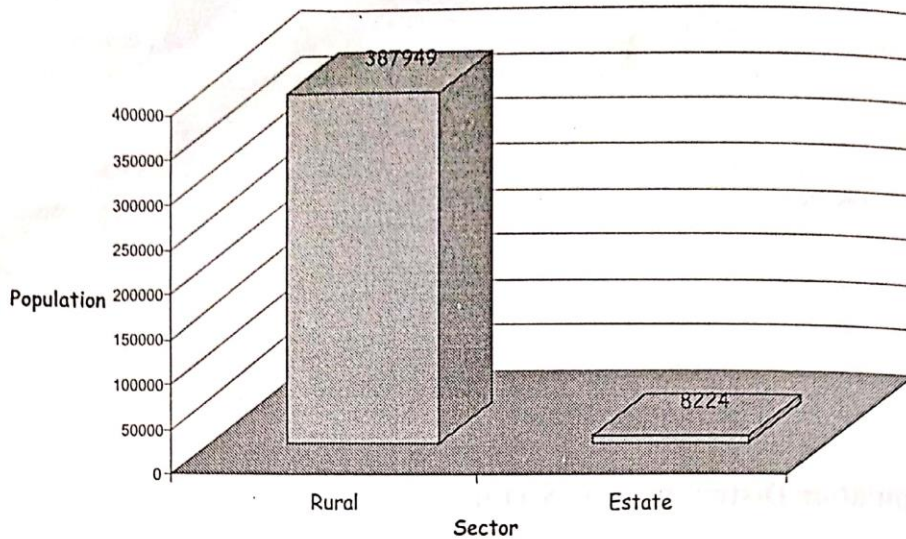
Table 11

Population distribution in sectors by Divisional Secretary Division Moneragala (percentage)

in

Divisional Secretary Division	Sector	
	Rural %	Estate %
Badalkumbura	100.0	
Bibile	100.0	
Buttala	100.0	
Kataragama	100.0	
Madulla	100.0	
Medagama	100.0	
Moneragala	93.4	6.6
Siyambalanduwa	100.0	
Thanamalwila	100.0	
Wellawaya	100.0	

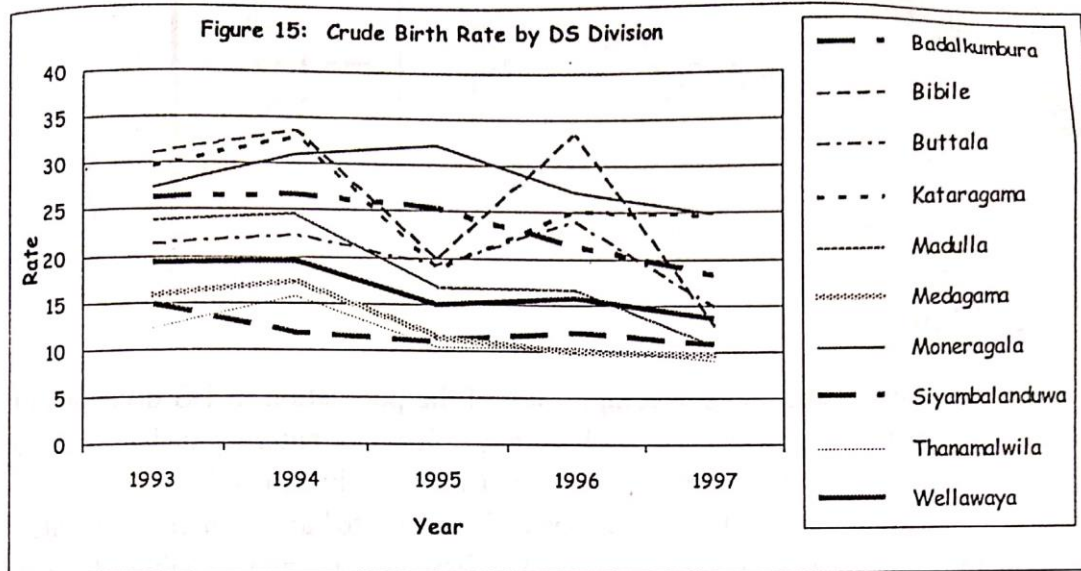
Figure 14: Population Distribution by Sector



