

**Outcomes, Quality and Reform:**  
Education Trends in the Central Province in  
Sri Lanka

**Nireka Weeratunge**

February 2003  
Article Series No. 5 - 2004

## TABLE OF CONTENTS

<b>1. Background</b>	<b>1</b>
<b>2. Methodology</b>	<b>2</b>
2.1 Conceptual issues	2
2.2 Methods	2
<b>3. Results of the study</b>	<b>3</b>
3.1 Literacy rates	3
3.2 Education level of the sample population	5
3.3 School enrolment and avoidance	7
3.4 Drop-out rates	8
3.5 The quality of primary and secondary education	12
3.5.1 Pupil-teacher ratios	12
3.5.2 Teacher wages	13
3.5.3 Type of school attended	13
3.5.4 Assessment of the quality of education	14
3.5.5 Perceptions of corporal punishment	15
3.5.6 Preferred school	16
3.5.7 Preferred curriculum	17
3.6 Paying for education	18
3.6.1 Private tuition and training	18
3.6.2 Pre-school education	20
3.6.3 Non-formal education	21
3.7 Vocational education	22
3.8 Gender disparities in education	23
3.9 Aspirations from education	24
3.9.1 The purpose of education	25
3.9.2 Desired level of education	27
3.9.3 Preferred sector and type of employment for children	28
3.10 Institutional changes: Education reform	29
<b>4. Conclusion</b>	<b>31</b>
<b>5. Policy implications</b>	<b>31</b>
<i>References</i>	<b>32</b>

## 1. Background: Government programmes and donor-supported inventions in education

Since Independence, the state has focussed on making education accessible to all, reflected in the relatively high literacy rates and enrolment figures in the Central province and in Sri Lanka generally. However, as education expanded to include the greater population of school-age children, there has been a consequent decline in the quality of education, as well as regional and sectoral disparities. To increase enrolment and attendance the public school system offers school uniforms and subsidised public transport. To promote education quality and improve achievement free textbooks are distributed and the Grade 5 Scholarship Programme has been instituted. In 1997 the government introduced new reforms to deal with the deteriorating quality of education. These cover five major areas: extending opportunity, quality improvement, practical and technical skill development, teacher training and management/ resource provision (Presidential Task Force 1996).

The state spent 2.74% of the GNP and 6.7% of total government expenditure on education in 1982 (UGC 1997). In 1996 the share of education had increased slightly to 3.41% of the GNP and 8.9% of total government expenditure. Of the allocation for education, the major share went into primary and secondary education. The share of tertiary education from the total expenditure on education fell from 16.6% in 1982 to 14.7% in 1996.

**Table 1 Number of government schools in the Central Province by District**

District	1991	1997	2000
Kandy	685	689	667
Matale	311	320	319
Nuwara Eliya	456	521	517
<b>Total</b>	<b>1452</b>	<b>1530</b>	<b>1503</b>

Source: Ministry of Education 1992, 1998, 2001

There was an overall increase in the number of schools in the Central Province between 1991 and 2000, and a marginal decline between 1997 and 2000. Nuwara Eliya district with a 13.4% growth in government schools contributed largely to this increase. By 2000, there were no disparities among the three districts in enrolment in government schools, considered as a percentage of the total population.

**Table 2 Pupil enrolment as a percentage of the total population by District, 2000/2001**

District	Total population	Pupil enrolment	Percentage
Kandy	1,272,463	296,817	23.3
Matale	442,427	104,300	23.6
Nuwara Eliya	700,083	165,941	23.7
Central Province	2,414,973	567,058	23.5

Source: Census 2001; Education Ministry 2001

Over a third (526) of government schools in the Central Province have been assisted under SIDA, GTZ, IDA, UNICEF, UNESCO, NORAD, FINNIDA, ADB, ISD-supported and other projects by 1997 with teaching materials, resources and teacher training. Over half (54%) of the schools in the Nuwara Eliya district where education indicators have been relatively poor for decades, have been assisted.

These constitute the activities and services of the education programmes and projects. The use of these outputs and services and the direct benefit to "target groups" are subject to some sort of evaluation by the institutions implementing these projects/programmes.

## 2 Methodology

### 2.1 Conceptual issues

In the JIMOD study, our primary interest was in both the direct and indirect impacts of these education interventions, by looking at the overall changes in education outcomes that have taken place in the Central Province. The assumption was that these changes could be dependent or independent of project activities. In education, trends and patterns in several areas were examined.

The study looked at both education outcomes and how these were perceived and assessed by members of households. Differences by district, sector, status of development, gender and ethnicity were examined wherever relevant. The literacy and education levels among the households interviewed were investigated. The type of school preferred and the reasons for this preference were explored. The incidence of school avoidance (non-enrolment) and drop-outs among households, the levels of the school cycle when this occurred and the reasons were examined. Parents' assessment of the quality of education received by their children was analysed. The rise in enrolment in pre-school education was investigated. The proportion of the population with formal vocational training was looked at, and the notions parents held about vocational training as an option for their children. The rise in attendance of private tuition and supplementary education was also examined. The overall purpose of education, as perceived by parents in their aspirations for the future of their children, was also analysed.

### 2.2 Methods

The analysis of this study is based on available regional-level secondary data, as well as primary data from the JIMOD Household Survey and the Participatory Assessment. The Household Survey comprised 440 households from the three districts of the Central Province, Kandy, Matale and Nuwara Eliya, stratified according to sectors, "more developed" and "less developed" areas (based on a set of indicators), ethnicity and gender. It was based on a structured questionnaire. More details are provided in the overview paper in this series<sup>1</sup>.

The Participatory Assessment used a qualitative open-ended questionnaire and was conducted among a smaller sample of 60 households selected from the larger pool. The purpose of this component was to understand the processes and causes of development/stagnation within communities in the Central Province. Altogether 12 units (6 villages, 3 estates, 3 urban neighbourhoods in the three districts) were covered indicative of "less developed" rural (LDR), "more developed" rural (MDR), estate and urban sectors within the three districts. The *urban* units covered were in the DS divisions of Gangawatakorale (Kandy), Matale and Nuwara Eliya. The *estate* units covered were located within the DS divisions of Doluwa, Rattota and Nuwara Eliya. The *"more developed" rural* units covered were in the DS divisions of Uduuwara, Yatawatte and Kotmale. The "less developed" rural units were located in the DS divisions of Doluwa, Galewela and Walapane.

The results of the Participatory Assessment are not necessarily representative of the sectors, but indicative of significant issues and problems surrounding education. Percentages have not been calculated for the data generated from this process as the sample size was small but tables with numbers are provided to distinguish between dominant and minority views/tendencies. The quotes from respondents are more important than the numbers to understand the processes and causes influencing education outcomes among households in the Central Province.

As the proportion of university students in the sample was small, the paper does not address trends relating to university education.

---

<sup>1</sup> Centre for Poverty Analysis. 2003. Understanding development trends in the Central Province of Sri Lanka: A project-transcending model of impact monitoring. Colombo

### 3. Results of the study

#### 3.1 Literacy rates

The adult literacy levels in the Central Province have increased in the period between 1990-2000, according to available macro statistics; precise data by province and district are unavailable since no Census was carried out in 1991. According to the UNDP report for 1998, Kandy district had an estimated 90% literacy rate, in keeping with the national average, Matale recorded 87%, and Nuwara Eliya 78%, the lowest rate of all districts in the country. However, the literacy rate is a misleading indicator, as it merely reports the number of people who claim to be able to read and write their name, and does not say anything about whether the person can actually read or write or the person's ability to function in the written language. While the JIMOD study by its nature could not attempt to measure functional literacy it attempted to establish what was termed "proven literacy" by administering a reading test to all those who had less than seven years of schooling to verify claims of literacy.

**Table 3 "Proven" literacy (persons above 10 years), percentages**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	84	96	78	85
Rural	81	80	80	80
Estate	61	61	65	62
More developed	89	82	77	72
Less developed	71	74	69	84
Male	80	83	80	81
Female	78	74	68	75
<b>Total</b>	<b>79</b>	<b>79</b>	<b>74</b>	<b>78</b>

Source: JIMOD Household Survey 2001

According to the JIMOD household Survey results, "proven" literacy (of persons above 10 years) in the Central Province was 78%. Kandy and Matale districts had a rate of 79% and Nuwara Eliya 74%; the difference between the three districts is not as wide as in macro-level statistics. The estate sector in Matale has the lowest rate of 61%. The disparity between urban and estate sectors in Matale is as wide as 35% points. Moreover, the difference between "more developed" and "less developed" areas is significant, as much as 18% points in Kandy district. The female literacy rate is lower for the Central Province as a whole while the difference is marginal only in Kandy district. The disparity in Nuwara Eliya between males and females is 12% points, particularly due to the presence of an older generation of women who did not have access to schooling.

**Table 4 "Proven" literacy (persons above 10 years) by ethnicity, percentages**

Ethnicity	Kandy	Matale	Nuwara Eliya	Central Province
Sinhalese	82	81	73	81
"Sri Lankan" Tamil	68	55	80	70
"Indian" Tamil	44	57	66	56
Moor	89	89	88	88
Burgher	100	-	-	100
Mixed	100	-	-	100
Other	-	-	-	-
Total	79	79	74	78

Source: JIMOD Household Survey 2001

In terms of ethnicity, literacy was highest among Moors in all three districts, as well as in the province as a whole. It was lowest among "Indian Tamils" in Kandy and Matale districts, as well as overall in the province. The disparity between the two ethnic groups is as large as 32% points in the province as a whole. The literacy rate among Sinhalese was also low in Nuwara Eliya district.

