FEMALE LABOUR UNDERUTILIZATION IN SRI LANKA

by

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ABSTRACT

This study investigates underutilization of female labour in Sri Lanka in the context of the effects of the demographic, educational, agro-industrial and mobility transitions which have occurred over recent decades in the country. In this respect the study investigates (1) the nature and dimensions of underutilization of female labour in Sri Lanka due to unemployment or underemployment and the work patterns of part-time working females (2) the characteristics of the women involved, (3) underlying causes of labour underutilization and (4) the major policy implications of labour underutilization. The Proposition that individual's unemployment/ underemployment situation can be largely explained in terms of demographic, cultural and family related characteristics is investigated. The empirical analysis is based on secondary data obtained from the Sri Lankan Socio-Economic Survey of 1969/70, Socio-Economic and Labour Force Survey of 1985/86 and Labour Force Survey of 1990/91.

The differential and interrelated impacts of the demographic, mobility and educational and agro-industrial transitions that have occurred in Sri Lanka have had repercussions on female labour supply and labour utilization. Some major conclusions emerging out of this study indicate first of all that a high level of female labour underutilization exists in Sri Lanka. Unemployment, underemployment and part-time employment among women are all high. There are identifiable specific patterns in female unemployment that can be related to recent demographic and socio-economic changes occurring in the country. Low

economic development in combination with rapid demographic and social change along with rapid increases in the female labour force have caused labour absorption problems. Incidence of high underemployment among females is related to this pattern of development. Even though exposure to increased education has increased the participation of women in economic activity, a large proportion of educated females were unemployed. A majority of women employed in the production and related occupations were in home-based, informal employment. The causes for this emanate not only from low economic development but also from the changing patriarchal value structure in Sri Lanka, the changing role of women in such a society and the life cycle patterns specific to female participation in the work force.

This work contains no material which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief contains no material previously published or written by another person except where due reference has been made in the text.

I give consent to this copy of my thesis, when deposited in the University Library, being available for loan and photocopying.

Egodage Kusumawathie Masinghe
21.12.94

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CHAPTER ONE

INTRODUCTION

This study is an investigation into labour underutilization of women in Sri Lanka - one of Asia's rapidly changing 'transitional' societies. While there is great diversity between and within Asian countries, it is an almost universal experience that social, economic and demographic change in the last two decades has been both substantial and rapid. In several nations, an important feature of the 'transitional society' has been an increased supply of female labour without the economies of those countries having the capacity to absorb such labour in productive employment, with the inevitable result being a high incidence of unemployment and underemployment. This problem however has been the subject of only limited research and attention from policy makers. The present study attempts to shed some light on this issue by examining labour underutilization of women in Sri Lanka.

1.2 OBJECTIVES OF THE STUDY

The overall objective of the present study is to establish the nature and dimensions of underutilization of female labour in Sri Lanka, the characteristics of the women involved, its underlying causes and to chart some of the major implications. It has hitherto not been established clearly how far the socio-economic and demographic changes occurring in rapidly changing Asian countries such as Sri Lanka have affected female labour underutilization levels and patterns. An important goal of this study is to find explanations for the causes of female labour

underutilization in the context of the several socio-economic and demographic changes occurring in the country. The specific objectives of the study are as follows...

(1) To establish clearly

(I) Labour underutilization of females due to unemployment or involuntary underemployment and the work patterns of part-time working females.

(II) The characteristics of underutilized and part-time working females

(2) To identify the causes of female labour underutilization and patterns of female labour absorption.

(3) Draw out the major implications of female labour underutilization so that necessary measures can be taken to address the problem adequately.

Inadequately used, available female labour resources are the theme of investigation in this study. Such an inadequacy may arise due to a person's potential labour not being used at all or being only partially used. Labour supplied by a person who is available for work and seeking work, but does not find work, is underutilized due to unemployment. When already employed persons are not working full time (in terms of accepted country norms of hours of work) and are seeking additional or alternative work, they are also considered to be underemployed. A person working voluntarily less than normal hours is a part-time worker. Because persistently high labour underutilization in a country for continued periods can lead to adverse socio-economic repercussions, it is important to examine differential causes of various dimensions of inadequate use of labour and take necessary remedial measures. An important

facet of development is efficient use of available labour resources.

The above objectives are investigated here at three points in time for which data tapes containing cross-sectional data were available. The Socio-Economic Survey 1969/70 was mainly used to analyse labour underutilization occurring from unemployment; the comprehensive analysis of all aspects of underemployment investigated in this study is through the Socio Economic & Labour Force Survey 1985/86 and the Labour Force Survey 1990/91 where there are comparable data available on unemployment and underemployment.

1.3 ISSUES OF LABOUR UNDERUTILIZATION IN THE ASIAN REGION

The last four decades have seen a number of important transitions in the economies and societies of Asia. The changes that have occurred in Asian countries due to these transitions have resulted in differential levels of development (Table 1.1) between and within the countries (Ogawa, Jones and Williamson, 1993:1-17). These improvements are related to the human resource development of younger age groups, particularly women and the status of Asian women has improved. The demographic transition in Asia (Caldwell, 1982) occurred due to dramatic declines in the mortality and fertility levels (Leete,1987:188-206; Jones, 1990a:219-251; 1990b:507-536; Hugo, 1992:28-57). Changes occurred in the patterns of diseases and shifts in the average age at death, from infancy, childhood, and young adulthood to older ages, and with corresponding increases in life expectancy (Omran, 1982:172; The World Bank, 1984:90-93). Dramatic declines took place in infant mortality and this differed between countries (Jones, 1990a:222). The commencement of the

Table 1.1
Issues of Labour Underutilization

	Growth Rate %		Growth Rates %			Rates %		
	Labour Force		Per/capita GNP	Population		Un-employment		Under employment
	70/80 total	80/92 total	80/92 total	70/80 total	80/92 total	90/91 total	90/91 female	80/85 total
Japan	0.7	0.8	3.6	1.1	0.5	2.1	2.2	15.8
South Korea	2.6	2.3	8.5	1.8	1.1	2.2	1.9	10.4
Hong Kong	4.3	2.0	5.5	2.5	1.2	1.7	1.5	-
Singapore	4.3	1.4	5.3	2.0	1.8	1.9	1.8	-
Philippines	2.4	2.5	-1.0	2.5	2.4	10.6	12.9	36.0
Malaysia	3.7	2.8	3.2	2.4	2.5	7.6	na	25.0
Thailand	2.8	2.2	6.0	2.7	1.8	2.2	na	0.3
Indonesia	2.1	2.4	4.0	2.3	1.8	2.5	2.6	42.7
Bangladesh	2.0	2.9	1.8	2.6	2.3	1.8	na	22.0
Sri Lanka	2.3	1.6	2.6	1.6	1.4	14.4	23.5	21.0
Pakistan	2.7	2.9	3.1	3.1	3.1	6.3	16.8	9.4
India	1.7	2.0	3.1	2.1	1.9	na	na	na

Social Indicators of Transition										
	TFR		IMR		Education Attainment females per 100 males				Female Share of Labour Force %	
					Primary		Secondary			
Years	'70	'92	'70	'92	'70	'91	'70	'91	'70	'92
East Asia										
Japan	2.1	1.6	13	5	96	95	101	99	39	38
South Korea	4.3	1.8	29	13	92	94	65	87	32	34
Hong Kong	3.3	1.4	28	8	90	na	74	na	na	na
Singapore	3.1	1.8	20	5	88	90	103	100	26	32
South East Asia										
Philippines	4.1	3.5	66	40	na	94	na	99	33	31
Malaysia	5.5	3.5	45	14	99	99	102	137	31	35
Thailand	5.5	2.2	73	26	88	95	69	97	47	44
Indonesia	5.5	2.9	118	66	84	93	59	82	30	31
South Asia										
Bangladesh	7.0	4.0	140	91	47	81	na	49	30	31
Sri Lanka	4.3	2.5	53	18	89	93	102	105	25	27
Pakistan	7.0	5.6	142	95	36	52	25	41	9	13
India	5.8	3.7	137	79	60	71	39	55	30	25

Source:
The World Bank, 1994:162-215 Tables 1, 25-30; 1993:291 Table 27
International Labour Office, 1993:88-94 (Statistical Annex)
Conference Background Papers presented at the Policy Makers Round Table Conference on Employment Strategies for Accelerated Economic Growth in Asia, 1 st - 2 nd December 1988, Kuala Lumpur, Malaysia
Notes: TFR - Total Fertility Rate
IMR - Infant Mortality Rate

fertility transition in some East, South East and South Asian countries occurred in 1960's and fertility declines have progressed up to the 1990's that eventually have led to a fall in rates of population growth (Hugo, 1984:1-23; Jones, 1990a:219-235; Dasvarma and Hull, 1983). These irreversible changes occurred more due to 'westernization' than industrialization (Caldwell, 1982:207-300) and the associated social and familial changes (Hugo, 1981:1-17), with education playing a vital role (Caldwell, 1982:301-350) as an agent of change.

Occurrence of an epidemiological transition (Omran, 1982:172-183) in Asian countries is observed when firstly a long term shift occurs in mortality and disease patterns. Degenerative, stress related and man-made diseases become more important than environment related diseases as causes of morbidity and mortality. Secondly average age of death shifts from younger to older ages and improved survival selectivity is in favour of younger age groups and of females. Thirdly unlike the epidemiological transition in developed countries caused by the rising standards of living and improved nutrition, in the less-developed countries changes in disease patterns occurred due to (a) medical progress and (b) organized health care. In the developing countries the health care, and disease control programmes are usually, internationally financed and thus are largely independent of the socio-economic development. Further maturation of the transition depends on beneficial synergy of health care programs and socio-economic development. Fourthly these variations in determinants, pace patterns and the consequences of population growth identify four basic

models of transition of which the transitional variant of the 'delayed model' (Omran, 1982:174) describe the mortality decline in some ASEAN countries, Sri Lanka, Mauritius, Jamaica, and probably China.

A transition in education occurred with the spread of modern schooling (Caldwell, 1982:365) and the attainment of mass education (Caldwell, 1980:237-249), leading to the achievement of universal primary education in some Asian countries (Jones, 1992:33). Education moved to the centre stage as an explanation for mortality and fertility decline in Asia (Caldwell Reddy and Caldwell, 1988:29). The Asian region experienced irreversible improvements in the levels of education and literacy in the population (Jones, 1992). The education transition has been more beneficial to females due to the higher participation of females in the primary and secondary levels of education (Jones 1992:30). With the improvement in the status of women in the family and society, the traditional roles performed and expected of women tended to become more relaxed or changed (Mahadevan and Sumangala, 1987:120-124). More women are seen to assert economic independence.

A mobility transition indicates clear changes in the internal and external mobility patterns in Asian countries. Circulatory patterns of migration observed in Java (Hugo, 1985:46-87) and increased emigration of females for work in foreign countries (Hugo, 1993) is a reflection of the dynamics of change in Asia. These changes are parallel to different phases of the demographic transition (Zelinsky, 1971) or are caused by structural changes in the rural economy due to modernization (Hugo, 1985). Mechanization in

agricultural production leads to the expulsion of traditional labour from agriculture to non-farm employment in other villages. Farmers migrate from rural areas looking for employment outside their village (Hugo, 1985:49-62). Thus, modernization in agriculture is associated with developments in internal and external migratory patterns in some countries. Such changes should be related to the process of socio-economic transition that is taking place in developing countries (Standing, 1985:3).

The changes that occurred in western countries were accompanied by a rapid shift from agricultural labour to industrial employment, referred to as the agro-industrial transition and an increase in the per/capita income in the country (Oshima, 1987:40-41). Industrialization and the accompanied economic growth of these countries resulted in a large proportion of persons employed in agriculture being relocated in the industries.

With respect to the demographic transition, the experience of the western countries has been that economic growth preceded the fertility decline (Davis, 1945:1-11; 1955:33-49; 1963:345-366; Notestein, 1945:36-57; Freedman, 1961:35-119). Contrary to the western experience, economic growth had been low in some East Asian and South Asian countries (Table 1.1) when these countries experienced fertility and mortality declines (Ogawa and Tsuya, 1993:21-64; Jones, 1990a:507; Jones 1990b). In some of these countries, the sequence of events relating to economic growth and occurrence of demographic and education transitions is not clear (Jones, 1993:230-258).

Irrespective of the level of development a common feature among a large number of countries is the high level of underemployment. Such underemployment is attributed to the influence of climatic patterns in paddy agriculture and the currently transitional nature of the economies in the region (Oshima, 1971:55-77; 1987:1-12). As shown in Table 1.1, unemployment is low for most of the observed countries in East and South East Asia. In the South Asian region, Sri Lanka presents a case where unemployment and underemployment is high while the population and labour force growth rates are low.

