

Income Trends in the Central Province

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TABLE OF CONTENTS

1	Introduction	1
2.	Income Levels	1
3.	Composition of Household Income	3
4.	Income Distribution	4
5.	Relationship between Income and Age	8
6.	Relationship between Income and Gender	8
7.	Relationship between Income and Education	9
8.	Relationship between Income and Ethnicity	10
9.	Relationship between Income and Occupation	11
10.	Savings	13
11.	Investments	13
12.	Loans	15
13.	Conclusions	17
	References	19
	Annex Table 3: Sources of Household Income	20

1. Introduction¹

The purpose of this paper is to analyse the income situation in the central province based on the findings of the JIMOD Household Survey, conducted by the Centre for Poverty Analysis in October 2001. The survey covered all three districts in the province, namely Kandy, Matale, and Nuwara Eliya. Data was analysed by districts, sectors and more/less developed areas. Analysis included income levels, composition of income, its distribution, and the relationship between income and socio economic factors such as gender, age, education, and type of occupation. In addition to income, savings, investment, and credit factors, which are directly linked to income, were also reviewed.

2. Income Levels

A household income consists of both cash and non-cash incomes. Non-cash income is twofold: 1) value of household resources used by the household itself such as residence, firewood and home garden produces and 2) receipts in kind such as school uniforms, Samurdhi benefits and gifts from friends/relatives. Values of these two categories were worked out using market values of such items in the respective areas. Survey results revealed that cash income consisted of over 85 percent of the total income in the province as well as in the districts of Kandy and Matale and Nuwara Eliya as shown in Table 1. The highest percentage of 90 percent was reported in Matale district. However, there was no consistency in sector wise data. In Kandy district cash income was highest in the estate sector (93%), in Matale district the urban sector (95%) and in Nuwara Eliya district the rural sector (88%).

Table 1: Contribution of Cash and Non-Income to Total Household Income (%)

Sector	Kandy		Matale		Nuwara Eliya		Central Province	
	Cash	Kind	Cash	Kind	Cash	Kind	Cash	Kind
Urban	86.12	13.88	95.13	4.87	83.78	16.22	86.74	13.29
Rural	87.76	12.24	88.33	11.67	88.43	11.57	88.06	11.93
Estate	92.82	7.18	88.72	11.28	84.87	15.13	88.94	11.05
All	87.48	12.52	89.75	10.25	85.35	14.65	87.22	12.25
Less								
Developed	85.37	14.63	89.12	10.88	84.70	15.30	86.08	13.91
More								
Developed	90.56	9.44	90.21	9.79	85.57	14.43	89.12	10.87

Source: JIMOD Household Survey 2001

The average household income of the Central province was Rs11,669 and the median income was Rs7,790, as shown in Table 2. This implies that 50 percent of the households in the province received less than Rs7,825 per month though average monthly income was Rs.11,669. As regard to districts, average income in Kandy and Nuwara Eliya districts exceeded that of the province.

¹ A paper prepared by L P Rupasena, Senior Research Fellow, Hector Kobbekaduwa Agrarian Research and Training Institute, August 2002

Average income was highest in Nuwara Eliya district (Rs12,136) and lowest in the Matale district (Rs10,267). Median income was highest in the Kandy district (Rs8,510). This could be due to the availability of better income generating activities resulting from improved infrastructure facilities compared to the other two districts.

According to Table 2, income levels by sectors show significant differences in all three districts in the Central province, with the urban sector income being much higher than the rural and estate sectors. In Kandy district, average monthly household income in the urban sector was Rs25,765, almost three times more than the other two sectors. Urban household income in Nuwara Eliya district was more than twice that of the other two sectors in the district. The income gap between urban and rural sectors in Matale district was not as high as that of Kandy and Nuwara Eliya districts, but still significant. However, the highest income in the rural sector was recorded in Matale district indicating that the rural population in Matale district was better off than those of the other two districts.

Table 2: Monthly Average and Median Income per Household, in SL Rupees

Sector	Kandy		Matale		Nuwara Eliya		Central Province	
	Average	Median	Average	Median	Average	Median	Average	Median
Urban	25765	15500	17955	15320	22834	12000	23507	14329
Rural	9831	7356	10332	7808	8976	7116	9691	7141
Estate	8218	6750	5161	4447	8288	5880	7071	5600
All	11978	8510	10267	7741	12136	6900	11669	7790
More Developed	11337	9158	11862	8975	14045	7939	11912	12107
Less Developed	13237	7615	8671	7091	8601	6466	11420	7200

Source: JIMOD Household Survey 2001

Average monthly income in the estate sector was the lowest in all three districts in the Central province. Among the three districts, the worst was Matale district with an average income of Rs5,161 as against Rs8,218 in Kandy and Rs8,288 in Nuwara Eliya. This might be due to the fact that the two estates captured by the sample in Matale district were situated in remote locations and were less productive than other estates visited for the survey.

An attempt was made to compare household income between less and more developed areas and results are presented in Table 2. As expected household incomes in more developed areas were higher than that of less developed areas in all three districts indicating that development efforts led to increased household income. For example, average income in more developed areas in Nuwara Eliya district was Rs14,045, 63 percent higher than that of less developed areas in the district. However, the income gap

²In Kandy district, average monthly income in the less developed areas was higher than that of more developed areas due to a very high-income level reported by a respondent. The median income thus shows a more accurate picture.

in connection to the median income is narrower. Median household income in more developed areas in Nuwara Eliya district was Rs7,939 as against Rs6,466 in less developed areas, a difference of only 23 percent. This implies that median income has increased at a lower rate than that of average income, indicating that trickle down impact is limited.