**Table 5 "Proven" literacy (persons above 5 years), by age, percentages**

Age group	Kandy	Matale	Nuwara Eliya	Central Province
5-19	87	77	86	84
20-35	85	91	77	85
36-55	75	75	61	72
55+	62	62	61	61
Total	80	78	74	78

Source: JIMOD Household Survey 2001

In order to understand how effective comparatively the school system was in teaching literacy, "proven" literacy levels by age groups were analysed. In the Central Province as a whole literacy is higher for the younger groups. However the rate for the 5-19 age group is marginally lower than that for the 20-35 age group. In Kandy and Nuwara Eliya districts 5-19 year olds have a higher level of literacy than their counterparts in the age group between 20-35 years. However, in Matale district the literacy level of the 5-19 age group is considerably lower than that of the 20-35 age group, indicating lower performance in the school system.

**Table 6 Differences in "proven" literacy in the school age population (5-19) years, percentage**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	81	75	59	71
Rural	84	77	86	83
Estate	69	58	81	70
More developed	86	80	73	81
Less developed	78	64	91	77
Male	77	73	79	76
Female	86	70	81	81
Total	82	72	77	78

Source: JIMOD Household Survey 2001

The lower outcomes in the Matale district are corroborated by examining differences in literacy within the school age population of the province. The “proven” literacy level in the 5-19 age group is the same as the overall literacy level recorded for the Central Province. In Kandy and Nuwara Eliya districts literacy among 5-19 year olds is slightly higher than among the general population. In Matale district the rate is somewhat lower than in Nuwara Eliya district; literacy levels are lowest in the estate sector of this district. The rate among 5-19 year olds in the urban sector in Nuwara Eliya district is significantly lower than among the general urban population. There is also a big disparity in the literacy rates between the more and less developed areas; this is particularly acute in the Matale district. Moreover, while literacy levels are generally higher among girls than boys in the Kandy and Nuwara Eliya districts, as well as the province as a whole, in Matale district it is lower among girls.

### 3.2 Education level of the sample population

The education level of the general population covered under the Household Survey revealed the many disparities within the province, showing the uneven outreach of the education system.

**Table 6 Level of education of the total population surveyed, percentages**

	Primary 1-5	Junior secondary 6-9	GCE “O” level 10-11	GCE “A” level 12-13
<b>Kandy</b>	24.3	24.8	27.8	12.5
<b>Matale</b>	28.7	22.7	27.8	9.8
<b>Nuwara Eliya</b>	26.3	28.8	22.9	8.3
<b>Urban</b>	15	21.2	31.6	19.8
<b>Rural</b>	25.9	25.6	28.9	10.5
<b>Estate</b>	36.8	25.8	14.9	4
<b>More developed</b>	22.2	24.1	31.4	14
<b>Less developed</b>	29.7	25.7	22.3	8
<b>Male</b>	28.5	27.6	26	9.7
<b>Female</b>	25.9	24.9	27	11
<b>Central Province</b>	<b>25.9</b>	<b>24.9</b>	<b>27</b>	<b>11</b>

Source: JIMOD Household Survey 2001

\* Percentages do not add up to 100, as the population with no schooling and the minute proportion of people with tertiary education has been left out of this table.

Out of the four categories, the larger proportion (27%) of the province's population comprises those with 10-11 years of senior secondary level schooling. This category is highest (31%) in the urban and more developed sectors. The estate sector has the lowest proportion (14.9) in this category. Of the three districts, Nuwara Eliya has the lowest percentage of people with 10-11 years of schooling, thus consistent with the overall literacy levels within that district.

Kandy district has a bigger proportion (12.5%) of the population with 12-13 years of schooling, as does the urban (19.8%) and more developed (14%) sectors in the province as a whole. The proportion of women with 12-13 years of schooling is somewhat higher than of men, and the percentage of women with 10-11 years of schooling is also slightly higher than of their male counterparts.

On the whole, around 38% of the population surveyed in the Central Province had a senior secondary level education (counting both groups 10-11 and 12-13 years of schooling). The enormous disparity between the urban sector with over 50% of its population having a senior secondary education, in comparison to only 19% in the estate sector is significant. It is consistent with the continuously high drop-out rates at junior secondary level in the estate sector, as discussed in the section below.

**Table 7 Level of education of by ethnicity, percentages**

Ethnic group	Primary 1-5	Junior secondary 6-9	GCE "O" level 10-11	GCE "A" level 12-13
Sinhalese	24.6	23.6	29.1	12.5
"Sri Lankan" Tamil	32.7	27.4	19.6	6.9
"Indian" Tamil	33.6	28.5	13.9	2.2
Moor	18.6	31.4	33.3	10.8
Burgher	-	33.3	33.3	33.3
Mixed	33.3	66.7	-	-
<b>All</b>	<b>25.9</b>	<b>24.9</b>	<b>27</b>	<b>11</b>

Source: JIMOD Household Survey 2001

\*Percentages do not add up to 100, as the population with no schooling and the minute proportion of people with tertiary education has been left out of this table

Leaving Burghers and the "Mixed" category out of the analysis, as the number of individuals in the sample was small, the ethnic group with the best overall educational attainment is the Moors. The highest proportion (44%) of the population completing a senior secondary education (years 10-13), as well as a junior secondary education (31%) is within this ethnic group. The Sinhalese have a higher attainment only in the category of 12-13 years of schooling. The lowest educational outcomes are among the "Indian" Tamils, with only 16% of the group having a senior secondary education. The ethnic disparities in educational levels of the population within the province are consistent with the literacy data analysed above.

### 3.3 School enrolment and avoidance

While pupil enrolment increased by 26% between 1981-1991 in the Central Province, there was a decrease of 1.6% between 1991 and 2000 (Ministry of Education 2001). The increase in enrolment seems to have peaked, and Kandy and Matale districts both show decreases in enrolment between 1997 and 2000.

**Table 8 Pupil enrolment in the Central Province, 1991 -2000**

District	1991	2000	Change
Kandy	306,358	296,817	- 3.1%
Matale	109,033	104,300	- 4.3%
Nuwara Eliya	161,121	165,941	+ 3%
<b>Central Province</b>	<b>576,512</b>	<b>567,058</b>	<b>- 1.6%</b>

Source: Education Ministry 1992, 2001

The combined primary, secondary and tertiary enrolment rate for the province was 43.9% in 1994 (UNDP 1998). Nuwara Eliya district where the combined enrolment rate at 45.42% in 1994, was the highest out of the three districts, shows a marginal increase in enrolment between 1997 and 2000. The higher enrolment rate in Nuwara Eliya where other education indicators, including secondary school enrolment rates, have been poor, needs to be accounted for. While the primary gross enrolment rate for the Central Province in 1994 was 111% (this might reflect over-aged children who are repeating), the secondary gross enrolment rate at 86%, was the lowest of all provinces in the country (Nanayakkara 2000).



The education ministry maintains no statistics about school avoidance. Thus, district level data are unavailable. The school avoidance (non-enrolment) rate as a percentage of the school-going age group, estimated for Zone 4 (which includes the Central Province as well as Uva and Sabaragamuwa) was 8.8% in 1996/7, reduced substantially from the 14.5% rate in 1986/7 (Central Bank 1993, 1999). However, one of the main reasons for avoiding school, the inability to provide basic requirements, which was cited by 17% of the Central Bank sample, remained unchanged 10 years later. The highest drop in school avoidance has been from the estate sector, which however continued to have the highest sectoral school avoidance rate of 12.7% in 1996/7.

**Table 9 Those who have never attended a school in the 5-19 age group in the Central Province**

Category	No	As % of age group
Kandy district	9	3%
Matale district	4	3%
Nuwara Eliya district	1	0.8%
Urban	4	4.6%
Rural	5	1.5%
Estate	5	4.6%
More developed	5	1.9%
Less developed	9	3.4%
Male	6	2.3%
Female	8	2.9%
Central Province	14	2.6%

Source: JIMOD Household Survey 2001

According to the JIMOD Survey data, school avoidance in the 5-19 age group was very low in the Central Province. It was lowest in Nuwara Eliya district. It was highest in the urban and estate sectors. It was higher in the less developed areas and marginally higher for females than males. The main reasons for school avoidance according to the JIMOD Household Survey data was housework and illness (23% each), with financial constraints having decreasing importance (8%) relative to those (19%), who had never gone to school in the entire sample. Mental disability and five/six year olds who had not yet been admitted to school also accounted for some of the school avoidance. Work on the family land and the lack of a nearby school, which were significant reason for an older generation who never went to school, did not emerge as reasons at all, among the current generation of children.

### 3.4 Drop-out rates

Drop-out rates up to Year 9 in the Central Province was 3.31% in 1991 and had decreased slightly to 2.93% in 1997, according the Education Ministry statistics (1991,1997). However, drop-out rates in Year 9 reached 7.31% in the entire province and up to 13% in plantation schools in the Nuwara Eliya district in 1997. However, the highest drop-out rate is at "O" level which over three quarters of students in the Province fail. Additionally the number of students enrolled at "A" level is quite low in Nuwara Eliya in relation to its population size, in the macro-level statistics.

Drop-out statistics produced by the Education Ministry remain unreliable, especially since 1991. Thus an attempt was made to examine school attendance as a proportion of the population under 18 years of age. Since the school avoidance rate is low and the proportion of students in the school system over 18 years of age is also low, this provides a rough estimate of those students who have

dropped out in the school-going age. Thus, around 30% of school-age students seem to be out of school within the province.

**Table 10 School attendance as a proportion of population under 18 years of age**

District	Population under 18	Pupil enrolment	Percentage
Kandy	429,672	296,817	69
Matale	150,033	104,300	69.5
Nuwara Eliya	256,297	165,941	64.7
<b>Central Province</b>	<b>836,002</b>	<b>567,058</b>	<b>67.8</b>

Source: Census 2001; Education Ministry 2001

This is slightly higher than the proportion of students, who once went to school but were no longer going to school, enumerated by the JIMOD survey, as a proportion of the population between 5-19 years of age, to indicate the drop-out rate within the province and districts.