High levels of underemployment in most of the countries in Asia and unemployment in some of the countries, suggest existence of underutilized labour resources in the region. Arthur Lewis's(1954:139-191) hypothesis of unlimited supplies of labour in the agriculture sector in Asian countries, focused attention on the problem of labour underutilization in the region. Since then, there has been a rich and lively discussion on the subject. Myrdal(1968:1003) emphasized the importance of taking into consideration the climatic and cultural background of the Asian region and the backwardness of the region originating from the dominance of agriculture, when attempting to understand the labour underutilization. Bloom and Freeman(1986:381-414) pointed out the importance of examining the long term effects of population growth on the labour force with their hypothesis of the lagged effects of rapid population growth on the labour supply and employment of developing countries. The International Labour Organization(1971b:1-88) documented and analysed the concepts and problems associated with the

measurement of labour underutilization. Godfrey(1986:1-30) highlighted the importance of understanding the labour underutilization issues in Asian countries in the wider cotext of demogrphic changes and the growth of working age population. Hauser(1974:1-15; 1977:10-25) measured the level of labour underutilization in some selected Asian countries. Oshima(1981:1-26; 1987) focussed attention on the post second World War developments in Asia and the current status of the problem in the region. Getubig and Oshima(1991) investigated the potential for a full employment strategy for the Asian countries as a solution to the problem of labour underutilization.

The effects of the transitional society on the labour supply in Asia have been manifold. The major long term impact which redefined the structure of the potential labour force has been lagged effects of the population growth. High growth periods in the early phases of the demographic transition have ensured that the labour supply increased dramatically and would continue to grow for a period of time (Bloom and Freeman, 1986; Bauer, 1990:615-642). Dramatic increases in the female labour supply occur partly due to declines in fertility (Bauer, 1990), the breakup of the patriarchal society and changes in economic production patterns in Asia. Moreover, the educational transition enhanced the human capital of the potential labour force and the mobility transition redefined the levels and location of the labour force.

Economic growth in a number of East Asian countries has involved an agro-industrial or agro-service transition (Oshima, 1987) caused by changes in the employment structure

(Jones, 1983:13-22) of the labour force with a move towards non-agricultural employment. The pace of the transition from agriculture to non-agriculture depends on the level and pattern of growth in the country (Oshima, 1987). Recent developments in some East and South East Asian countries show that they have achieved higher economic growth (Table 1.1) and industrialization (Oshima, 1987). However predominantly agricultural, South East Asian economies like Thailand and Indonesia have combated open unemployment to a great extent[1] nevertheless these countries face a problem of high underemployment among the employed labour force.

Among other Asian countries, Sri Lanka has achieved an advanced level of the demographic transition inspite of the low level of economic growth and per capita income (Table 1.1). Currently, it is experiencing fast labour force growth among the younger age groups due to the lagged effect of a high population growth period and increased participation of women in labour force. The momentum of growth of the labour force is aggravating the problem of labour underutilization and it is projected that over the next ten years the total labour force in Sri Lanka will exceed eight million by the year 2000 (Abeykoon, 1983:1-24; Roberts, 1981:1-24), National Planning Department, 1990) and at least one third will be women. There is every chance that the underutilization situation for the new entrant females to the labour force will degenerate over this period. The problem is increasing in complexity and magnitude.

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1 Low unemployment rates may be partly attributed to the definitions of unemployment adopted by the countries (Oshima, 1971:)

Educational development has long term implications for the labour underutilization problem. New entrants into the labour force over the next ten years will be more educated than earlier generations of workers. The female labour force has been growing at an average rate of 4.0 per cent per annum during 1963-71, 2.0 per cent per annum in 1971-81 (Masinghe, 1991), and is currently growing at a rate of 3.8 per cent per annum (National Planning Department: 1990). However, the rate of growth of females with secondary and above levels of education has exceeded 6.0 per cent per annum during 1971-1981 (based on Masinghe 1991:39) and is estimated to be growing at an even higher rate currently (National Planning Division, 1987). Numerical increases as well as high growth rates fluctuating between 5 per cent and 24 per cent are observed for school attending females of 5-19 age years at all levels (Masinghe, 1991:7). Vocational and technical education for females has also expanded in recent years (National Planning Division, 1988:100-106).

The socio-political environment in the country has influenced labour absorption patterns. Policies of successive governments since the country achieved independence in 1948, have influenced the labour utilization patterns in different periods. Import substitution oriented industrialization policies before 1977 and export promotion manufacturing of the post 1977 period represent two of the more important periods in this respect. The abandonment of the former policy as well as adoption of the latter had repercussions on labour absorption. For example, when the latter policy was adopted a number of programmes such as, the establishment of free trade zones, and the promotion of

small scale industries outside the free trade zones, came into effect and such programmes would have increased the labour absorption capacity of industrial sectors of the economy. These changes largely favoured increases in female employment in manufacturing sector.

1.4 STUDIES OF LABOUR UNDERUTILIZATION

Labour underutilization has long been recognized as being high in Sri Lanka (ILO, 1963:1-12; ILO, 1971a:1-36), but the problem has not been addressed in research. This is attributable partly to a lack of data necessary to examine important aspects of labour underutilization such as underemployment. There have been no studies which attempt to understand the impact of the several transitions outlined above that have occurred in Sri Lankan society on female labour utilization. Nevertheless, there are a number of published and unpublished articles that have addressed several aspects of the unemployment problem as it existed in the late 1960's to late 1970's. In particular, youth unemployment has been examined in relation to high population growth and the slow growth in the economy. Papers written by, Srivastava, Selvaratnam and Ambalavana(1971), and Srivastava and Selvaratnam(1972:39-40) addressed the problem of youth unemployment in Ceylon, prospects for employment, policy implications and employment targets in such an employment strategy.

Jones and Selvaratnam(1971:72-91) surveyed the problems associated with employment creation in Ceylon. They analysed the growth of employment by sectors from 1946 to 1968 and estimated the potential unemployment on the basis of contemporary data and estimated the potential investment

needed to create adequate employment in the non-agricultural sectors for the projected labour force. Srivastava, Jones, and Selvaratnam(1970) projected the patterns of labour force growth by looking at the employment and unemployment situation. Selvaratnam, Wright and Jones(1970) produced population projections for Ceylon, on the basis of three fertility assumptions and addressed the implications of labour force growth on the basis of population trends. Abeykoon(1983:17-25) projected the Sri Lankan labour force on the basis of demographic, economic, and socio-cultural determinants of labour force change. These projections anticipated that the prevailing rates of high population growth would have adverse repercussions on the potential supply of labour. Srivastava and Selvaratnam(1971) analysed the employment situation and trends of employment growth. Ranasinghe(1992:139-221;1977:23-27) commented on the problems associated with human resource development in Sri Lanka, unemployment and job expectations among youth and adult females.

An important study by (Wilson, 1975) addressed the problem of population growth, labour force growth and unemployment in some detail. The objectives of his study were to (a) examine the availability and comparability of labour force data, (b) to investigate the determinants of labour force growth and to analyse labour force trends and their relationship to the population and (c) to examine the structure and characteristics of the labour force. The study was based on data collected in Population Censuses. The author examines the effect of population growth on the size and levels of labour force by gender and in the course of

doing so, deals with unemployment. Lack of data on hours of work hampered the analysis of underemployment in this study (Wilson, 1975:192). Nevertheless the book constitutes an important study of Sri Lankan's labour force which is an area where major research is lacking.

A chapter on the Sri Lankan labour force had been contributed by Wilson, appears in the The Country Monograph Series, 'The Population of Sri Lanka' (ESCAP, 1976:252-282). This chapter includes a descriptive analysis of the composition and characteristics of the labour force in 1971 along with an analysis of participation patterns. Unemployment and underemployment is summarised by the author and underemployment figures are given as estimates based on 1968 published data of the labour force survey.

Another study by Wilson (1981) analysed the regional variation of labour force participation in Sri Lanka highlighting the inter-district differentials of female labour force participation. He examined unemployment as a composite part of the labour force that he was analysing, but does not address the issues of labour underutilization arising from underemployment or part-time work. His findings were based on the 1971 Census data tape and were constrained by the shortcomings of a narrow data base.

Abeykoon(1976) analysed the demographic aspects of Manpower in Sri Lanka and addressed the issues of female labour force participation in Sri Lanka. Masinghe (1991) analysed female labour force participation with special reference to graduate women and examined underutilization of graduate labour but addressed only unemployment and mismatched employment as issues of underutilization. The

main source of data for this analysis was the Ten Per cent Sample data tape of the Census of Population 1981 and was constrained by the lack of underemployment questions in the census. Balakrishnan and Gunasekera(1977:87-109) looked at high population growth patterns and drew attention to the impact of such population growth on the labour force and employment in Sri Lanka. Looking at the growth patterns they suggested that the backlog of unemployment had increasing substantially. Sanyal et al (1983) investigated university education and graduate employment in Sri Lanka, but did not address issues of labour underutilization.

Some of the studies that have analysed development patterns of the economy and rural non-farm employment have also commented on the employment, unemployment and underemployment situations in Sri Lanka. Karunatilake (1971:167-175; 1987:260-276) examined the labour force, employment and unemployment and discussed briefly the policy issues and the patterns of development that are reflected in the existing unemployment and employment situation. His analysis is based on published secondary data and does not address the issue of labour underutilization. Gunatilleke (1991:1-27) investigating national planning issues considered the unemployment problem. Hewavitharana(1986:1-17; 1991:1-60) investigated the dimensions of the rural unemployment problem and rural non-farm employment pattens, problems, issues and strategies.

Rodrigo(1988:1-105) inquired into employment, wages and income distribution in Sri Lanka during the 1960-1985 period and addressed issues of the structure of labour market and wage performance. She analysed the productivity in

employment using wage income levels and employment patterns. The study however, does not analyse the productivity issues of underutilization due to low hours of work. Rodrigo and Attanayake(1988:1-31) investigated the employment consequences of alternative development strategies in Sri Lanka. They found that the development strategies pursued during the post 1977 period were more effective than pre 1977 policy regime in absorbing the annual additions to the labour force. According to this analysis, the momentum of unemployment reached a high level during the pre-1977 policy regime, and had been effectively brought down by the post 1977 development strategies. Nevertheless, they found that in the post 1977 period, underemployment and casual employment had increased. They reported that rampant underemployment existed in many sectors of the economy particularly in the agricultural and construction sectors. Irwing(1986) analysed the prospects of employment and the privailing situation of unemployment in Sri Lanka. This study was organized by the Institute of Policy Studies and contains a brief analysis of economic growth patterns that contribute to an understanding of the unemployment problem in Sri Lanka. Masinghe and Gunasekara(1991:330-369) briefly examined issues related to employment, unemployment and underemployment in Sri Lanka, as an introduction to their study on 'Employment Stategy for Accelerated Growth in Sri Lanka'. They found that census data was inadequate to study underemployment.

Sepala and Lee(1989:1-23) undertook an empirical analysis of changing trends of female labour supply in Sri Lanka using cross-sectional survey data collected by the

Agrarian Research and Training Institute during 1987/88. They analysed the employment and unemployment situation in Sri Lanka as a prelude to their examination of labour supply.

Standing and Sheehan(1978:235-236) carried out a regression analysis of the determinants of labour force participation based on a 'conventional measure of participation, ie. employment and unemployment' of males and females in Sri Lanka. They found that in Sri Lanka, female participation is related to marriage, fertility and education. As such a decline in fertility may be expected to increase the extent of female labour force activity while rising levels of education could be expected to lead to greater female activity. This analysis was based on data collected in the Determinants of Labour Force Participation survey of 1973 conducted by the Central Bank. The authors warned that the low quality of data hampered the analysis and findings.

Kelegama and Wignaraja(1991:49-60) built a model to understand the pattern of labour absorption in the manufacturing sector in Sri Lanka with a view to contributing to the government's effort to resolve the unemployment problem. They concluded that in spite of a decade of experience with the export-led industrialization policy, the manufacturing sector had not been able to create large-scale employment opportunities for the unemployed and that the manufacturing sector had been characterised by low long-run rates of labour absorption per unit of output relative to some successful East Asian countries. Their results indicated that the dominant sectors

of Sri Lankan manufacturing have relatively lower labour absorption capacities.