Fertility and Mortality Trends

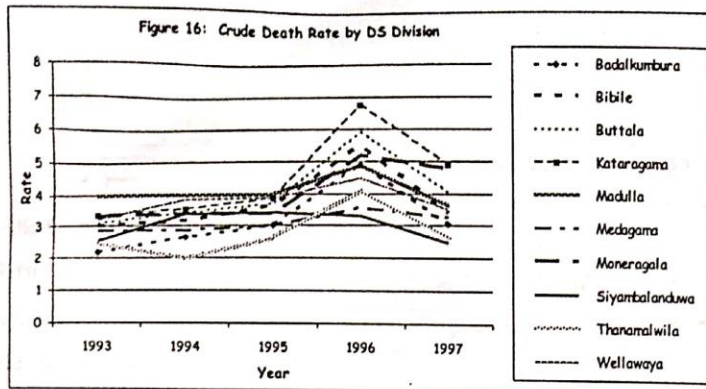
Moneragala has always been regarded as a district with a high fertility rate because of the potentially high fertility carried by the migrants to the land colonization schemes in the district. This was mainly due to the selection of the settlers on the basis of their poverty status and family size. Since the parent generations had larger family size norms, one cannot expect the attitudinal changes regarding fertility norms to occur among the younger generation so quickly, and thus the younger generations also have produced a relatively large number of children.

Figure 15 portrays the crude birth rate (CBR) calculated for each DS division in the district from 1993 to 1997. Since the recent data on births are not complete, we are not in a position to view the trend of births in the recent past. However, the trend observed in births from 1993 to 1997 can provide us with an understanding of what is going to happen to the trend in births in the Moneragala district. Although there has been a decline in the CBR in all the DS divisions in the district, some fluctuations are visible in Siyambalanduwa, Kataragama and Bibile. In addition, there is a tendency for the divisional fertility rate in all divisions to converge towards the same level. However, Moneragala and Kataragama still show relatively high fertility rates compared to the other DS divisions. Since fertility in general has been declining in the district as a whole, the fluctuations observed in these DS divisions may be due to the high fertility of the recent migrants, as these two divisions have been attractive migrant-destination-areas in the recent past. Therefore, if the government wants to carry out a fertility control programme, then it should be concentrated in these two DS divisions.



The health status of the people in the district seems to be relatively good compared to most other districts in Sri Lanka since all the mortality indicators show a declining trend in mortality. The maternal mortality rate in the district has declined from 0.8 deaths per 1000 live births in 1984 to 0.3 deaths per 1000 live births in 1996. Infant mortality rate has declined from 7 per 1000 live births in 1988 to 4.2 per 1000 live births in 2000, which is about 9 infant deaths less than the country average. Life expectancy is one of the highest in the country, registering 80 years (3 years greater than the country average), as indicated in the National Human Development Report.

The crude death rate has, in general, varied between 2 per 1000 population and 5 per 1000 population in the DS divisions although there was a peak exceeding this range in 1996 (Figure 16). It appears that this is the case in all the DS divisions, and our investigation indicates that this phenomenon is due to changes made in the registration of deaths, which provided a provision to appeal against refusal to issue certificates or issue of certificates.



Conclusion

The analysis of the age and sex composition of the population in DS divisions of Moneragala district shows that larger cohorts of youth will be entering the labour force ages except in Kataragama, Badalkumbura and Bibile DS divisions. The labour force in Medagama and Moneragala DS divisions will continue to have high illiteracy rates, while in the other DS divisions more literate youth will be entering the labour force in the future. Therefore, different development strategies need to be adopted when trying to create employment opportunities in various DS divisions in the district by considering their cohort size as well as the educational level and other characteristics.

Migration plays a significant role in shaping the age and sex distribution as well as the growth of the population compared to the influence of fertility and mortality. There is a convergence of both fertility and mortality rates in various DS divisions in the district, but at different levels. Since fertility has converged into a similar level in all the DS divisions except in Moneragala and Kataragama, suitable fertility programmes should be concentrated in these two DS divisions.

Intra-district in-migration shows that mobility is not so high, but a substantial proportion of the population in the district has moved into the district after residing in another district. In-migration is strongest in the southern parts of the district. Badalkumbura and Kataragama appear to be the destination for migrants who are interested in building their own house, while Buttala and Thanamalwila have been attractive for employment opportunities.