3. Composition of Household Income

For the analysis, household income was divided into four main sources: 1) occupation, 2) property, 3) windfall and 4) transfers (see Table 3 in the Annex). Occupation was further categorized into main and subsidiary occupation. Subsidiary occupation was again divided into four categories. Property incomes were divided into rent, interest, value of firewood, and value of home garden produce. Transfer income consisted of pensions, Samurdhi, school uniforms, and receipts from relatives and friends. Income sources which did not fall into these four groups were categorised as other, which is an insignificant ratio as it accounts for less than one percent of total household income as shown in Table 3.

About 56 percent of household income in Central province was derived from main occupation. There was no marked difference among districts except in Matale where the figure was a little higher (60%) than that of the province (56%). When subsidiary occupations were taken into account, total income from all occupations was 62 percent of the household income in the province. However, contribution from subsidiary occupations to the total household income was only 3 percent in Matale district as compared to 6 percent in Kandy and Nuwara Eliya districts. Opportunities for subsidiary occupations appeared to be limited in Matale district possibly due to low levels of urbanization and industrialization.

Income from property accounted for 22 percent of total household income in the province. Property income was largely attributed to; self-owned properties such as residence, home garden produce and firewood. As regard to districts in the province, contribution from property income to the total household income in Matale was relatively less (17%). This is due to low market value of owned houses, which resulted in only 8 percent contribution to the total income as against 13 percent in Kandy and 18 percent in Nuwara Eliya districts.

Value of home garden produce was around 3 percent in Nuwara-Eliya and Matale district. In Matale, many home gardens were cultivated with spices while in Nuwara-Eliya district it was vegetables. In Kandy the situation is somewhat different. Instead of a few specialised crops, there are a variety of crops, which is known as the "Kandyan home garden system". Nevertheless, nearly 2 percent of total income was made up from value of home garden produce in the Kandy district. It has to be noted however, that respondents often underestimate the value of home garden produce in this type of survey.

Transfer income, including remittances, played a significant role in generating household income in the Central province. It accounted for 15 percent of the household income. Of this, 10 percent consisted of receipts from friends and relatives living in the

country and abroad. Contribution from relatives and friends living abroad was 4 percent of the household income, which is much higher than the receipts from Samurdhi (1.4%). Receipts from relatives working in the Armed forces represented nearly 2 percent of the household income. When transfer income is analysed by districts in the province, there were some variations in the importance of sources. Transfer incomes from pensions contributed 6 percent of the total household income in Matale district while this figure for Kandy and Nuwara Eliya district was 3 percent and 1 percent respectively. Transfer incomes from friends and relatives had significant impact on household income in all three districts in the province registering about 8 percent of the household income. This partly reflects the cultural tradition of offering something mainly in kind such as clothes, consumer durables or a part of produce to relatives and friends during special occasions such as returning from abroad after work, receiving a new job and/or after harvesting crops.

As regard to sectors (urban, rural, estate), the principal occupation contributed over 50 percent to total household income in the province: 51 percent for urban, 58 percent for rural and 66 percent for estate sector. The pattern in the districts was the same. The percentage contribution in the urban sector is lower mainly due to higher property income, which accounts for 27 percent as against 20 percent in rural and 19 percent in estate sector in relation to the province. Income for owned residence in urban sector represented 19 percent of the household income as compared to 9 percent in rural and 6 percent in estate. This is mainly due to high market value for residence in the urban sector. Households in the estate sector depend heavily on the main occupation of wage earners as there is no time to spend on subsidiary occupation on the one hand and there is limited income generating activities in the estate sector such as cattle rearing on the other.

4. Income distribution

Income distribution was analysed in two ways: household income deciles and Gini coefficient. Income deciles were income groups whose boundaries are defined as to get 10 percent of the total number of households into each group, after arranging all the households in ascending order of household income. Gini coefficient is defined as the ratio of the area between the diagonal and the Lorenz curve to the triangular region underneath the diagonal. Theoretically, the value of the Gini coefficient varies between zero and one; zero being everybody's income is perfectly equal and one being all income accrues to one person. The larger the ratio the greater the inequality of income distribution. Table 4 presents results of the deciles distribution and values of the Gini coefficient.

Table 4: Deciles Distribution of One Month Income of Households and Values of Gini Coefficient of the Central Province by districts

Deciles	Kandy	Matale	Nuwara Eliya	Central Province
1	1.3	1.5	1.5	1.5
2	2.6	2.9	3.2	2.8
3	3.6	4.1	4.2	3.9
4	4.6	5.6	5.0	5.0
5	5.8	6.9	5.7	6.0
6	7.3	8.2	6.6	7.5
7	8.9	9.8	9.3	9.4
8	10.7	13.1	11.8	11.7
9	14.8	18.3	19.9	16.8
10	40.4	29.5	32.6	35.2
Gini-coefficient	0.49	0.41	0.48	0.47

Source: JIMOD Household Survey 2001

The poorest 40 percent of the households in the central province receive 13.2 percent of total household income while the richest 20 percent of the households receive 52 percent of the household income. According to the household income and expenditure survey conducted by the Department of Census and Statistics (DCS) in 1995/96, the poorest 40 percent of households received 17.4 percent of the total household income in the central province. Even for the districts, DCS data are higher. The percentage share of the bottom 40 percent of the households was 12.7 percent for Kandy, 13.9 percent for Nuwara Eliya and 14.7 percent for Matale, according to the JIMOD survey. The DCS figures were 15.2 percent for Kandy, 22.9 percent for Nuwara Eliya, and 17.8 percent for Matale. This could show an increase of income inequality during the latter part of the 1990s in the Central province. However, the DCS and JIMOD data are not strictly comparable as the sampling frame and methodology was not the same. For example, the Nuwara Eliya sample was biased towards the urban and rural sectors, as the estate sector was considered more homogenous in socio-economic characteristics. Nevertheless, the lower proportion of income accruing to the lowest quintile might be due the decline in significant cash crops in the central Province such as big onions, potatoes, and chillies, due to decreased subsidies for agricultural inputs and the liberalisation of imports. For example, the area under cultivation of big onions dropped from 3,687 hectares in 1995 to 1,413 hectares in 1998 (a 62% decline). Similarly, potato cultivation declined from 7,520 hectares in 1995 to 2,171 hectares in 1999 (a 71% decline). This would have decreased the incomes of those who were directly and indirectly involved with the cultivation of these crops. In general, the survey data confirms the current low returns from agriculture in the province.