A report of an interagency team[2] organized by the International Labour Office provided important insights into the unemployment situation in Sri Lanka in 1971. The report analysed the size, nature and the dimensions of the problem and proposed fundamental solutions in terms of the key fields where an employment strategy leading to a full employment situation could be achieved. The findings of the mission were based on published secondary data, the Socio-economic Survey of 1969/70, and discussions with the Government and officers who handled the subject of manpower planning. The investigation of the mission was hampered by the paucity of data available to analyse underemployment, but the main findings were as follows. Open unemployment[3] was high among youth, particularly more educated young, adult men and women. Unemployment was higher for women, than for men. Labour underutilization occurring from low income, and productivity were identified as problems, but not analysed. According to the mission, (a) high population growth, (b) declining balance of payments due to a decline in export earnings, (c) a system of education which had failed to adapt itself to the requirements of the economy, and (d) policy inertia which was incapable of making the necessary structural changes in the economy to achieve

2 The team consisted of several internationally recognized planners, researchers and academics. The editorial staff was headed by, Professor Dudley Seers who was the Director of Development Studies at the University of Essex at the time, and included Michael Lipton a fellow of the Institute of Development Studies of the University of Essex at the time, Chandra Arulpragasam, Louis Emmerij, Ronald Dora, and Richar Jolly (ILO, 1971:xi)

3 Open unemployment is defined as persons who are not employed and are actively seeking work.

growth were the four main factors behind the unemployment situation in Ceylon in the late 1960's and early 1970's. The mission's diagnosis for the high level of unemployment prevailing in the country was that the labour market was affected by two types of imbalances:

(i) an overall imbalance between the total supply and demand for labour, and

(ii) a structural imbalance, in which the types of work which people are willing and able to do does not match the pattern of opportunities available because the work opportunities and the demand for work are mismatched by the seasons during which demand for additional labour is created. In addition the places where the vacancies arise are located in places where people are not keen to work, hence a mismatch of skills, income aspirations or employment status aspirations. In coming to these decisions on mismatched employment the Commission was very much influenced by some occupations such as 'toddy tapping' where immigrant south Indians were employed because this occupation was not popular among the local employment seekers.

The Report of the Survey on Unemployment and Underemployment 1959/1960[4] (International Labour Office, 1963:1-11) provides an important insight into the labour underutilization situation at the time of the Survey in Sri Lanka. This survey was intended to provide the Government with the basic data needed for economic planning and in particular, to throw light on the unemployment problem in

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4 An attempt was made to obtain the data tape of this Survey from the Department of Census and Statistics, unfortunately the original survey was not available.

the country. Its essential purpose was to provide information about the characteristics of the labour force of Ceylon and to investigate unemployment and employment characteristics by hours of work and urban-rural sectors; the survey report indicates that unemployment was largely concentrated among young males and females aged less than 25 years. For measurement of underemployment the survey adopted a norm of 40 hours per week. Approximately 45 per cent of the rural labour force worked less than 40 hours and 19 per cent were available for additional work even though a large proportion (38 per cent) of the underemployed were working less than 15 hours per week. Similarly, 29 per cent of the employed in urban areas worked less than 40 hours per week and only 11 per cent were available for extra hours of work.

Reports of the Socio-Economic Survey 1969/70, the Socio Economic and Labour Force Survey 1985/86, and the Labour Force Survey 1990 describe broad patterns of unemployment and underemployment. Data tapes of these three surveys have been analysed in greater detail in this study. The tapes contain much more detailed information than the descriptions of broad patterns contained in the reports.

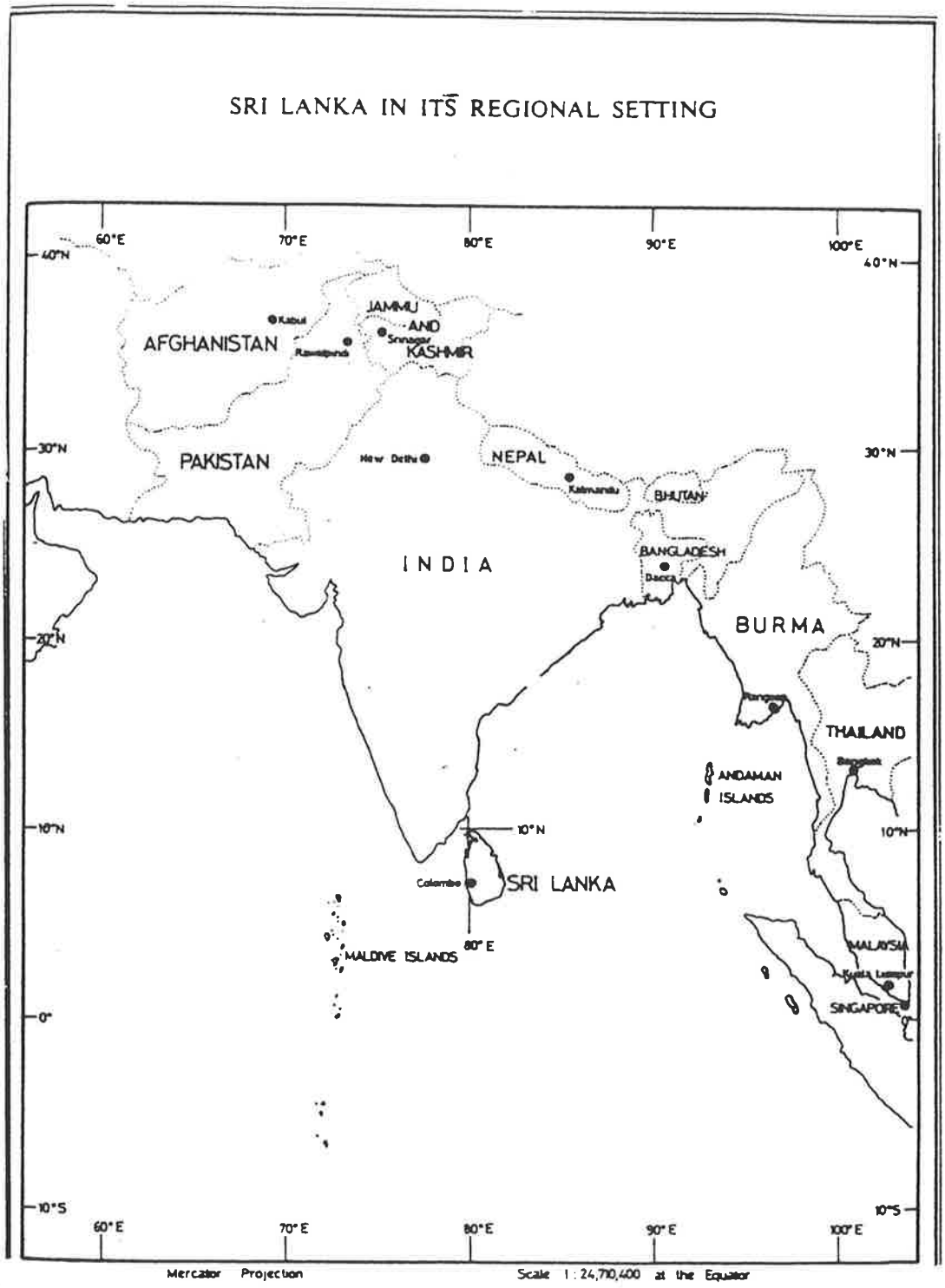
Reports of Censuses of Population in 1946, 1971, and 1981 document broad Census findings in the characteristics of employment and unemployment. Other Survey Reports such as the Determinants of Labour Force Participation Survey of 1973 and the Consumer Finance Surveys 1973, 1978, 1982/83 conducted by the Central Bank of Ceylon contain sections on unemployment and underemployment. The definition of underemployment used in these is based on 'the number of days worked' criteria. These reports contain some

information about the underemployment patterns prevailing in Sri Lanka. The Employment and Manpower Division, (1983) have also documented manpower data sources and utilization trends.

1.5 LOCATION AND GEOGRAPHICAL BACKGROUND

Sri Lanka is an island in the Indian Ocean with an area of approximately 25,481 square miles and lies between 5'55" and 9'51" north latitude (Figure 1.1). The island is separated from the southern extremity of the Indian sub-continent by the Gulf of Mannar and the Palk Strait, the width of the intervening sea at the narrowest point ie Adams Bridge being about 20 miles. The country experiences monsoonal climatic conditions. Generally the temperature of the low lying areas is around 81 degrees Fahrenheit, while in the highlands it declines to between 80-70 degrees Fahrenheit. Variation in the annual rainfall is between 40 to 200 inches with the North Western areas receiving below 40 inches and the South Eastern and the South Western fringes of the island receiving an annual rainfall of over 200 inches. Based on this rainfall pattern, the island can be divided into a wet zone and a dry zone with the boundary of the two zones along the 75 inch isohyet of annual average rainfall (Figure 1.2). The wet zone is the smaller and covers about 38 per cent of the island. Abundance of water throughout the year has meant a boom of development in that region. Export-oriented commercial agricultural crops

Figure 1.1



Source: Demographic Training and Research Unit, 1980:1

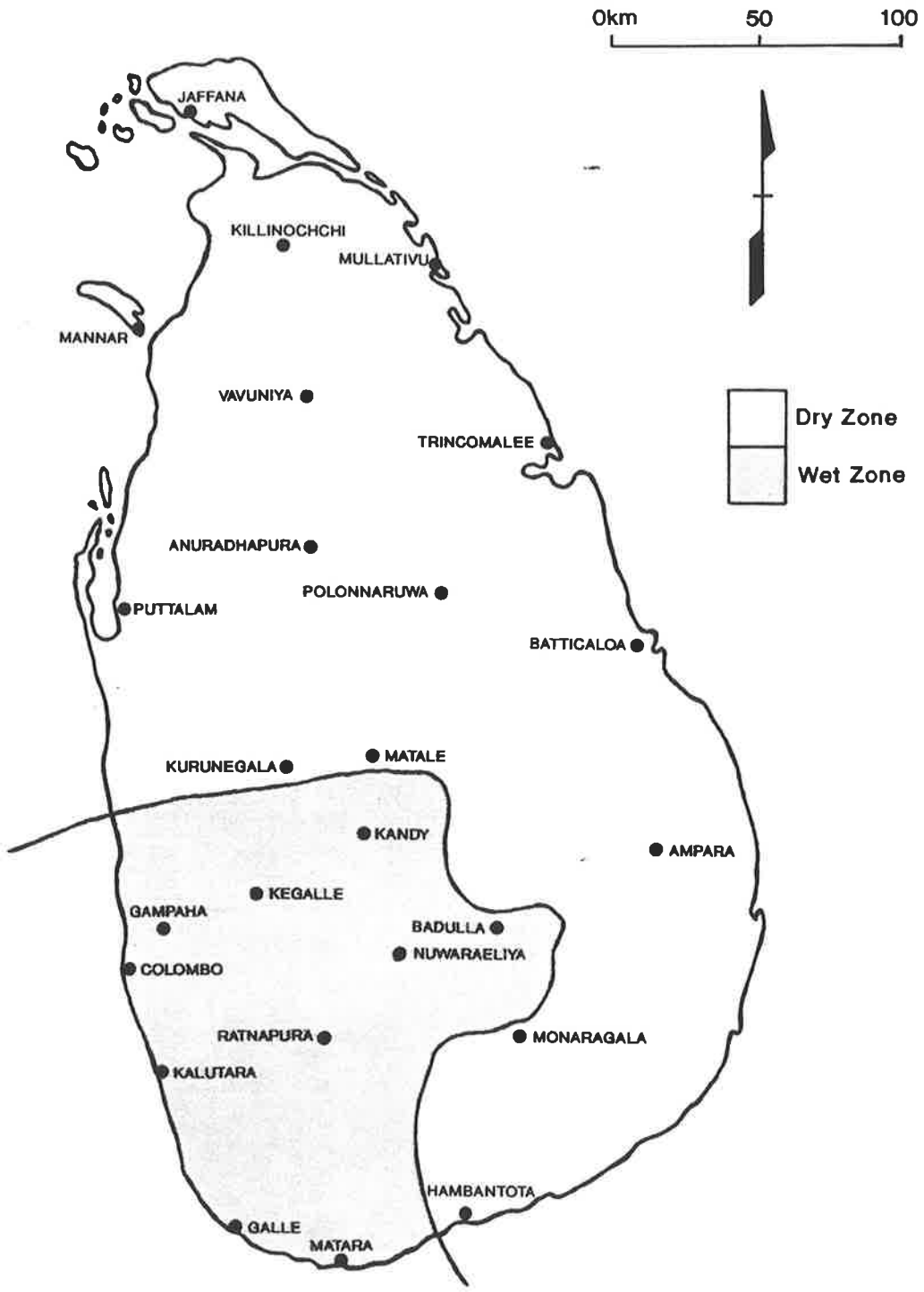


Figure 1.2 MAP OF SRI LANKA SHOWING THE DISTRICT CAPITALS, PLUS THE DRY AND WET ZONES

Source: Mendis, 1976:13 Updated

of tea, rubber and coconut are located in the wet zone. More than 75 per cent of manufacturing industries are also located in the wet zone because of the comparative advantages the area enjoys, arising from its overall developed infrastructure and transport. A disproportionate share of the population is concentrated in this zone. The 1971 Census showed that 60 per cent of the total population of the island lived in the wet zone. The Census of Population 1981 showed that the proportion of population living in the wet zone declined to 57 per cent (Department of Census and Statistics, 1986b:46-47 Tables 4.2 and 4.3). In terms of services and infrastructure the region has also been a major beneficiary. More than 70 per cent of the total urban population is concentrated in this region. The dry zone which consists of 68 per cent of the total geographical land area had less than 40 per cent of the total population in 1971 (Department of Census and Statistics, 1974:55-57), but this proportion increased to 43 per cent of the total population at the 1981 Census (Department of Census and Statistics, 1986b:49). Historical development of the country based on the river valley development is associated with this zone. Present irrigation and agricultural schemes based on river valley development are largely located in the dry zone (De Silva, 1989:280-282).