**Table 11 Drop-out rates for school age population (5-19 year olds), percentages**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	27	25	23	<b>25</b>
Rural	19	26	18	21
Estate	<b>29</b>	22	<b>17</b>	23
More developed	<b>23</b>	<b>29</b>	<b>23</b>	<b>25</b>
Less developed	20	21	12	19
Male	21	25	25	23
Female	23	24	<b>14</b>	21
<b>Total</b>	<b>22</b>	<b>25</b>	<b>19</b>	<b>22</b>

Source: JIMOD Household Survey 2001

Drop-out rates in this age group are highest in Matale District at 25% and lowest in Nuwara Eliya district at 19%. The urban sector and the more developed areas have the highest drop-out rate overall in the Central Province at 25%. The drop-out rate in the estate sector in Nuwara Eliya is the lowest at 17% while that of the estate sector in Kandy is the highest at 29%. Thus, there are wide disparities within sectors, across districts. Interestingly the more developed areas with higher economic opportunities have a higher drop-out rate than the less developed areas. Overall, drop-out rates for males are slightly higher than for females, with the exception of Kandy district.

An attempt was made to understand at what level of the school cycle students in the age group between 5-19 dropped out most. Drop-out rates were highest at the "O" level at the overall provincial level with 44% leaving the school system during these years. However, drop-out rates were high at junior secondary level (particularly in the Year 8 and 9) in the Nuwara Eliya district (56%), the estate sector in general (48%), among boys (42%) and in less developed areas (41%) in that order. The qualitative assessment revealed the highest drop out rates in the less-developed rural and urban sectors.

**Table 12 Education level of school leavers, aged 5 -19, in the Central Province, percentages**

	<b>Primary 1-5</b>	<b>Junior secondary 6-9</b>	<b>GCE "O" level 10-11</b>	<b>GCE "A" level 12-13</b>	<b>Total</b>
<b>Kandy</b>	14	29	47	8	100
<b>Matale</b>	17	33	46	4	100
<b>Nuwara Eliya</b>	0	56	31	13	100
<b>Urban</b>	12	41	35	12	100
<b>Rural</b>	10	27	53	10	100
<b>Estate</b>	20	48	29	0	100
<b>More developed</b>	15	30	46	10	100
<b>Less developed</b>	10	41	41	5	100
<b>Male</b>	10	42	42	4	100
<b>Female</b>	15	27	46	12	100
<b>Central Province</b>	12	35	44	8	100

Source: JIMOD Household Survey 2001

In the mandatory schooling years (5-14), the overall drop-out rate in the Central Province for this age group was not generally high at 6%. However, the urban sector, as well as the Kandy estate sector showed higher rates. The urban rate for Matale was particularly high at 25%. The female drop-out rate for this age group was somewhat higher in Kandy but only marginally higher in the province as a whole. More developed areas showed higher rates than less developed. In general, there was a consistency in drop-out rates for both age groups in sectors and districts, in terms of gender and development status. Thus, boys tended to drop out more than girls at the senior secondary levels as did students in less-developed in contrast to students from more developed areas.

**Table 13 Drop-out rates for school age population (5-14 year olds), percentages**

<b>Category</b>	<b>Kandy</b>	<b>Matale</b>	<b>Nuwara Eliya</b>	<b>Central Province</b>
<b>Urban</b>	14	25	5	<b>11</b>
<b>Rural</b>	6	7	0	<b>5</b>
<b>Estate</b>	14	5	0	<b>6</b>
<b>More developed</b>	11	12	2	<b>9</b>
<b>Less developed</b>	5	3	0	<b>4</b>
<b>Male</b>	6	7	3	<b>6</b>
<b>Female</b>	10	7	0	<b>7</b>
<b>Total</b>	<b>8</b>	<b>7</b>	<b>1</b>	<b>6</b>

Source: JIMOD Household Survey 2001

In the 5-14 age group, the highest drop-out rate overall in the Province (47%) is at the primary level. The only exception here is less developed areas where there is a similar drop-out rate (50%) in Year 6 and 7. Of those who drop-out during the mandatory years of schooling, a high proportion of girls (64%) does so at primary level, as do high proportions of students from Matale district, the urban sector and the more developed areas. In Nuwara Eliya district no student had dropped out at the primary level.

**Table 14 Education level of those who dropped out, age 5-14, in the Central Province, percentages**

	1-5	6-7	8-9	GCE "O" level	Total
Kandy	46	23	15	15	100
Matale	60	40	-	-	100
Nuwara Eliya	-	-	100	-	100
Urban	60	20	20	-	100
Rural	40	30	10	20	100
Estate	50	25	25	-	100
More developed	54	15	15	15	100
Less developed	33	50	17	-	100
Male	25	38	13	25	100
Female	64	18	18	-	100
<b>Central Province</b>	<b>47</b>	<b>26</b>	<b>16</b>	<b>11</b>	<b>100</b>

Source: JIMOD Household Survey 2001

#### *The reasons for dropping-out of school*

The Participatory Assessment revealed that children drop out of school for a multitude of reasons. These included personal reasons such as lack of interest and poor performance in school, as well as distance and inconvenience for parents to take a child to school.

*If the children can study well I like them to study as much as possible. I would spend money to send them to school. At least up to Year 10. But if the children refuse we can't do anything. My daughter stopped in Year 9 because she failed twice. So she said even if I go to school I won't be allowed to sit for the examination. She is very backward in education and she knew it. We forced her to go to school but she didn't go. (Sudumenike, Nuwara Eliya district, LDR)*

*Our son dropped out in Year 4 because the village school was closed for some time as there were no teachers and there was nobody to take him or accompany him to a more distant school. None of the other village children were sent to an outside school at that time. (Menikhami, Nuwara Eliya district, LDR)*

The behaviour and condescending attitudes of some teachers, as well as the low quality of teaching deter some students.

*My son stopped in Year 9. One day the teacher had punished him because he did not wear shoes. We didn't have enough money to buy shoes. So he left school. He didn't want to study further. (Sumanalatha, Kandy district, LDR)*

*My two sisters stopped going to school in Year 10. They refused to go to school when their Maths and English teachers were transferred since the teaching became bad. My mother tried to put them into a school in Matale but they were refused because they hadn't passed the Year 5 scholarship exam. Normally estate students are not enrolled there because the estate school has up to Year 10 and if everybody goes to Matale there won't be enough students in the estate school. (Meena, Matale district, Estate)*

Economic constraints and problems in the life cycle of the household also resulted in some children leaving school.

*Father became sick and stopped working and we had food problems at home so I decided to give up school after Year 5. Mother was not working too since she was sick. I was the eldest so I had to go for work. It would have been better if I had studied more then I would have go a job and not have to work among the rocks in the sun and rain. (Jeyanthi, Nuwara Eliya district, Estate)*

Thus, the reasons for dropping out are complex and need to be examined carefully, especially at the secondary level. Although the study regarded absenteeism as an important concern as well, and the Participatory Assessment queried households on absenteeism, there were no significant findings here as nearly all households with school-going children said that children stayed at home only in the event of sickness.

### **3.5 The quality of primary and secondary education**

The quality of education in the Central Province school system is very low (Aturupane 1998, UNDP 1998) and relatively lower even than the overall quality of the Sri Lankan education system, as a whole. The repetition rate up to Year 13 was 10.98% in 1991. The repetition rate up to Year 9 was 4.94% in 1997, with higher rates in plantation schools in the Nuwara Eliya district. As repetition of grades has been abolished, this is no longer an indicator to monitor the quality of the education system.

However, even if students do not repeat, the level of knowledge they take with them to the next grade is questionable. The low performance is particularly striking in the primary cycle with only 18.8% pupils mastering grade-appropriate language skills, 12% mastering numerical skills and 18% mastering life skills in the Central Province (NIE study 1995). Thus, less than a fifth of primary pupils reach basic grade-appropriate skill levels.

In the province only 23.1% passed the "O" level, and 43.8% passed the "A" level, below the national average of 25% and 47% respectively (Aturupane 1998). That less than a quarter of students pass the "O" level examination is generally consistent with the primary school skills acquisition rates (as a large percentage of the poor performers would have already dropped out by year 9) and reveals again the low quality of education.

Micro-level classroom studies (Jayasena 1998, 2000; Embekke 2000) in the Kandy district show lack of teacher "efficiency", lack of lesson planning by teachers, non-stimulating classroom environments, and the functioning of anti-school cultures.

In this section, first, pupil-teacher ratios and wages of teachers are discussed as factors affecting quality. Second, to investigate the quality of education received by children in the households surveyed, factors such as the type of school attended, the choice of their current school and the assessment of parents of the quality of education overall, teaching, curriculum and facilities were considered. Their preferences in terms of schools and the curriculum if they had choices, were also explored.

### 3.5.1 Pupil-teacher ratios

Teachers increased by 27.5% between 1981 - 1991 in the Central Province, but by only 11.6% between 1991-2001 (Education Ministry 1993, 2001). While the overall pupil-teacher ratio in the province was 23:1 in 1991, it had decreased somewhat to 20.5:1 in 2001. However, the pupil-trained teacher ratio in the province was 34:1 and the pupil-graduate teacher ratio was 80.6:1 in 2001. General pupil-teacher ratios in the three districts do not show a wide variation, ranging from 19:1 in Kandy, 20:1 in Matale to 23:1 in Nuwara Eliya. However, the disparity between Nuwara Eliya and the other two districts is considerable in the pupil-trained teacher ratio (Nuwara Eliya 41:1 and Matale 30:1) and pupil-graduate teacher ratio (Nuwara Eliya 155:1 and Kandy 63:1). Moreover, the highest overall pupil-teacher ratio in 1997 in the Central Province at 31.9:1 was in plantation schools in the Nuwara Eliya district. Plantation schools also have considerably less trained and graduate teachers than other schools.