The value of the Gini coefficient was 0.47 for the Central province, 0.41 for Matale district, 0.49 for Kandy and 0.48 for Nuwara Eliya district. Results indicate that income inequality is the lowest in Matale district in the Central province. According to the household income and expenditure survey in 1995/96 conducted by DCS, the Gini coefficient was 0.41 for central province, 0.44 for Kandy district, 0.42 for Matale district, and 0.32 for Nuwara Eliya district. The striking difference between the DCS and JIMOD case data in Nuwara Eliya district might be due to the reason stated earlier, where in the latter case the urban and rural sector samples were proportionately larger than that of the

estate Sector. The Nuwara Eliya district had consistently shown lower income inequality in relation to the other districts in national surveys due to its large share of estate sector households. However, the JIMOD data appear to reveal that income disparity in the estate sector in Nuwara Eliya has widened, in comparison to the estate sector in the other two districts.

As income distribution varies generally by sector, an attempt was made to analyse income disparity by sectors. Results are given in Table 5. The bottom 40 percent of households in the urban sector of the province received only 13.4 percent of total household income as compared to 14.5 percent for rural and 16.4 percent for estate sectors. On the other hand, the highest 10 percent of the households in the urban sector received 42 percent of the total income as against 32 percent in rural and 35 percent estate sectors. Income disparity was higher in the urban sector than the other two sectors because of a high degree of heterogeneity due to wide range of income generating activities available in the industrial and service sectors. On the other hand, income disparity was lowest in the estate sector. Values of Gini coefficient provided the same results indicating the highest value in the urban sector and the lowest value in the estate sector. District data showed that the income share of the bottom 40 percent of the households in both rural and urban sectors in Kandy district was the same (15%). In Nuwara Eliya district percentages are almost the same for the rural sector (18.7%) and the estate sector (18%). However, there is high-income inequality in the urban sector in Nuwara Eliya district. The poorest 40 percent of the urban households received only 4.6 percent of the total urban household income while the richest 10 percent got 66.7 percent. This was confirmed by the values of Gini coefficients. As shown in the Table 5, the value of the Gini coefficient was 0.49 for urban, 0.38 for rural and 0.40 for estate sectors in the Nuwara Eliya district. Unlike in the other two districts, the lowest Gini-coefficient (0.23) was reported in the urban sector in Matale district. Figures for the rural sector were 0.42 and while the estate sector recorded 0.28. As the figures indicate, there is vast income disparity between urban and rural sectors in Matale district. Nevertheless, the value of the Gini coefficient in the rural sector was not so high compared to the other two districts, and findings of the other studies. The salient feature was that income disparity in urban sector in Matale district was comparatively very low.

Table 5: Deciles Distribution and Gini Coefficient by Sectors

Deciles	Kandy			Matale			Nuwara Eliya			Central Province		
	Urban	Rural	Estate	Urban	Rural	Estate	Urban	Rural	Estate	Urban	Rural	Estate
1	2.29	1.8	5.50	3.4	1.8	5.08	0.56	1.5	2.2	1.8	1.6	2.4
2	3.38	3.2	3.51	5.6	3.3	5.9	1.05	4.6	3.9	3.2	3.1	3.8
3	3.93	4.4	4.26	8.1	4.3	6.23	1.29	5.5	5.5	3.8	4.3	4.5
4	4.87	5.5	6.09	8.4	5.9	6.7	1.70	7.1	6.4	4.6	5.5	5.7
5	5.88	6.6	7.13	9.3	6.8	8.7	2.29	7.9	7.2	5.3	6.7	7.0
6	7.55	8.4	7.88	10.7	7.7	10.8	2.76	9.4	7.8	6.3	8.1	7.7
7	8.87	10.7	9.89	10.7	9.0	11.1	3.91	12.1	8.8	8.3	10.0	8.7
8	10.62	12.6	11.03	10.9	10.8	12.42	5.93	13.8	10.9	9.9	12.0	10.1
9	22.62	16.3	13.62	12.2	15.6	16.8	13.84	18.8	21.0	14.7	15.0	14.2
10	29.99	30.7	31.09	20.6	36.6	16.44	66.66	19.3	26.4	42.1	32.0	35.0
Gini-coefficient	0.49	0.44	0.36	0.23	0.42	0.28	0.49	0.38	0.40	0.49	0.40	0.35

Source: JIMOD Household Survey 2001

In addition to sector wise variation, the level of development also has an impact on income distribution. Hence, income distribution was analysed by more and less developed areas. Results are presented in Table 6.