1.6 ECONOMIC AND SOCIAL BACKGROUND

Sri Lanka in the 1990's is described as a rapidly developing economy which has set the year 2000 as a deadline to achieve 'Newly Industrialized Country' status (Daily News, 12 October 1993). Even though it is not yet clear whether the country can achieve this target there is little

doubt that a significant transformation of the economy has taken place in the last four years with rapid growth in the manufacturing sector. During the 1990's the Gross Domestic Product of Sri Lanka has grown by approximately 5 per cent per annum.

A major part in the country's development since Independence in 1948 has been its socio-political development. A predominant agricultural sector coupled with a small manufacturing sector were important features of the economy when the country received independence. After the 1940's, the country experienced rapid population growth with the population doubling between 1946 and 1981. The enumerated population in 1981 was 14.8 million and currently it exceeds 17 million. The economy has grown at a slower pace than the population, and the import-dependent economy has suffered continuous balance of payment problems since the 1950's. Low per capita income, deficit budgets, low savings and investment and low growth in physical capital formation have defined the low growth patterns in the economy. Successive independent governments have had to enforce exchange regulations and import control measures to direct investment to import substitution. From 1977 an export promotion policy was adopted as a measure of promoting manufacturing development and it involved the introduction of free trade, relaxation of exchange controls and encouragement of direct foreign investment in the country. Currently several structural adjustment measures have been introduced to the economy to increase productivity and capture more funds for investment.

Sri Lanka's achievements in social and human resource development have been much greater than its economic growth. During the last quarter of a century four to six per cent of the Gross Domestic Product has been allocated for provision of health and education services to the community. Even before Independence, the country had adopted social welfare policies and policies of human resource development. Provision of free health, education, and distribution of food and other essential items at subsidized prices have been a corner stone of the Government policy. Improvements in the health condition and educational level of the population have been the force behind declining mortality and fertility levels in Sri Lanka to the extent that these policies have initiated a transitional society in Sri Lanka.

1.7 ORGANIZATION OF THE STUDY

The study is divided into nine chapters. Chapter one is the introduction which introduces the nature and dimensions of the problem of labour underutilization in Sri Lanka. This Chapter raises arguments for justification for this research study in the context of the socio-economic changes that are taking place in Asian societies and the effects of such changes on the levels and patterns of labour utilization in Asia. In this chapter, an overview of the existing studies on different aspects of labour underutilization has also been presented.

Chapters Two and Three deal with the theoretical and methodological considerations relevant to this study. Chapter Two presents the theoretical basis for the study and the methodologies employed in different chapters. Various theoretical explanations for socio-demographic and economic

repercussions of the changing Asian society and its surplus labour are examined in this Chapter. The Chapter presents a framework of analysis and an explanation of the methods used in subsequent chapters. Chapter three examines the strengths and weaknesses of the main sources of data used in the analysis. The chapter contains a comparative analysis of the designs of surveys used and the comparability of concepts and definitions used in those surveys. Also definitions, concepts and norms adopted in this study are presented.

Chapter four is a study of the growth patterns in the economy in relation to the growth patterns in employment. The Chapter investigates how the growth patterns of the economy could have contributed to problems of labour absorption. In this regard sectoral growth patterns and trends of the gross domestic product and the changes that have occurred in the sectoral composition of the economy during the last forty years are reviewed along with an investigation of reasons for such changes. This chapter compares growth patterns in different sectors in the economy with patterns of labour absorption and utilization and leads to a better comprehension of the economic background of labour underutilization in Sri Lanka. The structural changes that have occurred in the industrial structure of employment are studied using available cross sectional data at different points in time.

Chapter five is a study of the growth patterns of the working age population. The Chapter examines how demographic and educational changes in the country have contributed to female labour supply. The changing patterns of determinants

of population growth are investigated in this chapter along with the effects of such changes on the growth of the working age population.

Chapters six, seven and eight contain the main empirical analysis of the study. These three chapters examine labour underutilization of females due to unemployment, underemployment and part-time employment. Chapters Six and Seven examine the demographic, cultural, family related and economic dimensions of female labour underutilization due to unemployment, underemployment. Age, sex and marital status of the individual are the demographic characteristics examined. The ethnic identity is investigated under cultural characteristics while the size of the household, household status, support during unemployment, are the family related characteristics investigated. The occupation of the individual, industry to which the occupation is classified, employment status and educational level are the economic characteristics examined. Chapter eight examines characteristics of part-time workers and investigates reasons for such work patterns. Chapters Six, Seven and Eight also identify the causes of female labour underutilization and examine the industrial structure of female employment to highlight patterns of female labour absorption.

Chapter nine presents the conclusion of the study. The policy implications and research implications of these findings are discussed in this chapter.

CHAPTER TWO

THEORETICAL CONSIDERATIONS AND METHODOLOGY

2.1 INTRODUCTION

This Chapter examines the theoretical explanations which have been advanced for the investigation undertaken in this thesis and introduces a frame work of analysis and an outline of the methodology that will be used to study labour underutilization in Sri Lanka. There is a general lack of theory to explain labour underutilization of women in Asia and particularly a dearth of theoretical work linking demographic and economic changes in Asian societies and the effect of such changes on women. The theory section examines neoclassical approaches to understanding labour underutilization due to unemployment and the new theoretical approaches to understanding surplus labour in a broader context, embracing not only unemployment, but also underemployment and part-time work in the developing world.

2.2 THEORETICAL CONSIDERATIONS

2.2.1 LABOUR SURPLUS THEORIES AND ASSUMPTIONS

Among the various theories that have attempted to explain labour underutilization, there are two broad groups which can be identified. The first group of theories is referred to here as the neoclassical approaches which are focussed mainly upon labour underutilization due to unemployment and are based on the assumptions that the labour market is always tending toward equilibrium and that the functioning of the labour market is based on the experience of western capitalist economies. They contend that the supply of labour is determined by the real wage

level because supply and demand for labour is a function of the real wage (Keynes, 1942). According to the equilibrium theorists, unemployment in the labour market can be resolved by the market forces ie. the interaction of demand and supply forces should keep the wage rate and the labour supply at an equilibrium, if there are any inefficiencies that could be resolved through policy intervention (Pissarides, 1990:3-20,120-139). Natural calamities may create disorders in market forces. In such situations it is justifiable for the government to intervene and restore the market forces (Keynes, 1942).

Growth models developed by Harrod (1939) and Domar (1946) are based on the Keynesian approach and accept the assumption of the equilibrium of the labour market. Neoclassical theorists argue that the prevailing level of unemployment is an indicator which shows that a proportion of the potential labour force is not supplying their labour at the current wage for the production of goods and services (Hamermash and Rees, 1984:139-158). Inadequacies of the equilibrium argument to explain the short term labour market situation even in developed countries, have led to the concept of long-run equilibrium and balanced growth (Pissarides, 1990:21-40). Kalecki(1976:18-27) and Robinson and Wilkinson(1977) while accepting the equilibrium of the labour market argument, expanded the theory to include additional features (such as 'long period equilibrium', government intervention to boost investment, rapid development of agriculture, and adequate taxation of the rich) to overcome the inadequacies of the equilibrium argument.

These theories do not address the other social and demographic processes that may influence the supply of labour because such factors are taken as constant[1]. Nevertheless, constant supply of labour may be the case in stationary populations in advanced demographic transition stages that experience little or no effect of the momentum of the population growth from the previous cohorts. In the Asian situation taking account of demographic changes are important for considerations of labour supply. Kuznets(1980) and Oshima(1987:315-342) point out the importance of recognizing linkages between economic growth and demographic changes and of making labour supply an endogenous factor in the growth equation (Oshima, 1987:54).

The equilibrium approach is based on the institutional and structural assumption of well-functioning products, factors and money markets that characterize developed country economies (Todaro, 1981:215). It is difficult to apply this approach to an understanding of developing country labour markets because the developing economies are constrained by storages of capital, raw materials, intermediate products, skilled and managerial labour resources and poorly functioning resource markets (Oshima, 1987).

The equilibrium approach focuses on capital labour substitution (Oshima, 1987:55) and assumes full employment of the potential labour force (Nurkse, 1962:50-62). Such an approach recognizes the importance of technological changes to initiate growth and full employment. Nevertheless, the

1 Such an assumption may not be valid for some of the developed and industrialized countries, because in these countries, zero or near zero rate of population growth may not prevail.

theory does not fit the Asian scene because in Asia there is the need to adopt modern technological innovations of the late twentieth century into predominantly traditional, Asian structures and institutions (Oshima, 1987). Requirements of different manpower skills needed to adopt these technologies are still largely lacking. Similarly, the equilibrium approach does not provide easy answers for various external and domestic trade policies that need to be adopted. Some of these requirements may include adopting free trade while there is a need for domestic protection of industries (Nurkse, 1962:50) and the need for maintaining external equilibrium in balance of trade when the country has little or low external trade.

Oshima(1987) points out that the different sectors of production in industrialized economies on which the equilibrium approach is based, are equally developed and interconnected, that these several sectors can be considered as a single growth sector in a growth model. In developing Asian countries differential growth levels and patterns are seen in different sectors of the economy. Slow growth is particularly associated with traditional sectors, such as agriculture. Most of the Asian economies are predominantly agricultural and traditional in production techniques. This situation reflects that there is more than one sector in Asian economies and effects of differential growth in different sectors of the economy have to be taken into consideration.

The existence of a dual sector in the economy, in terms of a highly developed manufacturing sector and an undeveloped subsistence sector, creates disequilibrium

because there are more than one labour market and such a situation largely describes the Asian scene. The 'unlimited supplies of labour' hypothesis of Arthur Lewis(1954:146-149), one of the pioneers who recognized 'duality' in the functioning of the Asian labour market and the problem of 'labour surplus' in developing countries, is based on the labour market equilibrium assumption. His argument was that an equilibrium situation in the labour market could be created by bringing down the high wage rates enjoyed by the manufacturing workers while increasing employment in the sector. This could be achieved by absorbing the unlimited supply of labour from the agriculture sector into the manufacturing sector at a lower wage rate. He argued that the agricultural sector (which he described as the subsistence sector) had surplus labour with very low productivity and that such surplus labour can be transferred to the capitalist sector[2] or elsewhere at constant wages, so that the capitalist employer can produce with increasing profits which are then to be invested in more and better technologies[3]. The migration of marginally employed workers producing at zero or low productivity would result in increasing the productivity of the agricultural sector with the same level of output. The productivity of the agricultural sector was to be achieved by removing the surplus labour to the capitalist sector rather than by improving the agricultural output per se.

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2 According to Lewis(1954: 1-12) there were several categories of surplus labour in the subsistence sector. Some of them were 'the domestic service, messengers, farmers, the casuals, the petty traders, the retainers and women'.
3 The later writers equated Lewis's capitalist sector with the industrial sector.

The hypothesis of dualism based on the divided urban and rural labour markets of the equilibrium approach is also an explanation offered for the problem of labour surplus. This hypothesis is based on the assumption of the existence of two sectors, ie. urban and rural in the economy and the transferability of surplus labour from an unproductive rural sector to a productive and expanding urban sector. The hypothesis of dualism postulated by Harris and Todaro (1970:138-148) explains the existence of a high rate of migration from rural to urban in spite of an already prevailing high rate of unemployment in the urban areas. Todaro's model does not however offer an adequate explanation for countries like Sri Lanka where the level of urban industrial development is very low. Available internal migration data do not indicate high levels of rural to urban migration and labour underutilization is high in both sectors. Moreover, the urban and rural definitions used by censuses and surveys are based on administrative requirements (Department of Census and Statistics, 1986b:67). A considerable proportion of modern sector manufacturing industries established in industrial estates and free trade zones (Karunatilake, 1987:91-166) are located outside urban areas. Therefore, there is no identified "rural" supply and "urban" demand for manufacturing industries. In urban areas a concentration of employment in education, health and transport service sectors is evident. Such employment is largely in the public sector and reflects increased Government intervention to provide services which were largely a monopoly of Government, rather than a supply of labour for an urban demand for these services.

The labour market segmentation hypothesis (Gorden 1972:42-52) is another equilibrium-based approach, which seeks to explain labour surplus among certain identifiable groups such as females, minority ethnic groups, and different educational categories. It suggests that disequilibrium in the labour market is due to discrimination. Gorden(1972:50) for example, suggested that education helped persons to enter good jobs. Those who did not have a good education were locked up in their low wage jobs without an avenue for upward mobility. However, there are disagreements regarding this hypothesis. Psacharopoulos (1988:106) saw mobility in the labour market as a continuing process, without any clear line separating different labour segments. He argues that many workers have managed to cross over to higher level occupations by obtaining more education.