According to the 2001 figures, a noteworthy aspect in the province as elsewhere in the country, is that "better" schools with classes up to "A" level (1AB and 1C type) have higher pupil-teacher ratios than those with classes up to primary, junior secondary and "O" level (Type 2 and 3). Tamil medium schools in the province have slightly higher pupil-teacher ratios than Sinhalese medium schools, except in Nuwara Eliya district where the difference is considerable. While mixed schools have a lower pupil-teacher ratio, there is no major difference between girls' and boys' schools.

### 3.5.2 Teacher wages

In addition to low teacher competence, low motivation within the teaching profession is a significant trend. The real wage index of teachers, which decreased from 1988 to 1992, increased somewhat in 1995 and decreased substantially by 1997 (Aturupane 1998). Micro-studies (Ranatunge 2000) in the Kandy District reveal the low level of job satisfaction experienced by teachers in comparison with other state sector and public corporation employees, primarily due to the lack of career advancement. The lack of commitment to teaching is reflected by teachers engaging in additional economic activities, considering teaching merely as a transition stage to better prospects.

### 3.5.3 Type of school attended

The vast majority of students (95.8%) sampled in the JIMOD household survey who were attending an educational institution was at a state school. Around 1.3% was in private schools and 0.1 in an English medium "international school". Around 2% were in a university.

The Participatory Assessment looked at the type of schools students from the households were attending. The biggest proportion of students in the urban and rural sectors was attending a

**Table 15 Type of school currently attending**

Type of school	Urban	Estate	MD Rural	LD Rural
National/city school w/in district	3	-	1	-
National/city school outside district	-	-	-	-
Private school w/in district	-	1	-	-
Central school (M.M.V.) within district	1	-	1	2
Secondary school (M.V.) within district	<b>8</b>	6	<b>12</b>	<b>10</b>
Closest primary/junior secondary school	1	<b>10</b>	2	7
International school w/in district	1	-	-	-

Source: JIMOD Participatory Assessments 2001

senior secondary school (*maha vidyalaya*) within the district. In estate sector households, most children were attending the closest primary or junior secondary school, usually located within the estate.

**Table 16 Choice of current school**

Reason	Urban	Estate	MD Rural	LD Rural
Closest/convenient school	9	9	8	13
Can stay with relative	-	-	-	1
Closest secondary school	-	3	2	1
Central school is better/ passed scholarship exam	-	-	1	1
Need to send them to better school	5	2	1	-
Father old boy of city school	-	-	1	-
Nearest Muslim school	-	-	1	-
Nearest Sinhalese school	-	1	-	-
Central school allocated after scholarship	-	-	1	-
Small class size	1	-	-	-

Source: JIMOD Participatory Assessment 2001

The majority of households in all sectors chose the particular school for their children because it was the closest or most convenient school. However, a considerable number of urban households selected a school that was considered "better" in terms of quality of instruction and prestige, irrespective of distance.

#### 3.5.4 Assessment of the quality of education

The overall quality of education within the province was generally rated as "good" by the majority of households. However, there was a minority from the less developed rural, urban and estate sectors rating the quality as low. The more developed rural sector was the most satisfied with the overall quality.

**Table 17 Assessment of the overall quality**

Assessment	Urban	Estate	MD Rural	LD Rural
Good	11	11	13	11
O.K.	-	-	1	-
Inadequate	4	3	1	4
Don't know	-	1	-	1

Source: JIMOD Participatory Assessment 2001

In terms of the quality of teaching, parents also generally gave a positive assessment. They explained this positive assessment by pointing out that teachers explained lessons well to children, that they were kind and treated children well.

**Table 18 Assessment of teaching**

Assessment	Urban	Estate	MD Rural	LD Rural
Very Good	-	1	1	1
Good	9	8	11	8
Inadequate	5	4	2	5
Don't know	1	1	-	1

Source: JIMOD Participatory Assessment 2001

Those parents who expressed a negative assessment were mostly from the urban and less developed rural sectors. They said that teachers did not come to school regularly or on time. They did not know the subject matter adequately, had no proper training and were going to seminars all the time. They also said that teachers often do not correct children's mistakes, were rude to parents and were only interested in their pay. The insufficient number of teachers, especially in English and Mathematics, was also pointed out.

**Table 19 Assessment of the curriculum**

Assessment	Urban	Estate	MD Rural	LD Rural
Very Good	-	-	2	-
Good	8	7	10	10
O.K.	-	1	1	-
Inadequate	2	2	1	-
Don't know	5	5	-	5

Source: JIMOD Participatory Assessment 2001

The curriculum was assessed as generally "good". The rural sector, both more and less developed, revealed the most satisfaction with the curriculum. The positive assessment was based on the increase in practical knowledge, better standards in English and Mathematics compared to the past, as well as the introduction of computer education. Those who provided a negative assessment pointed out that children could not read and write properly any longer, that homework was difficult for parents to understand or help with and that there were too many assignments. There were also complaints that school materials had become increasingly too expensive and the teachers did not have the capacity to teach the new curriculum. Significantly, around a third of parents from the urban, estate and less developed rural sectors do not have any grasp of the curriculum that their children are following.

**Table 20 Assessment of facilities**

Assessment	Urban	Estate	MD Rural	LD Rural
Good	6	1	4	3
O.K.	1	-	-	-
Inadequate	7	12	10	12
Don't know	1	1	-	-

Source: JIMOD Participatory Assessment 2001

In contrast to the other aspects of education, there was near universal agreement, except in the urban sector, that the facilities in schools were grossly inadequate. Parents complained that basic amenities such as toilets, water and electricity were missing in many schools, in addition to science laboratories, playgrounds, music rooms and music instruments.

### 3.5.6 Perceptions of corporal punishment

It is well known that many schools, especially in the estate and rural sectors, still discipline their students with outdated methods of corporal punishment. The results of the Participatory Assessment show that apart from the urban sector, the majority of parents approved of corporal punishment. In terms of their views on this issue, there were three groups: those advocating corporal punishment unequivocally, those advocating limited use and those opposed to use.



**Table 21 Perceptions of corporal punishment**

Perception	Urban	Estate	MD Rural	LD Rural
Should use	4	10	7	11
Should use in a limited way	5	3 4	2	
Should not use	6	1	1	2

Source: JIMOD Participatory Assessment 2001

Those advocating use of corporal punishment explained that hitting was for the good of the child and that children did not learn without being hit. They would not do their homework if they were not hit. Children needed to be punished for their mistakes, Moreover, teachers were unable to control the children if they did not hit them. As parents hit children at home they could not blame teachers for hitting, they said.

Those advocating limited use of this type of punishment pointed out that children should be hit only for bad behaviour and not for making mistakes in their lessons. Teachers if they had to hit children, should use a ruler on their hand, rather than hitting them with the hand elsewhere on their bodies. Teachers should hit children only if other methods of control did not work, they said.

Those opposed to use of violence explained that children lost their interest in education when they were hit regularly by teachers. Teachers should use words rather than physical violence and discuss any problems they might be having with the child by having a meeting with the parent. It was also pointed out that hitting could damage the sensitive minds of children.

### 3.5.7 Preferred school

To understand whether parents' assessment of the quality of the current education of their children was based on knowledge of options available to them or simply on their limited experience, a question was asked on what type of school they would ideally prefer to send their children.

**Table 22 Preferred school**

Type of school	Urban	Estate	MD Rural	LD Rural
National/city school w/in district	5	6	5	1
National/city school outside district	2	-	1	-
Private school w/in district	-	1	-	-
Private school outside district	1	-	-	-
Central school (M.M.V.) within district	-	2	1	7
Closest secondary school (M.V.)	2	3	7	7
Closest primary school	1	1	-	-
International school w/in district	2	-	-	-

Source: JIMOD Participatory Assessment 2001

In the less developed rural sector around half of parents wanted their children to attend a central school in the district. In all other sectors, around half of the parents wished their children to attend a city school or national school. Some Nuwara Eliya parents wanted to send children to schools in Bandarawela or Kandy. Some Matale parents wanted to send children to Kandy. Thus, parents had an idea that city or national schools imparted a better quality education and had a reputation that the school closest to them did not have. The main obstacle reported to sending them to the preferred school was either distance or financial or both. In the rural sector around half of parents were satisfied with sending their children to the closest secondary school (*maha vidyalaya*).

### 3.5.8 Preferred curriculum

In order to explore whether parents' assessment of the quality of education was based on any distinct notions of what their children should know when they have completed their education, a question on what subjects they should be ideally learning in school was posed.

**Table 23 What would you like them to learn in school?**

	Urban	Estate	MD Rural	LD Rural	ALL
Practical things/skills for the future/ technological knowledge	5	3	5	6	19
English	3	4	7	3	17
Mathematics	1	1	4	2	8
Sports	5	-	2	1	8
Computer		2	1	4	-7
All three languages	3	3	-	-	6
Sinhalese	1	2	2	1	6
Art/music/speech/drama/dance	3	1	1	-	5
Social skills/values	1	2	-	2	5
Must learn everything	3	1	-	1	5
Science	-	-	3	1	4
Sewing/handwork/home science	1	-	2	-	3
Whatever is taught	1	2	-	-	3
To read/write	-	-	-	2	2
Religion	1	-	1	-	2
Agriculture	-	-	-	2	2
Health/Hygiene	1	1	-	-	2
Typing	-	-	1	-	1
History	1	-	-	-	1
Buddhist culture	-	-	-	1	1
Creative writing	1	-	-	-	1
Out-of-classroom learning/ field trips	1	-	-	-	1
Participation	1	-	-	-	1
Observation skills	1	-	-	-	1
Develop their intelligence	1	-	-	-	1
What they learn is adequate	-	1	-	1	2
Don't know	-	-	-	1	1

Source: JIMOD Participatory Assessment 2001

That parents were very clear about the links between education and future employment prospects was indicated by the fact that the majority of parents wished their children to obtain practical knowledge that would be useful to them later on in life. Many parents also emphasised the importance of learning English; this was particularly the case in the more developed rural sector. Parents from minority ethnic groups in the estate and urban sectors pointed to the importance of learning all three languages Sinhalese, Tamil and English. Sports were considered important by urban sector parents. Otherwise, parents mentioned a wide range of areas of learning from mathematics and science, agriculture and religion, to creative writing and out-of-classroom learning.