Table 6: Deciles Distribution and Gini Coefficient by More Developed and Less Developed Areas

Deciles	Kandy		Matale		Nuwara Eliya		Central Province	
	Less Dev.	More Dev.	Less Dev.	More Dev.	Less Dev.	More Dev.	Less Dev.	More Dev.
1	1.28	1.85	1.75	1.82	1.98	1.41	1.38	1.80
2	2.20	3.61	3.02	2.91	4.59	2.79	2.47	3.11
3	2.87	5.25	4.56	3.89	5.80	3.74	3.37	4.35
4	3.50	6.29	6.66	4.98	7.28	4.23	4.19	5.32
5	4.49	7.98	8.00	6.75	8.20	5.03	5.27	6.64
6	5.86	9.57	8.87	8.29	9.01	6.74	6.22	8.11
7	7.48	11.11	10.35	10.13	6.39	8.33	7.95	9.66
8	9.28	13.32	13.14	14.50	8.05	10.05	10.08	11.46
9	12.67	19.14	18.02	20.22	11.62	15.47	13.56	16.10
10	50.37	21.89	25.63	26.50	37.07	42.22	45.52	33.44
Gini-coefficient	0.55	0.37	0.35	0.40	0.41	0.50	0.51	0.42

Source: JIMOD Household Survey 2001

The income share of the poorest 40 percent of the households in less developed areas were higher than developed areas, except in Kandy district where the poorest 40 percent of the households in more developed areas received 17 percent of the total household income as against 9.85 percent in less developed areas. This indicates that the poor have

benefited more from development in the Kandy district, in comparison to Matale and Nuwara Eliya districts, where the benefits of development appear to have accrued to the highest income quintile. This is particularly pronounced in the Nuwara Eliya district.

5. Relationship between Income and Age

The age group 36-45 years contained the largest proportion of income receivers in the Central province as well as districts as shown in Table 7. The two age groups 26-35 years and 36-45 years together accounted for over 50 percent of income receivers in the districts of Kandy and Matale. The figure for Nuwara Eliya was a little lower than 50 percent. In Nuwara Eliya district income receivers in the age group of 19-25 years was 18 percent compared to 13 percent in Kandy and 11 percent in Matale. This implies that more income-generating avenues are available for school leavers in the Nuwara Eliya district, probably due to vegetable cultivation that takes place year round. Income receivers over 55 years were about 15 percent in the province. Overall results indicated that vast majority of income earners belonged to the prime working age population.

Table 7: Distribution of Income Earners by Age

Age Group (Years)	Kandy		Matale		Nuwara Eliya		Central Province	
	No.	%	No.	%	No.	%	No.	%
Below 14	2	.51	3	1.49	6	4.08	11	1.43
14-18	10	2.53	3	1.49	6	4.08	19	2.55
19-25	51	12.91	22	10.95	27	18.37	100	13.46
26-35	102	25.82	38	18.91	30	20.41	170	22.88
36-45	111	28.10	69	34.33	40	27.21	220	29.60
45-55	58	14.68	34	16.92	24	16.33	116	15.61
Over 55	61	15.44	32	15.92	14	9.52	107	14.40
Total	395	100	201	100	147	100	743	100

Source: JIMOD Household Survey 2001

6. Relationship between Income and Gender

Total income receivers in the sample were 737, of which 504 (68%) were male income receivers. According to the Report on Consumer Finance of Central Bank of Sri Lanka, male income earners for the country were 69 percent, in the same period. In the three districts, the highest proportion of male income earners were in Kandy (72%) district while the lowest was recorded in Nuwara Eliya district (58%). Likewise, nearly 50 percent of the male income earners were from Kandy district. As regard to sectors, the share of female income earners was the highest in the estate sector in the Nuwara Eliya district, which was 52 percent as shown in Table 8. This is due to high employment of

females in the estate sector, where predominantly female labour is used for tea plucking. This was also true for Matale district where the figure was as high as 50 percent for women. However, figures in the rural and urban sectors, (where the informal sector predominates) need to be treated with caution, as there is a general tendency to underestimate women's income and surveys do not necessarily capture an accurate picture.

Table 8: Distribution of Income Earners by Gender

Sectors	Male	%	Female	%
Kandy				
Urban	54	72	21	28
Rural	197	70	83	30
Estate	30	75	10	25
Total	281	71	114	29
Nuwara Eliya				
Urban	22	63	13	37
Rural	36	67	18	33
Estate	28	48	30	52
Total	86	58	61	42
Matale				
Urban	21	68	10	32
Rural	100	72	38	28
Estate	16	50	16	50
Total	137	68	64	32
Central Province				
Urban	97	68	44	31
Rural	333	70	139	29
Estate	74	57	56	43
Total	504	68	239	32

Source: JIMOD Household Survey 2001

7. Relationship between Income and Education

The proportion of income earners with a junior secondary education in the province was 40 percent. The district situation is almost the same as shown in Table 9. The proportion of illiterate income earners in the province was only 3 percent, with Nuwara Eliya district being the highest with 5 percent. Results also indicate that income increases with higher education attainment. A sharp increase in income was observed between the categories with junior secondary education and "O" Level, and those with "A" Level and University education. In the case of the former this might be due to the fact that jobs in the formal sector, which paid better than the informal sector, required GCE (O/L) as a minimum

qualification. As the number of income earning undergraduates in the sample was reported only as a single individual, the data on monthly median income for this group is not reliable.

Table 9: Distribution of Income Earners by Education

Level of Education	No. of Income Receivers						Monthly Mean (Income)			Central Province		
	Kandy		Matale		N'Eliya		Kandy	Matale	N'Eliya	No.	%	Monthly Median Income Rs.
	No.	%	No.	%	No.	%	Rs.	Rs.	Rs.			
No School (Literate)	-	-	-	-	1	0.85	-	-	26366	1	0.15	26366
No School (Illiterate)	8	2.27	4	2.25	6	5.13	3025	3602	2520	18	2.78	2853
Primary	94	26.63	65	36.52	38	32.48	4025	3608	3178	197	30.40	3833
Junior Secondary	151	42.78	58	32.58	50	42.74	5241	4317	5062	259	39.97	4952
G.C.E O Level	52	14.73	27	15.17	13	11.11	5676	6833	7133	92	14.20	6233
G.C.E.A Level	35	9.92	15	8.43	8	6.84	8333	5450	10840	58	8.95	7000
Under Graduate	1	0.28	-	-	-	-	13500	-	-	1	0.15	13500
Graduate	12	3.40	9	5.06	1	0.85	11741	7754	24333	22	3.40	10041
Total / Average	353	100	178	100	117	100	5330	4558	4090	648	100	4630