The 'economic dualism' argument of Mazumdar(1989) and the 'more than a dualism in the urban labour market' argument of Kannappan(1983) are two deviations from equilibrium approaches. Mazumdar's(1989:28-29) hypothesis of the existence of dualism and fragmentation of the labour market in Less Developed Countries is a non-equilibrium approach to explain labour utilization patterns in developing countries. He used the concept of 'economic dualism' to denote the existence of non wage employment alongside wage employment. Mazumdar contends that such wage differentials existed in urban and rural sectors of the economies of developing countries and that organized and unorganized economic activity prevailed in both urban and rural sectors. He saw 'economic dualism' as a significant

problem in the developing world. Labour underutilization in various forms[4] originate from such dualism. He advocated improvement of labour absorption by policy reforms such as land reform, encouragement of the informal sector and relaxation of minimum wage laws to rectify disguised unemployment and economic dualism. With regard to the urban, educated unemployment problem, he suggests that there is a trade off between goals of equity and efficiency, and quantity and quality of education. Mazumdar's study is about microeconomic issues of labour markets in developing countries and does not pay much attention to in depth investigation of labour underutilization or socio-demographic trends that could also have contributed to underutilization. He does not focus on the effects of demographic and other transitions when looking for solutions for labour underutilization in the less developed economies that he investigated.

Kannappan(1983:127-140) argued that there are 'more than two sectors' operating in the urban economy. His study of 'employment problems and the urban labour market in developing nations' is also a non-equilibrium approach, investigating causes, patterns and consequences of urban labour force growth. He identified more than two sectors in urban labour market which include a modern sector and an

4 Mazumdar (1989:100) points out that these various forms include unemployment, disguised unemployment in the rural sector and educated unemployed in the urban sector. The term disguised unemployment is used to describe surplus labour in the rural sector. According to Nurkse, (1962:33) 'the term disguised unemployment is not applied to wage labour. It denotes a condition of family employment in peasant communities. A number of people are working on farms or small peasant plots, contributing virtually nothing to output, but subsisting on a share of their family's real income. There is no possibility of identification here as there is in open industrial unemployment.'

informal sector consisting mostly of small industrial units and the self employed, and a third sector, ie. the urban formal sector which he describes as "the enclave sector". The enclave sector comprised of sections of the employed in government and public enterprises, foreign firms, and the best established domestic enterprises, having wage leadership whose determination of wages were not a function of a union or legislative pressure (Kannappan, 1983:197-198). Kannappan's study is not about examining labour underutilization existing in Asian labour markets even though he briefly examined unemployment and underemployment. He analyzed the organization and functioning of urban labour markets, but did not examine the rural segment in the Asian labour market which is equally important for a study of labour utilization in Asia. He examined the relationships between urban growth and population growth, but did not investigate the implications of the changes brought in by demographic, educational or mobility transitions on urban labour markets and the effects of such changes on labour underutilization.

Schultz(1964:58-59), Godfrey(1987:1-36) and Oshima, (1981:1-15) point out the conceptual anomaly of assuming Asian agricultural labour to be completely surplus or idle most of the time. Myrdal(1968:996-1023) providing an antithesis to the hypothesis of Lewis, pointed out the importance of understanding the labour surplus problem existing in Asia in the context of the underdeveloped characteristics of the region and distinguishing such labour surpluses from the conceptual understanding of the surplus labour associated with unemployment in economies where full

employment prevail. His main concerns were the rapid increases in population that the region was experiencing at the time, the traditionality of production processes, various forms of labour underutilization that existed in the region and the rampant poverty that the region was experiencing.

The labour underutilization problem in Asia is more complex than in industrialized western countries (Godfrey, 1986:12-30, 137-163) and stems from multiple causes. 'Non-equilibrium approaches' to understand the changes occurring in developing countries recognize the complexity of Asian 'transitional society'. They address several demographic, socio-cultural and economic changes that would lead to a better understanding of the labour underutilization problem in developing countries. When taken together these approaches offer explanations to comprehend the prevailing labour underutilization in Asia arising from economic, as well as demographic and other socio-cultural causes.

The complexity of the labour underutilization problem in Asia is due to the demographic, educational, mobility and economic transitions occurring in the countries of the region, and the levels, phases, effects and interrelationships of these transitions on the potential labour force. An important outcome of several stages of demographic transition that occurred in Asian countries is the changes in the age structure and marital patterns of the potential work force (Ogawa and Tsuya, 1993:41-45; Jones, 1992:35-39; Bloom and Freeman, 1986:381-386; Psacharopoulos and Tzannatos, 1993:293-298). The education transition has led to the growth of human capital and the supply of more

educated potential workers (Jones, 1993:229-243; 1992:41-43). Modernization that is taking place in Asian economies and societies has generated a transition in internal and external migration patterns (Hugo, 1985; 1992). The westernization of Asian societies has led to the changing traditional values and structures of production (Caldwell, 1982). Increased urban development, the adoption of modern technology and the growth of labour intensive industrialization (Oshima, 1983:47-49) may lead to changes in the employment structure of the labour force in favour of manufacturing employment in Asian countries (Oshima, 1987:69-71). All of these facets taken together reflect different aspects of labour underutilization problem in developing countries.

Rapid socio-economic and demographic changes that occurred in Asia during the last half a century are well documented. Many writers (Zelinsky, 1971:219-249; Hugo, 1981:1-18; 1984:1-23; 1985:46-87; Caldwell, 1981; 1982; 1988; Oshima, 1987:315-342; Jones, 1990b:215-269) have referred to multiple transitions that had taken place and their demographic, socio-cultural and economic implications in societies of developing countries in recent times. The non-equilibrium approaches to explain labour underutilization attempt to incorporate the behavioural changes caused by these transitions. Of the Asian countries in the transition some of the countries, such as Sri Lanka and the Philippines with higher labour underutilization[5], have undergone demographic and educational transitions

5 The term labour surplus is used by neoclassical economists; the term underutilization is used because a high level of open unemployment as well as underemployment are observed in these countries (see Table 1.1 in Chapter 1)

without substantial economic development. These countries are currently experiencing high growth rates of working age population with increasing proportions of younger, more educated persons entering the labour force, who in turn are mostly underutilized.

Oshima(1987) has emphasized the importance of understanding the dual processes of economic and demographic transitions that are occurring in the Asian region to understand the problem of labour underutilization. Oshima asserted that the theories that take into account socio-cultural, demographic and geographical background can explain more clearly, the nature of development in developing countries. He recognised that the Asian economies which are in structural transition from a predominantly agricultural labour force to a predominantly industrial labour force are, at the same time undergoing demographic transitions from high fertility regimes to low fertility regimes. Oshima(1987:54) alleged that development economists have been much more occupied with analysing changes in product per-capita and have paid scarce attention to implications of population growth for economic development. Understanding the implications of the demographic transition and the industrial transition is important to overcome labour underutilization and to achieve full employment status in the longer equilibrium period. In his comparative study of Monsoon Development Oshima analysed historical development, growth patterns and labour absorption patterns of the economies of East, South East and South Asian countries. Oshima's (1987:47-71) analytical framework to understand the dynamics of economic growth in

Table 2.1

Stages of Structural Transition in Oshima's Framework of Analysis

Stage of Transition	**Description**
Pre Transitional Stage	Employment in agriculture dominates; More than half and up to three quarter of the employed are in this sector.
Agro- Industrial structural Transition	* Employment in agriculture declines to one third/one fourth of total employment, while employment in industries increase. The economy has made a structural transition from predominantly agricultural to industrial economy
Industry - Service Structural Transition	Share of Employment in service sector overtakes the share of employment in the industries sector * Growth in employment in private and public services
Towards Full Employment State	When the following steps are achieved the country attains full employment * Productivity in agricultural sector increase; * Policy supports for improvement of agricultural production * Build up of infrastructure and basic industries; * Growth of labour intensive import substitution industries * Increase in income and equitable distribution of income * Demand for industrial goods increases
After Full Employment	* Increase in wages of unskilled workers * Industrial production for foreign markets * Labour demand for industries outgrow labour supply * Further mechanization in agriculture

Source: Oshima, 1987:47-64

Monsoon Asia use employment as a measure of transition. Therefore, much of the analysis is about the levels, patterns, causes and consequences of economic growth, labour

absorption and labour surplus patterns of Asian economies, which are in different stages of economic transition.

Oshima's (1987) argument is also based on the notion of long run equilibrium. He states that the long term economic growth of nations, although they have differential pace, and disequilibrium in the short run, could be described as having an equilibrium in the longer period by keeping track of structural and other changes in the economy (Oshima, 1987:56-64). He used employment as the measurement of the stage of transition. The reason for using employment to measure stages of structural transition of the economy was because such a measure indicated a clear distinction in labour absorption patterns in different stages of the transition. In the case of monsoon economies, the completion of the transition roughly coincides with a situation where high levels of surplus labour decline to levels of approximating full employment, and these transitions are accompanied by a demographic transition. Thus according to Oshima, the labour underutilization experienced in the Asian region is a passing phenomenon. The countries in the region should achieve full employment in the longer equilibrium situation when economic development is compatible with the demographic transition that is taking place.

Examples in Asian development show that the sequential occurrence of the agro-industrial and later the industry-services transition had not happened in some Asian Countries. In fact in countries like Sri Lanka the proportion employed in the services sector is higher than those in manufacturing even though the agro-industrial transition has not been completed. Employment in public

service has increased due to the role played by the Government in providing health, education and other welfare services. Therefore it seems that the role of the Government is an important issue in creating employment. Oshima,(1987) has not attempted to detail the structural changes in female employment in the process of the agro-industrial and industry -service transition. Due to the effects of the demographic transition and educational advancement in the region there is a large scale entry of females into labour force. The influx of females would have important repercussions on the structural composition of employment. This issue has to be investigated further in each of the countries currently in transition.

Labour progression hypotheses based on studies of net shifts in sectoral shares in the industrial or occupational structure of labour force at different points in time, enable a better understanding of the labour absorption patterns, the absorptive capacity of a developing economy (Chenery and Syrquim, 1975:32-49, Oberai, 1978:2-13) and the gender specific differentials of labour absorption in the economy (Lim, 1988:1-21). The patterns of labour absorption to the economy are clear in developed economies because largely, such employment is in the formal sector and the unemployed are in most cases recipients of unemployment benefits because they do not work. In developing countries, where non wage employment coexists with wage employment, a substantial proportion of employed are in informal activities, self employment or unpaid family work (Hauser, 1974; 1977). Studies of net shifts in sectoral shares of the economy show that the structure of production can be

examined to understand a progression in the allocation of labour from primary to secondary and tertiary employment in response to net shifts in demand (Oberai, 1978; Chennery and Syrquim, 1975:32). Such an analysis would reveal the exogenous and endogenous factors affecting the nature of such shifts, the evidence of traditionality and the lack of flexibility in certain industries to change with time. Most of these studies ignore the effects of sectoral shifts in employment with increased female labour supply.

Caldwell(1982) theorised that the demographic transition occurring in Asian and African countries is not a result of industrialization occurring through modernization and consequent economic growth, but a result of several socio-cultural changes originating through westernization. Caldwell observes 'from a demographic point of view, the most important social exports' of westernization 'have been the concept of the predominance of the nuclear family with its strong conjugal tie and the concept of concentrating concern and expenditure on one's childern' (Caldwell, 1982:153). Even though Asian countries show a considerable degree of mortality and fertility transition, most of these countries achieved only a very low level of economic growth. He noted that the changing traditional production systems in transitional societies, and the break-down of patriarchal values and the production systems had resulted in a net transfer of wealth from parents to children, whereas previously, the direction of net wealth transfers was from children to the parents. He argued that westernization through expansion of modern education was largely the cause

of such changes and that as a result these societies were experiencing a demographic transition.

The interrelationship between the demographic and several other transitions that are occurring in the Asian region and the level of economic growth prevailing is an important link in understanding the labour underutilization situation of Asian countries. Jones(1990b:224-225) notes that even though several socio-economic indicators that are given primacy in demographic theory such as mortality decline, urbanization, education, increases in income levels and female employment in non- agricultural activities had occurred in ASEAN countries, these developments cannot be taken as thresholds to the demographic transition happening in some Asian countries. This is because these events did not occur in any sequence. Therefore the lagged effect of the high population growth phase of the demographic transition in ASEAN and Asian countries will create problems of labour absorption for some countries without parallel economic development, because the labour force will continue to grow rapidly for some time (Jones, 1992:37). If the economy is unable to generate enough employment to keep pace with the rapid growth of labour force, higher rates of unemployment would occur (Jones, 1990b:231-233).

An important contribution to the understanding of labour supply and labour absorption in developing countries was made by Bloom and Freeman (1986:361-414). They investigated the nature and magnitude of the principal effects of rapid population growth on labour supply and employment in developing countries and discussed the interrelations between population growth and labour force.