### 3.6 Paying for education

#### 3.6.1 Private tuition and training

The proportion of students receiving private tuition in Zone 4 increased from 19.19% in 1986/7 to 30.14% in 1996/7 in Zone 4, lower than the national average of 35% (Central Bank 1999). Around 19% primary, 40% secondary and 59% post-secondary students attended tuition classes. The increase in private tuition was highest in the rural sector between 1986/7-1996/7. Statistics for the Central Province and a breakdown by district are not available. The increase in private tuition could reflect both the aspirations of parents and students to pass competitive examinations in order to obtain a "qualification", as well as the low quality of school education.

The JIMOD study sought to have a better grasp of the number of students attending private schools, colleges and institutes, including English/elocution classes and computer classes both on a full-time and part-time basis. The decrease in the quality of the state education system, the mismatch between education and the demands of the labour market, and the liberalisation of the economy combine to increase the number of students seeking private education. Studies (Aturupane 1997) analysing enrolment choice in education reveals a high willingness to pay for educational quality. Despite government policy against the appropriate accreditation of private schools and universities, students and parents are choosing to invest in private education. The magnitude of this trend needs to be monitored. Thus, the Household Survey attempted to ascertain the number of students enrolled in private education, the payments made and the reasons given for choosing private tuition as an option.

Table 24 School-going children attending private tuition classes, percentages

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	39	80	35	40
Rural	32	20	19	28
Estate	29	7	28	21
More developed	38	19	28	31
Less developed	29	20	24	26
Male	27	21	18	23
Female	38	18	33	33
Total	33	19	26	28

Source: JIMOD Household Survey 2001

Overall in the province, around 28% of school-going children reported attending private tuition classes. This was highest in the urban sector (40%) and lowest in the estate sector (21%). Of the three districts, Kandy showed the highest rate at 33% and Matale the lowest at 19%. The more developed sector had a higher rate than the less developed sector, and considerably more girls than boys took private tuition. The disparity between girls and boys was most striking in the Nuwara Eliya district. It is clear that where incomes are higher as in the urban sector more parents are willing to pay for extra tuition for their children. However, it is significant that parents are willing to pay for their daughters' education, as much or more than their sons'. The highest proportion of students attending tuition classes was reported from the urban sector in Matale while the lowest was reported from the estate sector, also of that district.

Qualitative assessments indicate that households, ranging from around 30% in the less developed rural areas to 60% in the more developed rural areas, send their children to private tuition. These rates for households are much higher than the rates reported in the Household Survey for individual children.

**Table 25 Assessment of private tuition classes**

Assessment	Urban	Estate	MD Rural	LD Rural
Very good	-	-	-	1
Good	3	7	8	4
O.K.	1	-	1	-
Inadequate	2	-	1	-
Total HHs with children receiving tuition	6	7	10	5

Source: JIMOD Participatory Assessment 2001

Over half of the households sending children to private tuition were satisfied with the tuition their children received. This was clearly expressed in the estate, more developed and less developed rural areas. However, in the urban sector there was more dissatisfaction with the quality of private tuition.

Parents gave several reasons for sending their children for private tuition. The primary one was that teaching in school was inadequate and the syllabus was not covered. This was particularly true for senior secondary level students who were preparing for examinations. Personal reasons were also provided i.e. that their child was weak in a particular subject and therefore needed extra help. Moreover, socio-economic reasons were also provided. Parents pointed out that education had become very competitive, most children took private tuition and their child would lose out if they did not give the same benefit to the child.

**Table 26 Average monthly expenditure per person on private tuition, in SL Rupees**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	469	950	969	726
Rural	295	503	206	324
Estate	207	170	133	166
More developed	366	627	638	470
Less developed	260	504	129	287
Male	288	612	166	350
Female	332	480	567	407
All	315	559	455	384

Source: JIMOD Household Survey 2001

The average monthly expenditure on tuition per child was approximately Rs. 384 overall in the province. The costs were highest in the urban sector, recording Rs. 726 on average. Of the three districts, Matale revealed the highest cost at Rs. 559 per month. Tuition costs were higher in more developed areas than less developed, and for girls, in comparison to boys overall in the province. Matale district is an exception, in that costs were higher for boys than girls. The disparity between urban and rural/estate, more developed and less developed, and girls and boys (in favour of girls) was striking in Nuwara Eliya district. The highest expenditure (Rs. 969) for private tuition was reported from the urban sector in Nuwara Eliya and the lowest (Rs. 129) from the less developed areas of the same district.

**Table 27 Willingness to pay equivalent of tuition fees to govt. school, if quality of teaching improves**

	Urban	Estate	MD Rural	LD Rural
Willing	2	6	5	4
Willing if one-to-one attention	-	-	1	1
Willing as long as there is money	-	-	1	-
Willing to pay for "A" levels	-	-	1	-
Not willing	2	1	2	-
Don't know	2	-	-	-
<b>Total</b>	<b>6</b>	<b>7</b>	<b>10</b>	<b>5</b>

Source: JIMOD Participatory Assessment 2001

Except in the urban sector, the majority of parents who now send their children to private tuition were willing to pay this amount to the school if the quality of education improved. In the urban sector, some parents pointed out that state education needed to be free so that it is accessible to everyone. Others explained that private tuition is given to the child due to his/her weakness in the subject and not necessarily because the quality of teaching was bad. Therefore they did not see the need to pay for the education in general.

In addition to private tuition, around 1/3 of households in the urban and more developed rural sectors and 1/4 of households in the estate and less developed rural sectors sent their children to supplementary classes such as English, Computer, Sewing, Sinhala, Elocution and Dancing so that they learn subjects that would give them better prospects in employment or where they could develop a particular talent.

### 3.6.2 Pre-school education

Another type of education that parents often pay for is pre-school education. According to the RIS database, there has been a phenomenal growth in pre-schools in the last decade. Pre-schools in the Central Province more than doubled from 892 in 1994 to 2161 in 1997. Nuwara Eliya district reveals the greatest change - an eight-fold increase in pre-schools. While NGO projects have played an important role in establishing pre-schools, especially in the rural and estate sectors, to what extent they are due to a ripple effect and to what extent to other development processes, such as the need for increasing childcare as more mothers work in the formal private and public sectors, was not apparent.

**Table 28 Growth in pre-schools in the Central Province, 1994 -1997**

District	1994	1997	Increase
Kandy	553	1188	115%
Matale	285	546	92%
Nuwara Eliya	54	427	691%
Central Province	892	2161	142%

(RIS Database, PPU, Kandy 1994,1997)

The JIMOD Participatory Assessment queried the number of children attending pre-school and the reasons for their enrolment.

**Table 29 Did your children attend pre-school?**

	Urban	Estate	MD Rural	LD Rural
Yes	13 (87%)	9 (60%)	9 (64%)	9 (60%)
No	2	6	5	6
Total	15	15	14	15

Source: JIMOD Participatory Assessment 2001

Over half of all households and almost 90% of urban households had sent children to pre-school. The results indicate that pre-school education was equally prevalent and accessible to the majority in the estate and rural sectors.

The most frequent reason cited for sending children to pre-school was that it was a preparation for school or a "rehearsal". Parents pointed out that children learnt how to behave properly, get along with others ("get used to society") and read a few letters at pre-school. Other reasons for sending children to pre-school was that it was easier for the teachers later on to teach children who were already used to a classroom environment and easier for mothers, since children often fought at home. Some parents also pointed out that the earlier the children start school the better, since they get a head start and it was a waste of their time to stay at home.

The major reason cited for not sending children to a pre-school was that there was none in proximity to their home. Some parents pointed out that if the mother were educated, she could teach the child, and therefore it was not necessary to send the child to a pre-school.

### 3.6.3 Non-formal education

The Participatory Assessment also sought to explore whether there were unfulfilled needs for non-formal education among adults.

**Table 30 Would any member of the family like to receive non-formal education?**

	Urban	Estate	MD Rural	LD Rural
No	5	2	5	3
Yes	10	13	10	12
Literacy/adult education	3	9	-	7
English	-	1	2	1
Sinhala	-	-	1	-
Computer	1	-	3	-
Vocational education	5	2	2	1
Sewing	1	3	2	1
Pottery/crafts/painting	-	-	2	2
Typing	-	-	1	-

Source: JIMOD Participatory Assessment 2001

Interest was high in non-formal education if this were offered within their communities or at a convenient distance, for free or at a nominal charge. The demand for literacy and adult education was expressed from the estate and less developed rural sectors. This included illiterate adults, as well as those who said that they knew how to write but they would like to improve their present skill level, learn more and keep up with the knowledge that their children were learning at school, as well as with what was going on in the world around them. An interest in vocational education in order to train in a new field was expressed by household members in the urban sector.

### 3.7 Vocational Education

Vocational education is increasingly important in the Central Province to qualify students to take up opportunities available in the labour market. It is specially important in a province, where only a quarter of the students pass the "O' level and go on to higher education. The Household Survey examined the extent of formal vocational training received by members of the participating households.