Source: JIMOD Household Survey 2001

8. Relationship between Income and Ethnicity

Average income was highest for Sinhalese households while median income was highest for Moor households in the Central province, as shown in Table 10. This was also true Matale district. However, in Kandy district, Sinhalese revealed both the highest average and median incomes. In Nuwara Eliya district in contrast, the average household income was highest for "Indian Tamil" households while the highest median income remained with the Moors. It appears that earning potential in terms of the median is highest for Sinhalese in the Kandy district, and for Moors in the Matale and Nuwara Eliya districts. On average, the highest earning potential is for "Indian Tamil" households in Nuwara Eliya district and for Sinhalese households in the other two districts.

³ The terms "Indian" and "Sri Lankan" Tamil in this survey are based on self-description by respondents and do not necessarily correspond with "official" definitions. Thus, the majority of households identifying themselves as "Sri Lankan" here would be considered "Indian" by the Sri Lanka Population Census definition.

Table10: Relationship between Income and Ethnicity (SL Rupees)

Ethnic group	Kandy		Matale		Nuwara Eliya		Central Province	
	Average	Median	Average	Median	Average	Median	Average	Median
Sinhalese "Sri Lankan"	13080	8750	11222	8383	9940	7183	12042	8364
Tamil "Indian"	10004	7600	5757	4628	12078	5880	9855	6067
Tamil	9779	7945	4719	4879	13993	7433	13444	7103
Moor	8058	6830	10891	8750	8658	8658	9869	8750
Other	6250	6250	-	-	-	-	6250	6250

Source: JIMOD Household Survey 2001

9. Relationship between Income and Occupation

This was analysed using data on main occupation reported by income earners. Results are presented in Table 11 and 12. Table 11 shows monthly average and median income derived from main occupation by an income receiver. The highest average and median incomes were among earners in the business sector. The lowest average income was reported in the mining and quarrying sectors and the lowest median income was reported in the agricultural sector in the Central province. Further, there were significant differences in income between the lower groups and the higher groups. For instance, median monthly income from agriculture was Rs2,055, which represented only 22 percent of the income derived from business sector.

Table11: Average and Median Income from Main Occupation of Income Receivers by Industrial Group (Rs)

Industry Code	Kandy		Matale		Nuwara Eliya		Central Province	
	Average	Median	Average	Median	Average	Median	Average	Median
Agriculture, Hunting, Forestry and Fishing	2375	1417	3894	2181	3237	2022	3420	2055
Mining and quarrying	1500	1500	2983	2717	-	-	2983	2717
Manufacturing	4725	3750	5091	2500	2554	2333	5104	3083
Construction	4640	4650	6250	6250	4444	4500	5031	4900

Wholesale and retail trade and restaurants and hotels	8714	4667	6144	3367	8408	5000	7771	4458
Transport Storage and Communication	7064	6500	9920	9300	4750	4750	7713	6750
Finance insurance, real estate and business services	12820	12000	4000	4000	-	-	11350	9250
Community social and personal services	7447	5300	6913	5400	3611	2650	6961	4833
Activities not adequately defined	3844	3333	2233	2233	2884	2063	3518	3000

Source: JIMOD Household Survey 2001

Table 12 reveals the percentage distribution of income receivers and incomes among economic sectors. The most prominent economic sector was agriculture including hunting, forestry, and fishing, which accounted for 43 percent of income earners in the province. However, the proportion of income from agriculture was only 28 percent indicating low returns from the sector. The wholesale and retail trade, which accounted for 9.4 percent of income earners, contributed 17 percent to total income.

Table12: Number of Income Receivers and Contribution of Income by Industrial Group

Industry Code	Income Receivers								Total Income			
	Kandy		Matale		Nuwara Eliya		Central Province		Kandy	Matale	Nuwara Eliya	Central Province
	No.	%	No.	%	No.	%	No.	%	%	%	%	%
Agriculture, Hunting, Forestry and Fishing	112	33.5	82	53.2	66	55.0	260	42.8	17.07	43.48	41.28	28.08
Mining and quarrying	1	0.3	4	2.6		0.0	5	0.8	0.09	1.66	0.00	0.48
Manufacturing	53	15.9	25	16.2	11	9.2	89	14.6	15.58	16.17	6.18	14.06
Construction	31	9.3	2	1.3	3	2.5	36	5.9	8.99	1.74	2.65	6.02
Wholesale and retail trade and Restaurants and hotels	33	9.9	8	5.2	16	13.3	57	9.4	16.90	7.20	31.89	17.10
Transport Storage and Communication	20	6.0	5	3.2	2	1.7	27	4.4	8.26	6.91	1.89	6.78
Finance insurance, real estates and business services	5	1.5	1	0.6		0.0	6	1.0	3.99	0.56	0.00	2.41

Community social and personal services	49	14.7	25	16.2	12	10.0	86	14.1	22.41	21.65	9.17	19.86
Activities not adequately defined	30	9.0	2	1.3	10	8.3	42	6.9	6.70	0.62	6.93	5.20
Total income receivers	334	100	154	100	120	100	608	100	100	100	100	100