On the supply side of the labour market the key issues examined were the lags between population growth and labour force participation; independent effects on labour supply of accelerated population growth due to changes in fertility, mortality and migration; patterns and trends in labour force participation rates; and gender differences in labour supply and behaviour. On the demand side they described and analysed the nature of labour markets in developing economies and attempted to identify key factors that condition labour absorption capacity in these countries. They concluded that during the period 1960-1980 population growth in developing countries had 'little net association with economic development'. Their analysis is largely based on aggregated indicators drawn from various publications. Therefore the analysis is devoid of detailed issues relating to specific countries. An important contribution of this study to understanding the general pattern of labour supply in developing countries, is the hypothesis of the lagged effect of population growth on labour supply.

Zelinsky(1971:219-249) noted the effects of modernization on mobility of labour. According to him the mobility transition was occurring due to changes occurring through modernization. He hypothesized that there are definite patterned regularities in the growth of personal mobility through space during recent history and these regularities comprise an essential component of the modernization process. He predicted that in the early and late transitional society (Zelinsky, 1971:230) when population growth was at its highest, massive numbers would

be looking for work and be willing to move from their country side and even cross frontiers to find employment.

Hugo(1985:46-87) documented the structural changes that had occurred in the rural economy in Java, Indonesia due to the effect of modernization. He observed that 'the failure of village agricultural systems to absorb population increases' have posed various difficulties for the rural poor in finding work. Consequently, as a strategy of survival, there is an upswing in circular mobility of the rural poor in Java, who had extended their search for employment in a wider spatial area.

Socio-economic changes occurring in transitional societies have led to the relaxation of traditional patriarchal values and an improvement in the status of women. Mahadevan and Sumangala(1987:120-124) found that the status of women in Kerala had improved in many way due to effects of modernization. Hugo(1990:1-76) commented on the economic and social transformations sweeping across most less developed countries. He noted that these changes have a 'profound effect on distribution of economic and institutional power between the sexes and upon the roles and status of women'. The breakup of the patriarchal system and the changing value of the patriarchal society (Caldwell, 1982:344-349, Jones, 1984:5-6, 41) in the Afro-Asian region may be an important explanation for the changing status of women in the region. The dominant feature of the patriarchal value structure was the male domination of the production system (Caldwell, 1982:344-345) and hence the sex segregation of females. Thus, the material base of a patriarchy is men's control of women's labour with women

playing a secondary role in society (Mahadevan, 1989:345-349). The breakup of such a system has led to increased participation of women in economic activity (Jones, 1984:5). Nevertheless, in situations where the economy is ill equipped to absorb this additional labour, underutilization of such labour occurs.

The spread of education has been one of the important reasons associated with the breakup of the patriarchal system of production. Caldwell(1982:314-329) and (Caldwell, Reddy and Caldwell(1988:29-46, 161-186) highlight the occurrence of an educational transition in Asian countries that has brought an attitudinal change towards 'westernization' of the countries in the region. Increased investment in human capital development in the Asian region has brought about many unforeseen repercussions (ESCAP, 1989a:11-14; Ogawa, Jones, and Williamson, 1992). Ahmed and Mabud(1989:100-128) and Kiranandana, Wongboonsin and Kiranandana(1989:323-334, 403) evaluate the importance of education policy and investment in education for population and development programmes in Bangaladesh and Thailand. Sharp changes in the educational composition of the labour force in many Asian countries were due to advances that these countries achieved in education. An important change was the changing profile of the educated labour force favouring the younger age groups and the increase of female participation may also be largely attributed to improvements in female education (Jones, 1992:37-39). When the economy could not absorb all the educated persons who were looking for work the tendency to underutilize educated labour increased.

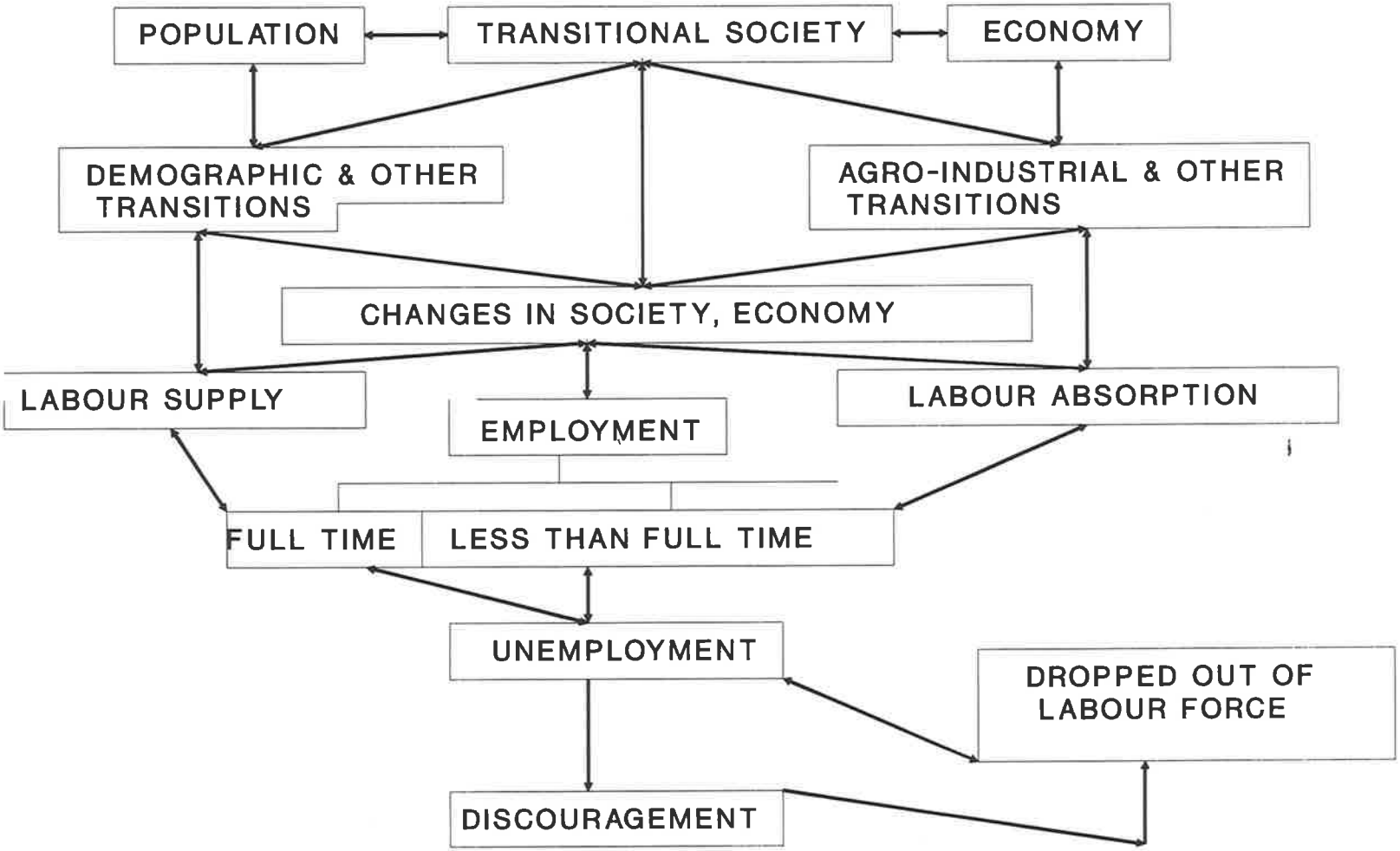
2.2.2 A THEORETICAL SCHEMA TO UNDERSTAND LABOUR UNDERUTILIZATION

Based on the above theoretical approaches Figure 2.1 presents a theoretical schema developed here to understand the labour underutilization problem addressed by this thesis. The figure indicates that a transitional society is a by-product of the changes occurring in the population and the economy and the sequential process of labour supply and absorption in a changing society. The age-sex structure, marital status, educational levels, household size and current composition of the household status of the potential labour force are either lagged or immediate effects of demographic and socio-cultural changes that are occurring in the society. These characteristics can be explained by the demographic and other transitions that have taken place. Changes in the population occur due to several transitions such as mortality, fertility, education and migration. Theorized or hypothesized aspects of social and economic changes addressed in this schema are in the age structure of the population (Demographic Transition Theory), migratory patterns (Mobility Transition Hypothesis), the status of women (Demographic Transition Theory), the human capital endowments (Educational Transition Hypothesis) and the structural composition of labour force (Monsoon Development Theory). The potential labour force is determined by and is constantly affected by these changes in the society.

Structural changes in the sectoral composition of the economy occur through development and parallel to these changes, the industrial structure of the employed population

Figure 2.1

A THEORETICAL SCHEMA TO UNDERSTAND LABOUR UNDERUTILIZATION



change in favour of non-agricultural employment. A larger proportion of population employed in agriculture, find productive employment in non-agricultural sectors. Thus the labour supply mechanisms as well as labour absorption are subject to constant changes in the transitional society.

The labour supply is not fully absorbed by the economy. The absorbed labour can be measured in terms of either full time work or less than full time work based on the using the norms of normal hours of work that an employee is expected to work. Unemployment constitutes that proportion of the labour force which has been supplied, but has not been absorbed at all. In a situation of continuous unemployment for long periods of time, there is a possibility that a proportion of the labour force may drop out as they become discouraged to seek employment any further.

2.3 CONTRIBUTION OF THIS STUDY

This study looks at the demographic, familial, social and economic characteristics of women who are underutilized through unemployment, involuntary underemployment and voluntary part-time work in the context of the currently changing society and economy of Asia and particularly of Sri Lanka. The theoretical approaches spelt out in the previous sections enable us to understand the forces that have led to the current labour underutilization of women in Sri Lanka. In industrialised economies "employment" is an avenue of income through wages or salaries, minimum wages or salaries are defined, individual choice is the determining factor to work or not to work and unemployment income supports are available during the period of unemployment. On the other hand in labour surplus, predominantly agricultural

economies, employment/work is the only means of livelihood since in most circumstances there are no other income supports (Godfrey, 1986:12-19; 1993:1-26). Most persons even though they are technically 'unemployed', engage in intermittent work for their livelihood. Thus, hours of work criteria is important in distinguishing between absolute unemployment and less than normal hours of work.

The transitional processes in the population and the economies of the Asian region have had repercussions on the social status and economic behaviour of women. The breaking up of patriarchal social values and production systems due to an increase in education and westernization, and perhaps through Government intervention are some of the important outcomes of such changes. An unforeseen outcome is the development of female human capital and their potential, productive work time. Streeten(1983:3) notes that investment in human resources has three important benefits which include (1) being a valued consumption good (2) it raises productivity and (3) it lowers reproductivity. Among other determining factors[6], expanded educational opportunities for women have resulted in more and more females entering the labour market and taking up non-traditional employment. An increased trend in female labour force participation in the non-agricultural sector is observed in Sri Lanka and in other Asian Countries (Wilson, 1975:118; 1981; Jones, 1984:6-8; ESCAP 1989:14-16; Hugo, 1993:77-82; Widarti, 1991). The declaration of an International Decade for Women in 1984, and other legal ratifications to enhance the status

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6. Widarti, 1991 for Jakarta Indonesia, Masinghe, 1991 for Sri Lanka, ESCAP, 1987 for Asia and the Pacific discuss in detail determinants of female labour force participation

of women would have increased the tendency for women to participate in economic activity. The Government of Sri Lanka in more recent years has taken various steps to enhance the status of women (National Planning Division, 1988:100-110).

This study is a contribution towards understanding how far the socio-economic and demographic changes occurring in rapidly changing Asian countries have affected female labour underutilization levels and patterns. In this regard the study examines the demographic, familial, socio-cultural and economic characteristics of Sri Lankan women in the labour force whose labour is underutilized and the pattern of their absorption into employment. Vast declines in fertility experienced recently in Asia have resulted in women having more time to enter the labour force and engage in productive economic activity in the formally measured labour force[7]. But the prevailing high rates of unemployment for women suggest that there is a major problem of female labour absorption in some of the East and South East Asian countries (Table 1.1 of Chapter One shows that in these countries women are more affected by unemployment). Ogawa, Jones and Williamson (1993:8-10) observe that 'the rapid declines in fertility in the Asia - Pacific Rim countries contributed to the rapid increase in the proportion of women participating in the labour force. Since the 1960's female workers in developing Asia have contributed to the elastic labour supply at a low cost and by contributing with unique human resource qualities.

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7 Nevertheless, there are women working for household consumption whose economic activity is not counted in the current data collection processors.

Definitions used for the measurement of the 'economically active population' may not measure some of the work done in the process of performing household work, family land or household business which is economically valuable (Blacker, 1977:49). Rural women in less developed countries, spend their time producing goods and services which are bought for money in developed countries, but such work is not recorded in official statistics (Boserup, 1975:1977:1-20; Durand, 1975:239).

Oshima(1987:41) points out that by examining changes in the employment structure of Asian countries the economic transition that occurred over a long period of time can be better understood. Nevertheless, changes in the employment structure of females have not been investigated. Analysis of the female employment structure would reveal patterns of female labour absorption and the demand for such labour. Hence the nature of change and the pace of change in agro-industrial and industrial- service sector transitions of employment in the female labour force can be examined. The study will contribute further to the existing knowledge by seeking explanations for the nature of the structural transition in the Sri Lankan case.