**Table 31 Persons who have received formal vocational training in the Central Province, percentages**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	13	13	11	13
Rural	9	4	6	7
Estate	7	0	3	4.8
More developed	12	5	8	9
Less developed	8	4	3	6
Male	9	4	5	7
Female	10	4	8	8
Total	10	4	6	8

Source: JIMOD Household Survey 2001

The data reveal that only around 8% of the total population surveyed had received vocational training in the Central Province overall. The urban sector shows the highest rate (13%) and the estate sector the lowest (4%). That vocational training is mostly an urban phenomenon is revealed by the fact that there is very little variation within the urban sector among the three districts. Of the three districts, Kandy district has the highest overall rate (10%). More developed areas have a higher rate than less developed areas. Women surprisingly have a slightly higher rate than men; the difference between the female and male rates is noteworthy in Nuwara Eliya district. In terms of ethnicity the Moors have the highest rate (12%), as for literacy and education level in general.

**Table 32 Children who wish to receive vocational training and the type of training desired**

	Urban	Estate	MD Rural	LD Rural
No	1	2	1	4
Yes	14	13	14	11
Computer	5	4	6	2
Wiring/electrical work/ electronics	2	1	6	3
Sewing/tailoring/bridal dressing	6	5	2	4
Mechanics/engineering	1	4	1	3
Carpentry	-	-	2	4
Typing	2	-	1	-
Business training	1	1	-	-
Tinkering	-	-	1	1
Masonry	-	-	-	2

Art/Graphics	-	-	-	1
Book-keeping	-	1	-	-
Driving	-	1	-	-
Cookery	2	-	-	-
Pottery	1	-	-	-

Source: JIMOD Participatory Assessment 2001

In the Participatory Assessment, the majority of household members interviewed expressed the desire for vocational training. The demand was slightly less in the less developed rural sector. Predictably, the type of training most desired was computer, followed by electronics/electrical work and sewing/tailoring/bridal dressing. There was also an interest in mechanics.

**Table 33 Parents' willingness to pay for vocational education**

	Urban	Estate	MD Rural	LD Rural
Willing to pay	7	6	6	6
Prefer free training	1	2	4	1
Cannot pay	6	5	3	4
Can't say	-	-	1	-
Total	14	13	14	11

Source: JIMOD Participatory Assessment 2001

Around half of the households who expressed the wish for vocational training were willing to pay for it. There was no major variation among the sectors. Some expressed the view that they could pay but would prefer to receive free training; this was particularly the case in the more developed rural areas. A considerable number of households indicated that they could not pay for vocational training and would like the state or NGOs to provide such training for free.

### 3.8 Gender disparities in education

One of the most important development trends in education is the change in gender patterns of student enrolment. For the first time in 1997 the number of female students enrolled in the Central province was slightly higher than the number of male students, reaching a 1:1 ratio (Education Ministry 1997). In comparison in 1989 there were 97 girls to every 100 boys. Kandy district contributed significantly to this higher rate, as Matale and Nuwara Eliya continued to have a higher number of male students. However by 2001, Matale district also recorded a higher proportion of girls (50.2% of total pupils), Kandy maintained its slightly higher proportion of girls (50.4%) and Nuwara Eliya has almost reached parity (49.9%) (Education Ministry 2001). A survey of non-schooling children (Education Ministry 1998) also revealed a higher number of boys, rather than girls between 6-14 years, not attending school. The JIMOD study results discussed so far confirm the macro-level data in all these aspects.

The enrolment pattern is striking in that boys outnumbered girls in both the primary (100:94) and junior secondary (100:97) cycles in all three districts in 1997, but by the senior secondary cycle (100:109) and "A" level stage (100:132), girls had significantly overtaken the boys. However, the overall ratios have changed slightly in favour of boys by 1999. There was no change in the primary cycle, which remained at 100:94; in the junior and senior secondary cycles the ratios declined slightly to 100:96 and 100:108 respectively. At the "A" level stage, the ratio increased slightly in favour of the girls - 100:133.

The male drop-out rate of 6.6% in the Central Province in the 10<sup>th</sup> grade in 2000 (increasing from 4% in 1991) was higher than the female rate of 5.9% (which had also increased from 3% in 1991) (Education Ministry 1999). Apart from the fact that the drop-out rate appears to have increased



for both genders during the decade, the highest drop-out rate was in Matale, as it was in 1991. However, the major stage of dropping out for boys appears to be the "O" level. Moreover, boys outnumbered girls as repeaters at all levels (percentages were not available), except at the "A" level. Whether the higher number of female repeaters is due to the overall higher number of girls in the "A" level cycle, or whether it is because boys are likely to drop out more after their first attempt, is not clear due to the absence of data.

Micro-studies (Jayasena 1998, 2000) in the Kandy district reveal a lower level of acceptance of the school system and culture, and an increasing trend to question both the relevance of education and the authority of teachers by boys, especially of lower socio-economic strata. These factors need to be explored to understand the higher drop-out rate for boys.

However, the overall gender pattern that emerges is a higher number of boys entering the primary cycle but dropping out by Grade 9. Thus, a higher number of girls complete the education cycle culminating with the "A" level. However, the boys who reach "A" level appear to perform better at the examination with higher mean marks in all four streams (Kottahachchi 1998). Thus, the percentage of boys who enter university is higher than girls in all streams, except Arts, where the number of girls eligible for university significantly outnumbers boys. Therefore, the overall female proportion among undergraduate entrants from the Central Province has increased only marginally from 49% in 1981/2 to 50% in 1995/96. However, parity has been reached here as well, except that the proportion of girls in the sciences continues to be low.

The JIMOD data on education level of the general population surveyed, non-attendance and drop-out rates confirm the gender patterns of the provincial-level and district-level data to a great extent. Parents do not seem to discriminate against their daughters in terms of educational opportunities, except at the primary level. The reason for non-attendance of this small proportion of girls appears to be housework and illness. More girls are receiving private tuition than boys and parents are spending larger sums of money for their daughters to receive private education than for their sons. In vocational training young women seem to have a slight edge over men, although many do not actually use the training that they have acquired but have a predilection for collecting certificates, especially if the training is free. Parents also aspire for a higher status and "cleaner" work for their daughters in that there is a slight preference for white-collar work for their daughters, rather than for their sons.

### **3.9 Aspirations from education**

Aspirations from education vary with social groups, households, parents and children. Some children aspire for a higher education while others wish to be employed. Parents similarly have aspirations for their children.

According to a national study, aspirations for a university education in the early 1976 were confined to only a third of students enrolled in the "O" level stage in the early 1970s (Jayaweera and Rupasinghe 1998). This reached a peak of around 85% in the early 1990s. However, by 1998, a little over half of "O" level students aspired to a university education. While over 80% of students aspired to work in the state sector, 17% of boys and 7.6% of girls wished to work in the private sector in 1998. In 1990 by contrast 16% of boys and 18.9% of girls wished to work in the private sector. Thus, the proportion of girls aspiring to work in the private sector has more than halved.

Career aspirations of "O" level students have changed markedly for boys with the army as first choice and driver as a fifth choice in 1998, replacing engineer and accountant respectively of 1990 (Jayaweera and Rupasinghe 1998). While girls' first choice remained teaching, the army had become the fourth choice for girls as well by 1998, replacing clerk of 1990. Job security was the primary reason for the preferences expressed by both genders. While the Kandy district was covered by the study, disaggregated data for Kandy are unavailable. However, the micro-study undertaken by Jayasena (1998) in Kandy district also reveals the reported preference for the army among relatively privileged boys from a metropolitan national school.

Thus, while career aspirations of students reveal a more realistic assessment of the job opportunities available than what is promised by the education system, they appear to reinforce the low quality of the education system and the lack of interest in academic achievement and acquisition of competence.

The JIMOD study sought to verify what exactly parents wanted for their children in the future by exploring their notions on the purpose of education, the level of education they desired for their children, the sector of employment in which they would like to have them work and the type of employment they wished their children to have. While children contributed to this discussion during the Participatory Assessment, the perceptions of the parents were solicited and recorded.

### 3.9.1 The purpose of education

The purpose of education was clear-cut to most parents. An overwhelming majority pointed out that the major reason was to find good employment. Good citizenship and literacy were also frequently mentioned. Parents in the estate and more developed sector were most focused on education as a means for a job. In contrast, parents in the urban and less developed rural sectors expressed the importance of education in itself, for personal development and as a necessity for life.

**Table 34 Why send children to school?**

Reason	Urban	Estate	MD Rural	LD Rural	All
To get a good job	8	14	11	7	40
To be a good citizen/ learn about society	3	-	6	2	11
To learn to read and write/literacy	2	5	2	1	10
To have a good future/path in life	2	-	3	2	7
To get a [good] education	4	1	1	1	7
To develop talents/skills/themselves	4	-	1	-	5
Education is necessary for life	1	-	2	3	6
To have a position/status in life	1	2	-	1	4
To get knowledge	2	-	-	-	2
To make up for our lack of education	-	-	1	1	2
To gain things in society	1	-	-	-	1
To improve intelligence	1	-	-	-	1

Source: JIMOD Participatory Assessment 2001

For most parents, employment possibilities, a better future and social status were expectations that they held from educating their children. Education was both a way out of their current difficulties and status, as well as something that entailed sacrifices on their part. This was particularly the case among parents in the estate sector.

*We send them to school so that they can get jobs. We will make sure our children are taught even if we have to beg. (Chandrasekera, N'Elia district, LDR)*

*We send them to school so that they won't have to suffer like us in the rain with the tea bushes in the hills. They can get jobs. (Jeyanthi, N'Elia district, Estate)*

*We want them to get a bigger job than they would have in the estate. (Selvananthan, N'Elia district, Estate)*

*We want them to study well and come up to a good position. (Meena, Matale district, Estate)*

*We hope for a better future for them and that they will become socially accepted people.* (Wickremasinghe, N'Eliya district, MDR)

Good citizenship and literacy were two other important purposes of education cited by parents. Good citizenship was valued among parents in the more developed rural sector who considered themselves middle-class and respectable.