Source: JIMOD Household Survey 2001

10. Savings

Household savings are part of income, which is not used for consumption. Income and expenditure for the one-month period was taken into account in calculating the saving ratio in terms of income. Table 13 shows the results. Saving as a percentage of income was 19 percent in the province. This is almost similar to the national saving ratio of 19.5 in 2001 as given in the Annual Report of the Central Bank of Sri Lanka. Rate of savings was the lowest in Matale district (3.8%) compared to 17.2 percent in Kandy and 7.6 percent in Nuwara Eliya. The urban sector had a higher savings rate than the other two sectors. This could be due to higher incomes earned by urban families possibly due to the availability of multiple livelihood opportunities

Table 13: Savings for One Month per family by Sectors (October 2001)

Monthly Income (Rs.)	Kandy	Matale	Nuwara Eliya	Province
Urban	25765	17955	22834	14329
Rural	9831	10332	8976	7141
Estate	8218	5161	8288	5600
All	11978	10267	12136	7790
Monthly Savings (Rs.)				
Urban	4426	695	2467	3645
Rural	978	359	267	550
Estate	609	229	507	448
All	1950	390	918	1510
Savings as % of Income				
Urban	17.2	3.9	10.8	25.4
Rural	9.9	3.5	3.0	7.7
Estate	7.4	4.4	6.1	8.0
All	16.3	3.8	7.6	19.4

Source: JIMOD Household Survey 2001

11. Investments

Household investment is defined as the allocation of household savings among different assets for future return or benefit. Such investments could be grouped into two: financial investments and physical investments. Financial investments include Savings Accounts, Fixed Deposits, Government Bonds and Securities, EPF contribution, Insurance premium, *Cheettus* (informal rotating credit) and Samurdhi savings. Physical investments consist of Land, Residential Buildings, Non-residential Buildings,

Industrial, and Agricultural machinery and equipment, Vehicles, Livestock and other assets of physical nature. The reference period used in this analysis of investment is one month. Any net increase of these categories during the reference period indicates an investment while any net decrease indicates a negative investment or a disinvestment.

11.1 Total Investment

Table 14 describes calculation of investment rates as a percentage of investment against total income of the households. The average net investment rate was 8.8 percent in the province but there is marked variation among districts and sectors. The highest investment rate for all three sectors was observed in Kandy district: 17.6 percent for urban, 11.8 percent for rural and 13.1 percent for estate. As shown in the table the reason for a high investment rate in Kandy district was due to high financial investments. On the other hand, the rate of investment in rural and estate sectors in Matale district was negative. Capital losses incurred in rural sector attributed to the negative investment rate in rural sector while negative financial investment was observed in estate sector.

Table 14: Net Investment for One-Month Period by Sectors

Sector (1)	Total Income Rs. Per Month (2)	Net Financial Investments (3)	Net Physical Investments (4)	Capital Losses (5)	Total Net Investment (6)=3+4+5	Net Investments as a % of Income (7)=6/2*100
Kandy						
Urban	1096308	198427	0	5833	192593	17.57
Rural	1700794	203645	62892	67442	199095	11.71
Estate	189018	9720	16667	1583	24804	13.12
All	2986120	411792	79559	74858	416492	13.95
Matale						
Urban	251373	7741	2333	2383	7691	3.06
Rural	877453	17496	7833	37233	-11904	-1.36
Estate	103235	-2020	167	0	-1853	-1.79
All	1232061	23217	10333	39616	-6066	-0.49
Nuwara Eliya						
Urban	434853	36447	0	6075	30373	6.98
Rural	260307	6467	0	1078	5389	2.07
Estate	241661	8639	1667	1440	8866	3.67
All	936821	51553	1667	8593	44628	4.76
Central Province						
Urban	1782534	242615	2333	14291	230657	12.94
Rural	2838553	227608	70725	105753	192580	6.78
Estate	533914	16340	18500	3023	31816	5.96
All	5155001	486563	91558	123067	455053	8.83

Kandy						
Less Developed	1772957	385330	25808	42392	368747	20.8
More Developed	1213162	26462	53750	32467	47745	3.94
Matale						
Less Developed	520287	10802	4333	28650	-13514	-2.6
More Developed	711775	12415	6000	10967	7448	1.05
Nuwara Eliya						
Less Developed	232236	9210	1667	2700	8177	3.52
More Developed	704585	42344	0	46567	-4223	-0.6
Central Province						
Less Developed	2525479	405343	31808	73742	363409	14.39
More Developed	2629522	81220	59750	90000	50969	1.94

Source: JIMOD Household Survey 2001

12 Loans

In this survey, data on loans taken by all the members of the households during the one-month period concerned was collected. Only cash loans were taken into account. Information on cash loans was collected by purpose and by source. In this section, loans are analysed in terms of the number of households, purpose, and source. Table 15 compares the number of households who borrowed finances with the total households in the sample. It shows that household indebtedness is considerable-35 percent of the households in the total sample have taken loans in the province. As regard to districts and sectors, the figures varied. When districts are compared, Matale recorded the highest percentage of indebted households (44.2%). The estate sector showed the highest indebtedness (53%) within the province..

Table 15: Household Indebtedness

	Total Households	Indebted Households	% of Sample
<u>Kandy</u>			
Urban	40	11	27.50
Rural	180	47	26.11
Estate	20	15	75.00
All	240	73	30.42
<u>Matale</u>			
Urban	20	8	40.00
Rural	80	34	42.50
Estate	20	11	55.00
All	120	53	44.17

Nuwara Eliya

Urban	20	6	30.00
Rural	30	12	40.00
Estate	30	11	36.67
All	80	29	36.25

Central Province

Urban	80	25	31.25
Rural	290	93	32.07
Estate	70	37	52.86
All	440	155	35.23

Source: JIMOD Household Survey 2001

In the survey, respondents were asked the purpose of obtaining loans. Answers are given in Table 16. Accordingly, the most important areas vary by districts. In Kandy district, over 75 percent of the total value of the loans were for housing, settlement of debt and consumption. Agriculture, housing, and consumption were the most important areas registering about 75 percent of the loans in Matale district. Agriculture was the most important (39%) among them. This may be due to cultivation of big onions and chillies, which require high cash investments. As regard to Nuwara Eliya district, much of the credit demand was for business, consumption, housing, and agriculture showing over 75 percent of the values of the total loans obtained by the households. Overall results indicate that housing, consumption, debt recovery and agriculture are the areas where the credit is high in the Central province.