2.4 METHODOLOGY

2.4.1 A FRAMEWORK OF ANALYSIS FOR THE THESIS

Studies of labour absorption patterns over time have used the time series data analysis method to understand the labour absorption patterns of different industrial sectors in the economy, in order to find solutions to the employment problems (Godfrey, 1993; Lim, 1988; Oshima, 1987; 1991). Such an analysis reveals the nature of sectoral shifts in employment and the factors affecting labour absorption over

time. Also patterns of traditionality and the lack of flexibility in industries to change with time would be exposed. Therefore, time series studies would provide answers to problems of labour absorption which are a result of past events and a rational understanding of these changes could be achieved. Chennery and Syrquim(1975) Turnham(1971) Oberi(1978), Lim(1988) examined the structure of production using a crosstabulation methodology and time series data or selected cross sectional data to understand the nature of the allocation of labour to different industries and occupations.

Standing and Sheehan(1978) document a number of empirical studies based on behavioural models to suit low income environments and use several approaches to identify the labour force such as multivariate or multiple regression methods of analysis. They found that the theoretical frameworks for such models were still to be developed. Booth and Sundram(1985) used multiple regression analysis to understand the relationship between the duration of unemployment and several demographic and non-demographic factors among school leavers in urban areas of Malaysia. Mohan(1985) developed a behavioural model to understand the determinants of labour force participation in developing countries using a loglinear analysis and found that the analytical frameworks for such a model were quite developed. Ogawa(1991:1-19) used multivariate analysis using logit method to understand female labour force participation and the type of female employment in Japan. Widarti (1992) used multivariate analysis using logit method to understand the determinants of female labour force participation and work

pattern differentials among women in Jakarta. In circumstances where the dependent variable is qualitative, it is appropriate to use the logit method. Both these researchers were analysing micro level data and large samples. In circumstances of using data at the individual level, one may have to resort to the maximum-likelihood method to estimate parameters (Gujarati, 1988:483).

2.4.2 LEVEL OF ANALYSIS IN THIS STUDY

This thesis is based mainly on national level survey data. Major distinctions only seen in the composition of national population, will be reflected in this study. The definitions of urban, rural and estate areas of Sri Lanka are based on administrative definitions used as machinery for the effective function of the central government (Mendis, 1976:10-19; Leitan, 1979:46-60). Therefore this study will examine the urban growth levels by analyzing the employment patterns rather than employment in urban, rural and estate areas. Growth of non-agricultural employment induces a structural change in an economy towards a shift of labour from the agricultural to the industrial and service sectors (Oshima, 1987). Since an urban area could also be defined as one with predominance of non-agricultural employment, levels and patterns of non-agricultural employment would reflect the patterns of urban growth in the country. Nevertheless it has to be pointed out that even though structural change in employment and urbanization are related that they are not perfectly correlated.

2.4.3 PROPOSITIONS EXAMINED IN THE STUDY

Two propositions that are examined in the study in Chapters six and seven are as follows:-

(1) The unemployment situation of a person could be largely explained by that person's unique[8] demographic, cultural, and family related characteristics.

(2) The underemployment situation of a person could be largely explained by that person's demographic, cultural, and family related characteristics rather than by his/her economic characteristics.

In Chapter seven the key question addressed is what basic importance can be attributed to each category of the characteristics identified to explain the part-time employment situation of a person.

This study investigates demographic, family related, cultural and economic characteristics of underutilized women in order to understand the implications of a changing society and economy for female labour supply and absorption. Examining the demographic characteristics would lead us to understand the effect of the demographic transition on the age structure of the working age women in a broad sense and highlight the predominant age patterns among unemployed, underemployed and part-time working women and the effects of changing marital status and reproductive behaviour on female labour supply and absorption. Repercussions of social changes on labour supply and absorption of women are reflected in the family related characteristics such as household size and status of females in the family. Because each ethnic group has its own cultural identity and values, the cultural characteristics are investigated to discern any cultural differences as denoted by a person's ethnic

8 The word 'unique' is used to denote group of persons with specific characteristics such as female, younger age, never married more educated etc that will identify a person uniquely.

identity in this changing process. Answers will be sought to the question of whether the industrial structure of female employment has changed parallel to the demographic and educational changes that had occurred? The economic characteristics of underutilized and part-time working women are investigated in order to understand how changes in the economy have affected female employment patterns.

2.4.4 METHODS OF ANALYSIS USED IN THIS STUDY

Several methods of analysis will be used in this thesis. Wherever data are available, time series analysis will be adopted. For the analysis in Chapters four and five, continuous time series data is used as such data will be averaged to get a better continuous trend. For analysis of unemployment in Chapter Six, underemployment in Chapter Seven and part-time employment in Chapter Eight, continuous time series data are not available. For these three Chapters cross-sectional data provided by three major surveys conducted to collect data on labour force are used. The three surveys are (1) The Socio-Economic Survey of 1969/1970 (SES 1969/70) (2) The Labour Force and Socio-Economic Survey of 1985/86 (SE&LFS 1985/86) and (3) The Labour Force Survey of 1990/91 (LFS 1990/91). Of these three Surveys the SE&LFS 1985/86 has been designed to collect more details on unemployment, preferred employment, family support during period of unemployment, principal employment, secondary employment hours of work and availability for additional or alternative work etc. These details would facilitate a better understanding of labour underutilization in Sri Lanka. This survey will be largely used for detailed analysis and in depth study.

Throughout the study crosstabulation methodology is used to understand the simple bivariate relationships between dependent and each independent variable. This method is enhanced by controlling for one or more independent variables when required. When crosstabulation analysis was used for analysis of economic variables such as industry and occupation the level of classification was up to the three digit level, using International Classifications of Occupations (ISCO) and International Classifications of Industries (ICI). In the regression analysis of economic variables, a single digit classification was used.

Regression analysis will be used to understand the relationships between the dependent variables and all or most of the independent variables taken together in a single situation. Such a method is useful, because in this study there are more than one explanatory (independent) variable (Figure 2.3) and these independent variables are interrelated. Regression analysis facilitates 'analysis of statistical dependence of one variable, the dependent variable, on one or more other explanatory variables' (Gujarati, 1988:23). The subset of the independent variables that are contributing most, collectively and individually to describe the dependent variables will be identified. The individual relationships of the independent variable and the dependent variable will indicate the relationship in a series of partial coefficients. Forthcoming sections will present further arguments for justification of the use of this methodology.

2.4.5 DEPENDENT VARIABLES

Figure 2.2 presents a framework of analysis that identifies the dependent variables for this analysis. The figure indicates the categories of underutilized labour in the working age population. As indicated in Figure 2.2, the analysis is concentrated on underutilized labour ie (1) workers who work less than 35 hours per week and seek additional or alternative employment, identified as underemployed persons;

(2) persons who work less than 35 hours per week and who do not seek work, identified as part-time workers;

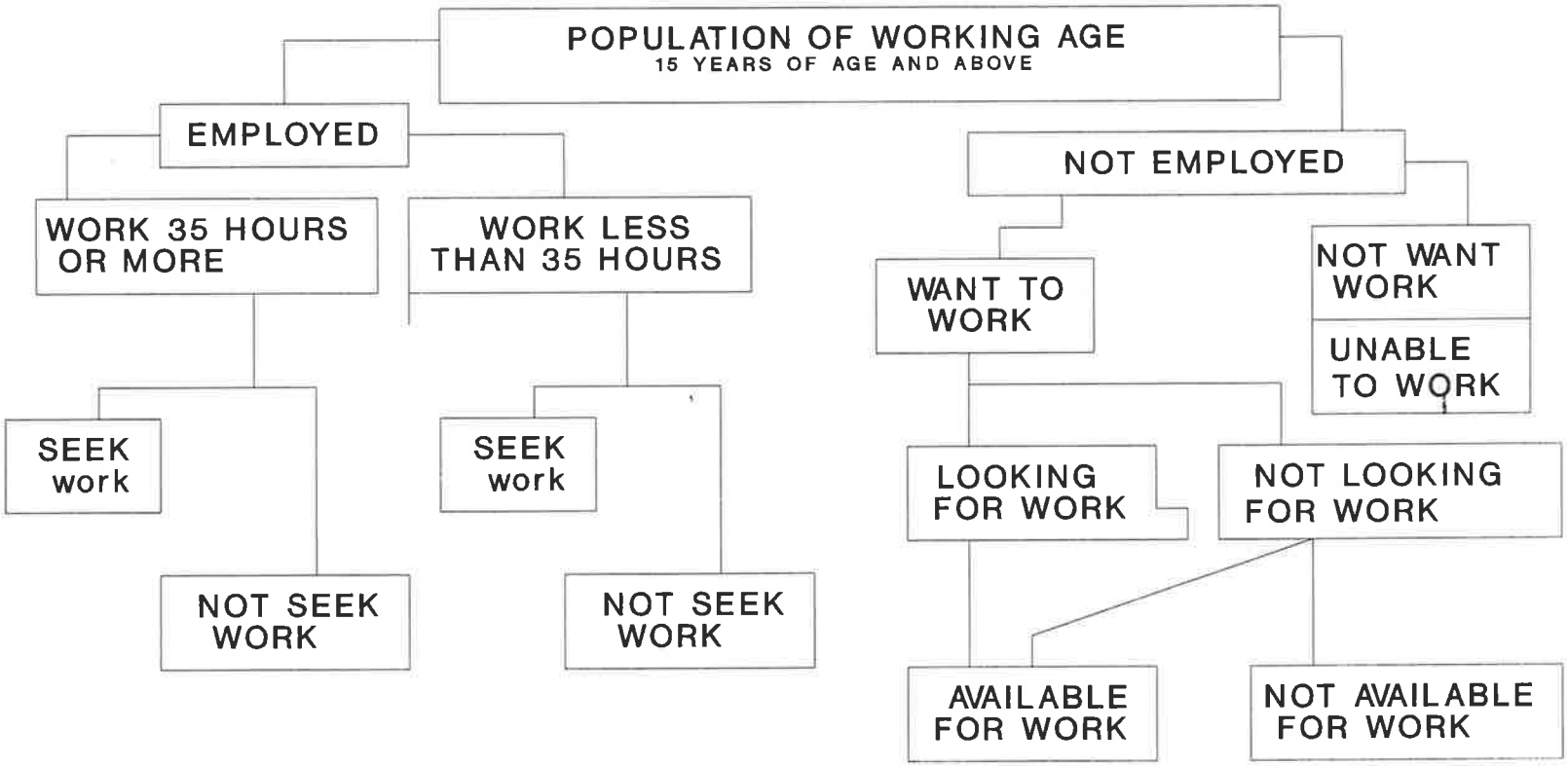
(3) persons who are not employed but available for work and looking for work, identified as unemployed.

Justification for the choice of 35 hours per week as normal hours of work is contained in section 3.7.7 of Chapter three. International criteria laid down by the ILO, (1989:xviii), previous research (Houser, 1974:10; 1977), other country norms (International Labour Organization, 1994:24-27), and norms set by Sri Lankan surveys (Department of Census and Statistics, 1991a:64) were considered when criteria for hours of work was adopted for this study.

Demographic, cultural, and family related characteristics of the underutilized labour relate to the supply of labour, while economic characteristics relate to labour absorption. In the analysis of demographic, cultural, and family related characteristics, this thesis can be seen as investigating the supply factors, while the analysis of economic characteristics may be seen as an investigation of labour absorption factors that contributed to the participation in unemployment, underemployment and voluntary

Figure 2.2 A FRAMEWORK OF ANALYSIS IDENTIFYING DEPENDENT VARIABLES

UNEMPLOYED, UNDEREMPLOYED, PART-TIME WORKING AND DISCOURAGED WORKERS



Source: SE&LFS1985/86

part-time employment of the potential work force. The term 'underutilized' is used in the context of the definitions adopted in this thesis as discussed in Chapter Three. Figure 2.3 sets out the characteristics analysed in this study and the variables selected to analyze each characteristic. The variables are selected to reflect the relevant characteristics of the person. Justification for selection of variables is addressed in section 2.4.7.