*We expect our son to learn well and become a good citizen.* (Nirmala, Kandy district, MDR)

*That they learn to read and write is our main expectation. Then they should develop their talents and get jobs.* (Gunasena, Matale district, Urban)

The value of education in itself as a necessity for life and for carving out a path for oneself, was expressed by parents, particularly in the urban sector.

*Education is for everyday life as well as a job.* (Hemamala, N'Eliya district MDR)

*There is nothing you can do without a school education. It is a must.* (Pushpa, Matale district, LDR)

*We send the children to school that they will study and develop and find a good path in life.* (Shanthi, N'Eliya district, Urban)

*Education is very important. One can do anything in the world only if you have an education.* (Ahmed, Kandy district, Urban)

Some parents who themselves had no opportunity to receive an education valued the prospect that their children could make up for their own lack and have better chances in life than them.

*We are not educated so at least they will make up for our shortcomings.* (Sudumenike, N'Eliya district, LDR)

### 3.9.2 Desired level of education

Parents also expressed their views on the level of education that they wished their children to accomplish. In the more developed and less developed rural areas, as well as the estate sector, the majority of parents wished their children to complete the "A" level.

In the urban areas, there was a split between low and middle-income neighbourhoods. Low-income parents wanted their children to study until "O" level, while middle-income parents wanted "as much education as possible", followed closely by university level and "A" level education. In the less developed rural areas a considerable proportion of households desired university education and "as much education as possible" for their children as well.

**Table 35 Desired level of education for children**

Level	Urban	Estate	MD Rural	LD Rural
Primary	-	-	1	-
Year 8-9	1	2	-	1
"O" level	4	4	2	2
"A" level	3	6	9	6
University	3	1	2	2
As much as possible	4	1	1	3
Until able to read/write	-	-	-	1
Don't know	-	1	-	-

Source: JIMOD Participatory Assessment 2001

In responding to the question of what they thought the ideal number of a years child should go to school, the majority pointed out that the "A" levels had become a basic qualification by now. It was difficult to get by in life and have access to employment opportunities without 13 years of education. Several parents also expressed the view that learning is a lifelong process.

*It's enough if they learn up to 13 years, "A" level. We are not expecting them to go for big jobs. If they learn well that's fine. We're in no situation to send them to campuses. (Kamalawathi, Nuwara Eliya district, LDR)*

*There are things that you have to learn until you die. But up to "A" level is essential. If the child can go above that we'll give all the support, even if we have to lie and get credit from the shop. We are anyway in debt on all four sides. (Chandrasekera, Nuwara Eliya district, LDR)*

*Ten years is not enough education. I am regretting it now since I can't get a proper job. I was in the Middle East for 2 years. I felt if I had known English I could have gone to another country like Italy. I could have also gone to the Middle East not as a maid but on another job like a hospital worker. There is no end to education. But one has to get at least an education that is sufficient to get a job where one can stand on his/her feet. (Dammika, Matale District, LDR)*

The parents who wished their children to have a junior secondary/"O" level education gave several reasons for this preference. They pointed out that they did not have the financial resources for their children to continue to study or that their children were not capable enough. Some also expressed the view that the returns from higher education was no longer high and it was better to engage in self-employment after a basic secondary education.

*I like my children to stop their education after Year 10 and train for self-employment because of the situation in the country nowadays. There are even graduates who are unemployed, so spending money and studying further is a waste of our money. (Sunil, Matale district, LDR)*

### 3.9.3 Preferred sector and type of employment for children

The preferred sector of employment overall not surprisingly was the state sector, as many other studies have also revealed. This was especially the case for the estate and urban sectors. The preference for the state sector included predictable reasons such as security of employment, pensions, status and access to loans. However, some even pointed out as benefits the space to do minimum work, have free time to attend to one's other affairs and take leave without being fired.

Households in the rural sector were most open to self-employment, the private sector or any of the three sectors. In the urban sector a few parents insisted that they could not speak for their children and it was the latter's choice to decide when they were old enough.

**Table 36 Preferred sector of employment for children**

Sector	Urban	Estate	MD Rural	LD Rural
State	12	15	9	8
Private	1	-	2	3
Self-employment	2	2	2	5
Any of the three	2	-	3	2
Choice of the child	2	-	-	-
Total	19	17	16	18

Source: JIMOD Participatory Assessment 2001

In looking at the type of employment preferred by parents for their children, the JIMOD Household Survey looked at parents' views on white-collar and blue-collar work for each of their children.

**Table 37 Predominant type of employment desired by parents for children (white-collar worker), percentages**

Category	Kandy	Matale	Nuwara Eliya	Central Province
Urban	65	80	54	61
Rural	66	81	51	68
Estate	75	64	69	69
More developed	70	77	54	67
Less developed	65	76	63	67
Male	65	74	55	66
Female	69	80	60	69
Total	67	77	58	67

Source: JIMOD Household Survey 2001

Parents wished for white-collar work for 67% of their children overall in the Central Province. Matale district with 77% reveals the highest desire for white-collar jobs. Parents in the urban sector are more willing than those in other sectors to let their children do blue-collar jobs. In contrast the estate sector parents had the highest desire for white-collar work overall in the province. There was no major difference between more and less developed areas overall in the province. Parents' wish for white-collar jobs for their female children is slightly higher than for male children. The rural sector in Nuwara Eliya was the most open to blue-collar work. Parents in the urban sector of Matale had the highest desire for white-collar work for their children, as did parents in Matale in general for their female children.

Overall, parents have relatively high aspirations for their children in terms of the education level they need to complete as well as the sector and type of job they would like their children to have. This is somewhat in contrast to the more pragmatic stance they took when evaluating the quality of education, where practical education and life skills were valued.

### 3.10 Institutional changes: Education reform

It is too early to assess the long-term impact of the new educational reforms, introduced by the government in 1997. But questions can be asked about problems in implementing reform and the response from those subject to such reform. This provides an indication of the extent to which the system is "reformable" or resilient to change. Although the attitudes of teachers could not be gauged in the JIMOD study, that of the parents were investigated.

While the formulation of reform involved some level of participation from the people, the school system remains deeply hierarchical. The extent to which it has instituted processes and structures that ensure participation of parents in the content and quality of education, is revealed to some degree from the perceptions of the parents on change in the education that their children receive.

**Table 38 Assessment of changes in education, 1990-2001**

Sector	Positive	Negative	Both	No change	Don't know
Urban	10	2	2	1	-
Estate	7	2	2	4	-
MD Rural	8	1	4	1	1
LD Rural	9	-	5	1	-
Total	34	5	13	7	1
Percentage	<b>57</b>	<b>8</b>	<b>22</b>	<b>12</b>	<b>2</b>

Source: JIMOD Participatory Assessment 2001

The majority of parents saw positive change in the education system during the last decade. This was particularly the case in the urban and less developed rural sectors. A considerable minority saw both positive and negative changes; this was most pronounced in the rural sector. In the estate sector almost half the households saw negative changes or no change at all.

The *positive changes* perceived included those related to the new approach to education, the curriculum, as well as teaching. Thus, practical work and projects, assignments, assessments/evaluations, out of classroom activities, and the encouragement to work independently were positively valued. It was pointed out that children had better general knowledge and were less examination focused. English, science and mathematics instruction was perceived to have improved. The introduction of computers was particularly appreciated. The knowledge of children was considered more advanced than in the past. In terms of teaching, methods were considered better, more teaching aids were noticed and the number of teachers was said to have increased, especially in rural schools. The state assistance with uniforms and books was considered a positive feature of the last decade as well. An increase in performance and cultural activities was also mentioned.

*Education has completely changed. More practical subjects now than theory. There are computer courses to suit the modern world. It is also important to get a job. English is better too.* (Sunil, Matale district, LDR)

*Earlier in school only writing skills were taught but now what you need for life is also taught. Technical skills are given to the children.* (Fauzia, Matale district, MDR)

*Now things have changed. Year 1 is all through play. They have evaluations. No exam papers. It's not the way we learnt. It was all letters then. Now there's a lot of paper pasting, sand, rocks and clay. Everything is play but they remember everything.* (Nimali, Kandy district, MDR)

*Education is better now. Earlier there were no teachers in the village school but now there are. Also the books and uniforms are a great benefit.* (Sudumenike, Nuwara Eliya district, LDR)

Those parents who saw *negative changes* explained it in terms of outcomes, teaching, parents' lack of understanding and financial factors. Thus, children were said to have less knowledge than in the past and that they could not read or write properly despite many years of schooling. It was pointed out that teaching had deteriorated, that teachers were not familiar with the new curriculum and teachers demanded too many materials from students. In contrast to those parents who perceived children as having less knowledge than in the past, other parents thought that knowledge had become too complex and that parents could not understand what their children were learning and could no longer help them with their homework. Some parents also complained that the expenses for school had become higher, especially stationary, and that children had too many books to carry to school. Many parents pointed out that school had become more competitive and some that discipline was deteriorating and children were learning bad language and behaviour at school.

*Earlier in 2-3 years of school they learnt a lot. Now they have to learn everything externally. Earlier they could read and write. Now even after finishing Year 5 or 6 they still cannot read and write. They take hundreds of books now. Earlier it was only the alphabet book. What is the use?*

(Pushparaj, Nuwara Eliya district, Estate)

*Education is very competitive now. Parents are competitive and expect their children to do better than the others. Earlier with the "O" level you can get a job. Now you need a degree. Ten years ago the education was much better. What they learnt in Grade 7, now they learn at "A" level. The quality of education is low now. There are children who have studied up to Year 10 and can't read a board.* (Wickremasinghe, Nuwara Eliya District, MDR)

*More assignments are done now. Education is difficult. Home work is difficult. We can't help them. Text books are different to what we have learnt, known or seen.* (Hazna, Matale district, MDR)

Those parents who perceived **no change** in the education received by their children were mostly from the estate sector and based their assessment on the lack of teachers and inadequate facilities in these schools.