Table 16: Percentage distribution of loans by Purpose

Purpose	Kandy	Matale	Nuwara Eliya	Central Province
Agriculture	8.8	38.9	9.2	15.5
Livestock	0.2	2.2	0.0	0.6
Industry	1.4	1.3	6.9	1.7
Business/Trade	6.6	2.8	36.5	7.6
Housing	29.5	24.2	11.7	27.2
Settlement of Debt.	24.5	5.5	3.0	19.0
Consumption	23.4	11.7	20.2	20.6
Consumer Durables	1.4	8.3	2.8	3.0
Ceremonies	0.4	0.4	4.5	0.7
Other	3.7	4.6	5.2	4.0
Total	100	100	100	100

Source: JIMOD Household Survey 2001

Table 17: Percentage distribution of loans by Source

Purpose	Kandy		Matale		Nuwara Eliya		Central Province	
	Formal	Informal	Formal	Informal	Formal	Informal	Formal	Informal
Agriculture	77.1	22.9	99.3	0.7	69.2	30.8	89	11
Livestock	100	0	100	0	-	-	100	0
Industry	100	0	100	0	100	0	100	0
Business/Trade	61.3	38.7	47.6	52.4	100	0	71.4	28.6
Housing	57.3	42.7	88.6	11.4	100	0	65.3	34.7
Settlement of Debt.	99.8	0.2	60.2	39.8	30.8	69.2	96.6	3.4
Consumption	1.9	98.1	10.4	89.6	34.7	65.3	4.5	95.5
Consumer Durables	70.2	29.8	95.2	4.8	0	100	81.2	18.8
Ceremonies	63.6	36.4	50	50	99	1	76.5	23.5
Other	91.4	8.6	57.1	42.9	89.3	10.7	82.4	17.6

Source: JIMOD Household Survey 2001

The sources of loans were categorised as formal (banks and micro-finance institutions) and informal (money lenders, shop owners, friends and relatives). Results obtained from the respondents were analysed in Table 17. The formal sector was dominant in providing credit in all areas except consumption, in the province. A report on Consumer Finances and Socio Economic Survey 1996/97 conducted by the Central Bank of Sri Lanka revealed that institutional sources provided two thirds of all loans. The reason for rapid growth in institutional loans is expansion of the formal and semi-formal sectors, due to the increasing presence of private banks such as Seylan and Sampath, as well as micro-finance institutions such as Sanasa and Samurdhi. With considerable increase in credit availability and accessibility, borrowing appears to have increased from the formal sector, especially in the areas of housing, settlement of debt, and business.

The informal sector is dominant in the provision of consumption loans in all 3 districts, 98 percent in Kandy, 90 percent in Matale and 65 percent in Nuwara Eliya. It is obvious that formal sector is reluctant to provide credit for consumption because of high risk. In addition to consumption, percentage contribution of the informal sector in the province is 35 percent for housing, 29 percent for business/trade and 24 percent for ceremonies. As regard to districts, the informal sector provided 39 percent of loans for business/trade in Kandy and 52 percent in Matale. It appears that small traders continued to largely rely on informal sources due to problems of collateral.

13. Conclusions

The following conclusions could be made based on the above analysis.

- Of the total household income, cash income accounted for about 85 percent in all three districts in the province.

- There was no marked difference in income levels among the districts but a significant variation was noted in sectors. The highest income was reported in the urban sector while the lowest was observed in the estate sector in all districts in the province.
- Over 50 percent of household income was derived from the main occupation. However, transfer income played a significant role contributing 15 percent to the household income.
- The poorest 40 percent of the households in the Central province received 13.2 percent of the total household income while the richest 20 percent received 52 percent of the household income. When compared to the findings of earlier studies, this indicates an increase in income inequality. However, this difference needs to be treated with caution as the sampling frame and methodology employed by the JIMOD survey is not comparable to national surveys.
- The vast majority of income earners belonged to the prime working age population, which lies between 26 and 45 years. Similarly, male income earners represented nearly 70 percent of income receivers in the sample. However, female income earner accounted for around 43% of income in the estate sector. Around 40 percent of income earners had obtained a junior secondary education. A sharp increase in income was observed between the categories with junior secondary education and GCE (O/L) and those with "A" Level and University education.
- The most prominent economic sector was agriculture including hunting, forestry, and fishing registering 43 percent of income earners in the province. Nevertheless, the proportion of income from agriculture was 28 percent, indicating low returns from the sector, whereas wholesale and retail trade, which accounted for 9.4 percent of the income earners, contributed 17 percent to total income.
- Savings as a percentage of income was 19 percent in the Central province, which was almost similar to the national savings rate of 19.5 percent. However, there was a big variation among the districts, 16.3 percent in Kandy, 3.8 percent in Matale, and 7.6 percent in Nuwara Eliya. As regard to sectors, urban sector reported the highest saving rate of 25.4 percent while the lowest was observed in the rural sector with 7.7 percent.
- The average net investment rate was 8.8 percent for the province but there was marked variation among districts and sectors. The highest investment rate for all three sectors was in Kandy district. This may be due to availability of better investment opportunities in Kandy district compared to the other two districts in the province.
- Household indebtedness was considerable in the province. Around 35 percent of the sample reported current outstanding loans. As regard to district, the maximum rate of borrowing was reported in Matale district with 44 percent. Housing, loan settlement, consumption and agriculture were the main reasons for borrowing. The formal sector was dominant in provision of credit except in consumption where the informal sector played a major role. In the recent past, the institutional sector has expanded with the advent of new private banks as well as micro-finance institutions.