The majority of the population in economically active age groups is economically inactive in the district. Unemployment is severe in Medagama, Moneragala, Wellawaya and Kataragama DS divisions. Since there is an inverse association between employment and literacy, it is suggested that improvement of farm agriculture is important especially

in the DS divisions where unemployment is relatively low such as Siyambalanduwa, Badalkumbura and Thanamalwila while promoting the non-farm employment activities in the DS divisions where unemployment levels are relatively high. In fact, intra-district in-migration is also taking place to DS divisions where the illiterate in-migrants can engage in farm agriculture.

Thanamalwila, Siyambalanduwa, Buttala, Madulla and Wellawaya DS divisions show very high child dependency ratios compared to other DS divisions in the district. The main reason for having relatively high child dependency in the district is the prevalence of high fertility in the district from the 1950s, which was primarily associated with migration of high fertility families. Old age dependency ratio is not going to be a major problem in the near future because of the low old-age dependency recorded for all the DS divisions.

The population growth rate during the past two decades has influenced the population density to increase considerably. The highest density is seen for Badalkumbura while the lowest is reported for Kataragama. The most interesting observation here is the negative association between the density of the population and land area.

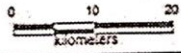
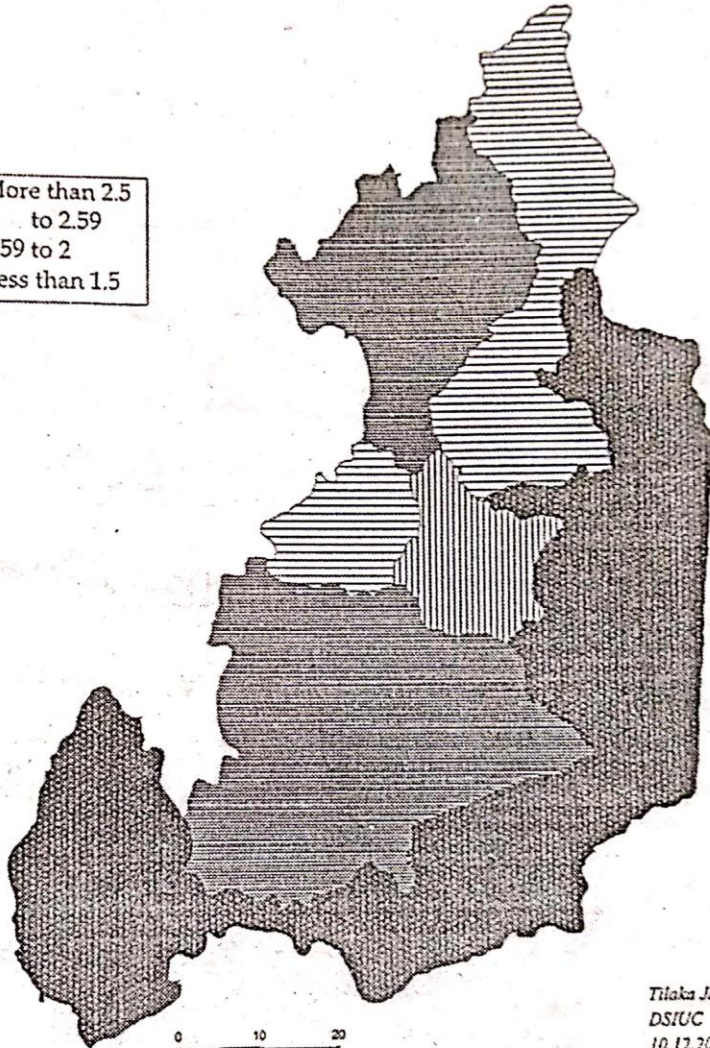
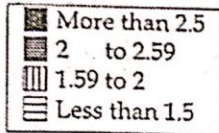
It is quite important to note that all the ethnic groups in Moneragala district except Sinhalese and Sri Lankan Moors show a declining trend in terms of numbers in the recent past. Majority of the Muslims live in Medagama while majority of the Sri Lankan Tamils are in the Moneragala DS division. Indian Tamils live in both Bibile and Moneragala D.S divisions. Although the proportion of the estate population in the district is insignificant, its absolute number shows that there are 8,224 people living in the estates and hence special attention should be given to their needs in the context of development in Moneragala.

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Population Growth Rate in the Moneragala District Map 11



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10.12.2002