#### 4. Conclusion

One of the recognisable outcomes of education - literacy - is still not very high in the Central Province, The JIMOD survey indicated that only 78% of the surveyed population could demonstrate "proven" literacy. There is some evidence to show that literacy levels in Matale district are deteriorating due to a lower level of literacy among the 5-19 age group, relative to other districts. Although Nuwara Eliya had lower literacy levels in the past there is sufficient evidence to show that it is "catching up". Donor interventions in this district seem to have paid off.

Senior secondary level attainment in education in the province is highest in the urban sector and more developed areas. It is higher for girls than boys. The ethnic group showing the highest level of educational attainment is the Moors. The group with the lowest outcomes is the "Indian" Tamils,

Around a quarter of the children who were once enrolled in school in the 5-19 age group have left the school system in the Central Province. However, the drop-out rate for the mandatory schooling years (5-14) is not high in the province. The urban sector and Matale district have high drop-out rates in the 5-14 age group. Nuwara Eliya district, which has had low education outcomes in the past, indicated both a lower school avoidance rate and drop-out rate (for the 5-14 age group) than the other two districts. However drop-out rates at junior secondary level remain high for both the estate sector in the province as a whole, as well as Nuwara Eliya district.

The vast majority of children were found to be attending state schools, generally a senior secondary school (*maha vidyalaya*) close to their home. The parents' choice of school was mostly influenced by proximity and convenience, except in the urban sector. Although the quality of education in the Central Province, as elsewhere in the country is rated low by "objective" criteria, parents who were involved in the Participatory Assessment generally rated the quality as good, including teaching and the curriculum. However facilities in schools were rated as inadequate, with basic amenities such as toilets, water and electricity missing in many schools. The majority of parents held old-fashioned notions about corporal punishment.

Most parents in the urban and estate sectors would ideally like to send their child to a city or national school, as did a considerable number in the more developed rural areas. However, the preferred school for parents from the less developed rural areas is a central school within the

district. Many rural parents were also happy with the closest senior secondary school. In terms of what parents wanted their children to ideally learn in the school system, most cited practical/technical knowledge ("useful for life") and English.

Around a third of school-going children were taking private tuition in the Central Province, according to the Household Survey results. The rate was higher among households involved in the Participatory Assessment. Attending private tuition classes was highest among urban households and in the Kandy district. The expenditure for private tuition was highest in the urban sector in Nuwara Eliya district. More girls than boys took private tuition and parents paid larger sums of money for girls to attend private tuition. In addition to private tuition, a considerable number of households paid for supplementary education such as English, computers, music and dancing.

Less than 10% of the population surveyed was found to have received formal vocational training. This was mostly an urban phenomenon. Slightly more women had received vocational training than men, and more Moors had received vocational training than members of other ethnic groups.

The gender disparities in education were mostly in favour of females. The only exception was that fewer girls than boys were enrolled in school at the primary level. However, higher drop-out rates for boys starting from junior secondary level to "A" level resulted in more girls than boys completing "A" levels.

The majority of parents sent their children to school with the hope of obtaining a good job. Literacy and good citizenship were other considerations. Most parents wanted an education up to "A" level for their children; the only exception was low-income urban parents who considered the "O" level to be adequate. The majority of parents wished their children to find employment in the state sector. Households in the rural sector, particularly in the less developed areas, were most open to private sector jobs and self-employment. Most parents wished their children to have white-collar employment; this was slightly higher for girls than boys. Parents from the rural and urban sectors of Nuwara Eliya district, as well as from more developed areas of that district were most open to blue-collar employment.

In assessing the new educational reform and changes in the education received by their children during the last decade, most parents were positive about the changes and appreciated the practical turn in education. They were able to provide clear examples of how the approach, the teaching methods and the content of education had changed. A considerable minority saw both negative and positive changes while a sizeable number of households in the estate sector saw no change at all. Among those who perceived negative changes, a primary complaint was that children did not know how to read or write properly despite considerable years of schooling. While teaching was generally assessed positively, many shortcomings in the knowledge and attitudes of teachers, as well as in the methods used were voiced by more critical parents. Around a fourth of parents did not grasp what the new curriculum was about.

The outreach of the education system in the Central Province has been good. Educational outcomes, such as literacy, have increased overall and school avoidance and drop-out rates have decreased. However, drop-out rates at the senior secondary level continue to be a problem in the province, while drop-out rates at the junior secondary level is a specific problem in the estate sector. The problem of the lack of basic facilities in many schools, as well as the quality of education needs to be addressed. Although parents generally perceive the reform process positively, there is much to be done to raise awareness, train teachers in new concepts and methods of interactive teaching, and develop problem-solving and critical thinking skills, as well as creativity and innovation among students.



## 5. Policy Implications

Future interventions need to concentrate on quality rather than outreach, except in targeted pockets such as the estate sector in Matale and Kandy districts. Some attention needs to be focused on Matale district in general to verify whether and why educational outcomes might be deteriorating there. The quality of basic primary and secondary education needs to be enhanced considerably and an effort made to ensure that the drop-out rate, at the junior secondary level in specific sectors and at the senior secondary level overall in the province, is decreased. Moreover, parents need to be made more aware of the problems of corporal punishment.

The practical turn in the new educational reform is in the right direction and is supported by the majority of parents interviewed for the JIMOD study. However, a lot more effort has to be made to effectively implement this reform including teacher training, awareness of the new curriculum among parents, and development of problem-solving and critical thinking skills among students.

In addition, the further improvement of vocational training is critical. New and relevant areas of training need to be identified and developed, and the overall quality improved by involving trainers who have practical experience in the subject they are training. Students also need to be prepared to face the realities of the employment market through awareness creation at school level on the opportunities in the private sector, as well as in self-employment, to overcome their current expectations of state-sector employment.

## References

- Aturupane, Harsha 1998. Education and Poverty in Sri Lanka. Draft Paper for the Policy Framework for Poverty Alleviation in Sri Lanka.
- Aturupane, Harsha. 1997. The Economic Policy Framework and Poverty in Sri Lanka: Efficiency and Equity Implications. Report submitted to the World Bank.
- Central Bank of Sri Lanka. 1999. Report on Consumer Finances and Socio Economic Survey Sri Lanka 1996/97: Part I.
- Central Bank of Sri Lanka. 1993. Report on Consumer Finances and Socio Economic Survey Sri Lanka 1986/87: Part I.
- Embekke, E.K.S.K. 2000. Panthi kamaraye igenvim kriyavaliya kerehi guruvara/guruvariyanage sahabhagithvaya (Teachers' Participation in the Teaching Process in the Class Room). Paper presented at the Seventh National Convention on Women's Studies, March 2000, Colombo.
- Jayasena, Asoka. 2000. Life in Schools: Reactions of Adolescent Boys and Girls to teacher Efficiency/Inefficiency in the Classroom. Paper presented at the Seventh National Convention on Women's Studies, March 2000, Colombo.
- Jayasena, Asoka. 1998. School Cultures: An analytical Study of Different Culture Patterns of Adolescent Boys and Girls in the School Setting. Paper presented at the Sixth National Convention on Women's Studies, March 1998, Colombo.
- Jayaweera, S. and S. Rupasinghe. 1998. Vocational Preferences of Secondary School Students - Trends and Issues. Paper presented at the Sixth National Convention on Women's Studies, March 1998, Colombo.
- Kottahachchi, Dhanapali. 1998. Why Girls Do Not Study Science in the Sri Lankan Universities? Paper presented at the Sixth National Convention on Women's Studies, March 1998, Colombo.
- Ministry of Education. 1992. Educational Statistics of Sri Lanka 1992.
- Ministry of Education. 1997. School Census 1997.
- Ministry of Education. 1998. School Census: Preliminary Report.
- Ministry of Education. 2001. School Census: Preliminary Report.
- Ministry of Education. 2000. Statistical Database.
- Ministry of Education, GTZ and Provincial Ministries of Education, NEP and CP. 2000. Teacher In-service Project (TIP-Lanka): Report of the Joint Planning Workshop, 28 February - 2 March 2000.
- Ministry of Finance and Planning and the Asian Development Bank. 1999. Improving Educational Planning (ADB TA 3073-SRI): Draft Final Report.
- National Institute of Education (NIE). 1995. *What children have learned after five years of schooling*. Maharagama.
- Presidential Task Force on General Education in Sri Lanka. 1997. General Education Reforms.

Ranatunge, R.A.M. 2000. Sri lankawe guruwurthiye niyali sitina guruvara guruvariyan ha rajaye ha sansthapitha rekiya sevavanhi niyuthu kanthavange ha purushayange rekiya rata ha svabhavaya pilibanda thulanathmaka adyanayak (A Comparative Study of the Patterns and Nature of Occupations of Women and Men Employed in Teaching, Government Service and State Corporations). Paper presented at the Seventh National Convention on Women's Studies, March 2000, Colombo.

Regional Rural Development Programme (RRDP). 1997. Regional Information System (RIS) Database.

Regional Rural Development Programme (RRDP). 1993. Regional Information System (RIS) Database.

Sri Lanka Primary Mathematics Project. 1999. National Basic Mathematics Survey Report.

University Grants Commission. 1983. Statistical Handbook 1983.

University Grants Commission. 1997. Statistical Handbook 1997.

United Nations Development Programme (UNDP). 1998. National Human Development Report.