References

Central Bank of Sri Lanka (2002) Annual Report for 2001

----- (1999) Report on Consumer Finances and Socio Economic Survey 1996/97

Jayasuriya S & David Dunham "Equity and Growth in Sri Lanka: Retrospection and Prospects", a paper presented at the conference on 50 years of independent Sri Lanka organized by the Central Bank of Sri Lanka

Department of Census and Statistics (2001) Household Income & Expenditure Survey

Indraratna A D V de S (ed) (1998) Fifty Years of Sri Lanka's Independence: A Socio Economic Review, Sri Lanka Institute of Social and Economic Studies

Rupasena L P (2001) "An Analysis of Food Security Situation in Sri Lanka" A paper submitted to the National NGO Council, Colombo

----- (2000) "An Evaluation of the Significance of Rural periodic Markets in the Development of Central and North Central Province", Concept paper prepared for the project on Poverty Alleviation and Regional Development, USI-SIDA, SAREC, University of Jayawardanapura

Annex Table 3: Sources of Household Income

(Percentage)

Occupation	Kandy				Matale				Nuwara Eliya				Central Province			
	Urban	Rural	Estate	All	Urban	Rural	Estate	All	Urban	Rural	Estate	All	Urban	Rural	Estate	All
Main	49.9	55.2	69.2	54.17	51.4	63.1	64.0	60.79	53.9	54.7	64.7	56.75	51.1	57.6	66	56.23
1 st Subsidiary Occupation	9.4	4.4	2.3	6.13	1.3	3.7	3.7	3.21	4.6	9.8	5.8	6.38	7.1	4.7	4	5.47
2 nd Subsidiary Occupation	0	0.5	0.9	0.34	0	0.3	0	0.21	0	3.3	0	0.94	0	0.7	0	0.42
3 rd Subsidiary Occupation	0	0.0	0.0	0	0	0.1	0	0.04	0	0.3	0	0.10	0	0.1	0	0.03
4 th Subsidiary Occupation	0	0.0	0.0	0	0	0	0	0	0	0.1	0	0.01	0	0	0	0
All	59.3	60.1	72.4	60.64	52.7	67.2	67.7	64.25	58.5	68.2	70.5	64.18	58.2	63.1	70	62.15
Property																
Rent/Lease Imminent Property	1.7	1.8	2.7	1.85	5.7	0.3	0	1.41	0.4	0	0	0.21	2.0	1.2	1	1.45
Imputed rent Owned house	19.3	10.4	5.3	13.35	12.1	6.7	4.5	7.60	21.7	11.5	6.5	18.05	18.9	9.3	6	12.28
Rent Moveable property	0	0.1	0.0	0.06	0	0.7	0	0.49	0.1	0	0	0.03	0	0.3	0	0.16
Income other Property	4.8	2.7	0.3	3.30	7.0	1.3	0	1.03	0	0.3	0.4	0.20	3.0	2.0	0	2.20
Interest all dividends	1.5	0.2	0.0	0.70	0	0.4	0.3	0.32	0	0	0.2	0.06	0.9	0.3	0	0.49
Imputed value of firewood	1.3	3.8	4.1	2.90	1.2	3.4	7.2	3.29	0.8	5.3	8.2	3.90	1.2	3.8	7	3.18
Imputed value of Home garden produce	0.9	2.4	1.5	1.77	1.0	3.7	2.2	2.99	0.5	1.6	10.0	3.12	0.8	2.7	5	2.31
All	29.5	21.4	13.9	23.93	27	16.5	14.2	17.13	23.5	18.7	25.3	25.57	26.8	19.6	19	22.07
Windfall Income	0	0.3	0	0.18	0	0	0	0	0	0	0	0	0	0	0	0
Transfers																
Pensions	3.3	2.8	0	2.80	12.4	4.9	0	6.01	2.1	1.1	0.2	1.32	4.3	3.3	0	3.31
Samurdhi	0.1	2.1	0.2	1.25	.3	2.7	2.7	2.21	0.1	2.5	0.1	0.8	0.2	2.3	1	1.40
School Uniforms	0.1	0.5	0.3	0.33	0	0.1	2.1	0.26	0.3	0.8	0.5	0.5	0.1	0.4	1	0.34
Other Government	0	0.4	0	0.23	0	0.1	0	0.08	0.2	0.3	0.0	0.17	0	0.3	0	0.18
Non-government	0	0.0	0	0	0	0	0	0.03	0	0	0	0	0	0.0	0	0.01
Relatives(Armed forces)	0.5	4.9	0	2.92	2.3	0.2	0	0.62	0.1	2.1	0.0	0.65	0.6	3.2	0	1.96
Other relatives/friends in Sri Lanka	1.9	2.7	3.7	2.44	11.6	4.9	9.4	6.63	0.5	4.8	0.5	1.71	2.9	3.5	3	3.32
Other relatives. Friends (aboard)	3.5	4.7	8.8	4.52	0	1.8	3.2	1.57	14.8	0.3	0	7.05	5.7	3.4	4	4.26
Other	1.6	0.1	0.8	0.65	0	1.3	0.9	1.01	0	0.8	0.1	0	0	0.5	1	0.66
All	11	18.2	13.8	15.14	26.6	16	18.3	18.42	18.1	12.7	1.4	12.2	13.8	16.9	10	15.44
Other Income	0.2	0.1	0	.11	0	0.3	0	0.19	0	0	0.3	.76	0.1	0.1	1	0.25
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Source: JIMOD Household Survey 2001