2.4.6 CHOICE OF REGRESSION METHODOLOGY

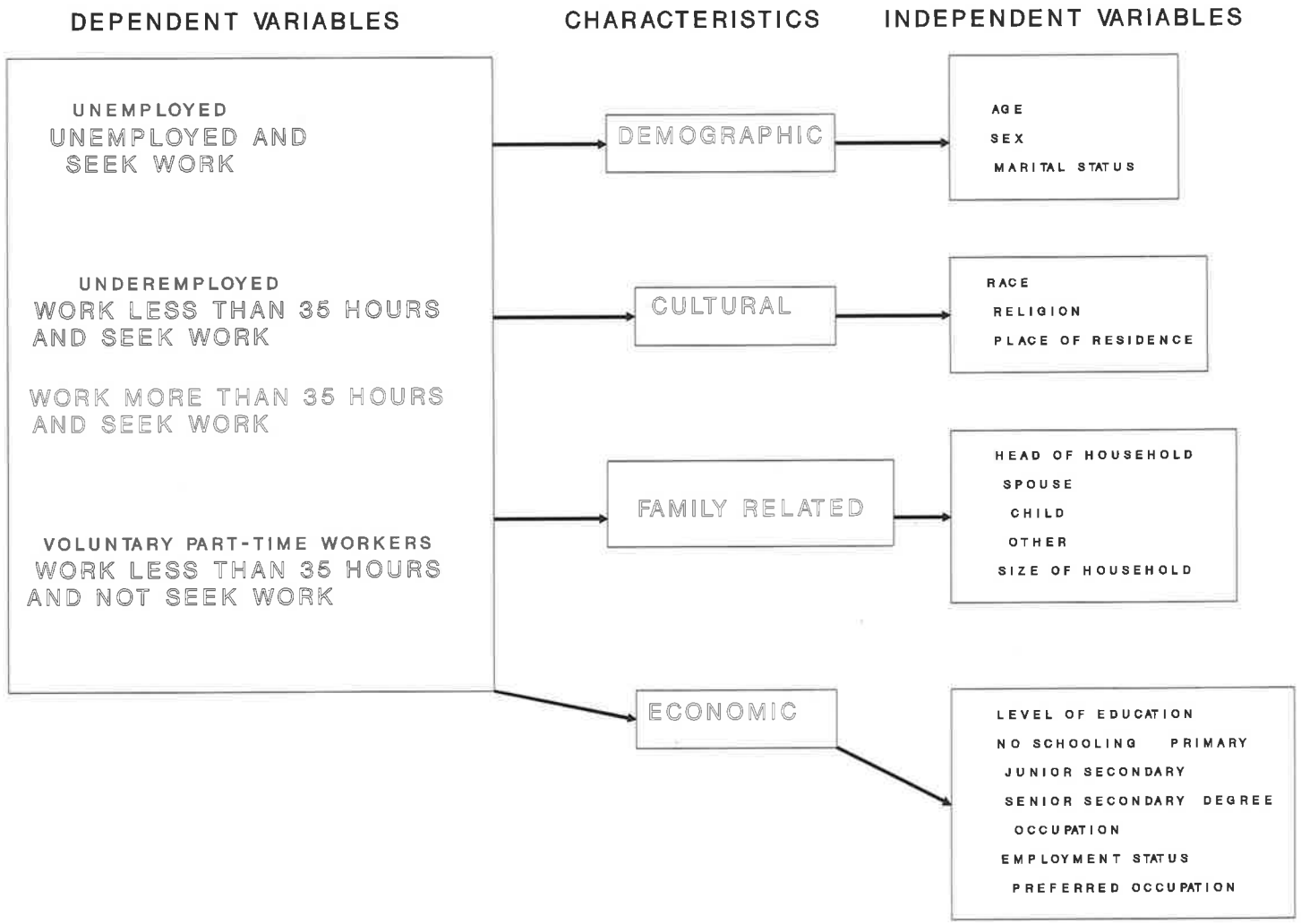
In selecting a suitable methodology to understand the nature of the relationships between each dependent variable and all the independent variables taken together, multiple regression analysis is considered to be the best option for the following reasons:

(1) The dependent variables were dichotomous, qualitative variables.

(i) The first dependent variable was unemployed person ie. a person who indicates (a) the desire to be employed as distinct from already being employed; the question asked to identify unemployed persons was 'are you available for work during the last calendar week?' The answer to this question was either 'yes' or 'no'.

(ii) The second dependent variable was involuntarily, underemployed person; such a person is distinct from one who is voluntarily underemployed and not seeking

Figure 2.3 FRAMEWORK OF ANALYSIS; DEPENDENT AND INDEPENDENT VARIABLES



work. An underemployed person is defined as one who is working less than normal hours and seeking employment. The question asked to identify an underemployed person was 'are you available for additional or alternative employment'?. The structured answer to this question was either 'yes' or 'no'. Thus, the second dependent variable is clearly established as a dichotomous variable.

(iii) The third dichotomous variable comprised all those persons who were working less than normal hours and selected the response 'no' to this question.

(2) Independent variables such as gender, marital status, ethnicity, religion, status in the family and sector (Figure 2.3) are either qualitative/categorical or parametric variables. One method of quantifying such attributes is by constructing artificial variables called dummy variables (Gujarati, 1988:432). The dummy form could be attributed to qualitative, politomous variables, using the rule that if a qualitative variable has 'm' categories, (m-1) dummy variables could be introduced. In this regard the level of age group, marital status, education, sector, ethnicity, religion, marital status, status

in the family, job preferences and period of search for work are politomous variables. The dichotomous attribute will be given to each individual category of variable by attributing one to the investigated category, while all the other categories of that variable are equated to zero when these sub-categories are investigated.

2.4.7 CONSIDERATIONS FOR THE SELECTION AND TRANSFORMATION OF VARIABLES IN THE REGRESSION ANALYSIS

The selection criteria of the independent variables reflects the different characteristics of a person who satisfies the definition of underutilized labour as defined in this thesis (see Figure 2.3). Age, sex and marital status of the individual are chosen to understand the demographic characteristics of that person. During the course of the demographic transition, the behavioural changes in an individual have augmented the labour force through increased participation. Some of these changes may be in the marital status of the person, her status in the family, her conjugal and familial responsibilities and with an increase in education, her attitude towards gainful employment and the attitude of the family toward working women.

The lagged effects of population growth on labour supply hypothesis (Bloom and Freeman, 1986:363-364) suggest that the supply of labour will be high after a high fertility regime. Demographic transition theory (Caldwell, 1982) contends that while the transition commences with dramatic declines in mortality,

particularly infant and child mortality, that there is a lagged effect of mortality decline before the fertility decline phase of the demographic transition commences. A further contention of the transition theory is that initial fertility declines are due to delays in marital fertility (Caldwell, 1982), while irreversible fertility declines are due to declining fertility. The theory of monsoon development (Oshima, 1987:337) contends that during the transition, parents began to demand that after secondary schooling, adolescents postpone marriage to help with family finances so that average age at marriage rose.

The mortality transition in Sri Lanka commenced in the late 1940's. The high fertility that prevailed during the pre-transition period continued up to the 1970's, when fertility began to fall substantially. Both these characteristics, ie. mortality decline and fertility maintained at constantly high levels, had increased the potential for working age population to enter the labour force in increasing numbers (Bloom and Freeman, 1986:361-366; Bauer, 1990:615). Young female adults who are the subject of analysis of this thesis are survivors of this phase of transition. The delay in marital fertility (Jones, 1984:10, 32) had also increased the potential for females to enter the labour market. Jones(1984:40) also notes that rapid declines in marital fertility and increased labour force participation of women in ASEAN countries highlight the importance of understanding the linkages between fertility decline and the rise in economic activity of married women. Changes to the male and female working age population age structure due to the

demographic transition could be examined by using age and sex variables. Labour supply and absorption patterns of single, currently married and ever married females could be understood by analyzing the marital status variable.

Ethnicity and religion variables are used in this analysis to understand the effect of the cultural identification of a person on her labour supply in the multi-racial, multi-cultural dimension of Sri Lanka. This variable had been used in previous studies as a proxy for culture (Fong, 1978:215-234). Widarti(1991) used the ethnicity variable to identify cultural, as well as regional dispersion of communities in Jakarta. In Sri Lanka, Sinhalese constitute approximately 74 per cent and are the majority of Sri Lankan population. Sri Lankan Tamil, Indian Tamil, Sri Lankan Moor and Malay and various other small ethnic groups constitute the remaining 26 per cent of the population (Department of Census and Statistics, 1986b:111). There is a very close association between each ethnic community and religion. More than 90 per cent of Sinhalese are Buddhists and 99 per cent of Muslims are believers in Islam, while at least 84 per cent of Tamils are Hindus. About eight per cent of Sinhalese and 16 per cent of Tamils are Christians (Kearney and Miller, 1987:92; Department of Census and Statistics, 1986b:124). There is a cultural identity in each community and religion (Kurian, 1985). Strong traditional and cultural values which may be dominant in the older generations would be more relaxed among the younger

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9 Fong, (1978:215-234) in a regression analysis of labour force growth, utilization and determinants in Singapore used the variable ethnic group as a proxy for Culture.

generations due to their increased exposure to education which varies substantially by the ethno-religiosity of the community (Abeykoon, 1987:3). For example, Moors and Indian Tamils have the lowest level of education (Abeykoon, 1987). Females of some ethnic communities such as Indian Tamils are more affected by traditional, patriarchal values (Kurian, 1985).

Three variables are considered as 'family related' in this analysis. Caldwell(1982:) asserts that an important outcome of the demographic transition is the behavioural effects of such a transition on the family, especially the effect on females and their familial, productive and reproductive roles. Family related variables are considered as important in understanding the changes that have occurred in the value systems of the family and that would have affected the nature of labour force participation, particularly the siblings of the family during the course of transition.

The size of the household is considered as a family related variable in this analysis. The size of the household at any given moment is related to the life cycle of the family. However, there are limitations in the use of this variable. The three surveys used in this study used the household as the sampling unit and the definition used 'a household can consist of one or more persons, living together and having common arrangements for food and other essentials of living. Persons living in a household may be related or unrelated' (Department of Census and Statistics, 1986b:11). Thus, there are inherent difficulties in using the household size as a proxy to

determine the pattern of the nucleation of family. Nevertheless, a previous study (Standing, 1978:235-246) has used the household size variable as a proxy for fertility to understand the level of fertility (the presence of children in the house) which would affect female participation. Non-availability of any other variable compel the use of this variable. Caldwell(1982) asserts that one of the important exports of 'westernization' to Asian transitional societies was the concept of the nuclear family. If the demographic transition had an effect on the labour force participation of persons, it is reasonable to assume that it would be reflected in the intensity of participation and the size of their household, because nucleation of the family had distinct advantages for the labour force participation of women.

Another important family related variable is the status of the person in the family, ie. whether a person is a head of the household, spouse, child or an outsider in the family. The head of the household is generally a male and carries with it the burden of being the main income earner and family supporter. The spouse is generally a female and her labour force participation and type of employment depend upon her conjugal and familial responsibilities (Durand, 1975[10]), differences in the life cycle of age and marriage of women (Jones, 1984:28-29) income needs of the household, income of the husband (Standing, 1978), the number of school-going children

10 Durand notes that the life cycle of women's participation is related to the life cycle of marriage and family in many countries and in many ways (Durand, 1975:37).

(Ogawa, 1991:21) and infants (Mahadevan and Sumangala, 1987:122). The labour supply of children in the household depends on their age, whether they are still attending school, their level of education. Thus, the labour underutilization situation of a person, be it due to unemployment, underemployment or part-time employment, is different for different members of the family. For example, the unemployment situation of a child in the family may be different from that of a spouse or head of the family.

A third family related variable used in the analysis of unemployment is the family support during the period of unemployment. During the course of multiple transitions that have taken place in the society the value system changes. The familial production system which used labour of all members of the family has changed (Caldwell, 1982). The parents have invested more on the human resource development of their offsprings (Caldwell, 1982; Oshima, 1987). They supported the changing job values that their children acquired through education, in expectation of suitable remuneration for their investment, in terms of suitable employment for their children (Ranasinghe, 1977). The support from the family variable is used to understand the nature of the relationship between the unemployed persons and the support they got from their families.

Another economic variable used in the analysis of unemployment in this study is the preferred occupation of the unemployed person (Figure 2.3). Failure of the stagnant economy to cater to job preferences of educated,

job seekers who largely sought employment in the non-agricultural sectors added to the problem of unemployment (Ranasinghe, 1977:19-29; Jayaweera, 1979:149-152). A person's job preference is in most circumstances, associated with his or her level of education and is related to a person's expected income. Standing (1978:33) notes that an unemployed person can be voluntarily idle if waiting for an expected job. Therefore, by investigating the unemployed's aspirations and expectations, their job preferences, a clearer picture of labour supply could be provided.

The level of education was categorized as an economic variable. It is reasonable to regard a person's level of education as an economic variable because in this instance education is regarded as an investment in the expectation of future benefits or as a source of direct income through employment (Standing,1978:162[11]). Psacharopoulos and Tzannatos(1989:187) argue that if education has been undertaken as an investment, a women must work to recoup the cost of that investment. Jones(1984:38) notes that although a positive relationship between education and female labour force participation rates is often postulated, the empirical evidence is mixed. Sepala and Lee (1989:7) found that in Sri Lanka increased educational attainments of females was another factor responsible for increased labour force participation of females.

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11 Standing argues that the positive influence of education on participation exists partly because education enhances employment opportunities. It also raises income aspirations, generally increases the opportunity cost of inactivity, and weakens the restrictive power of cultural traditions limiting women's non-domestic activities.

Three other economic variables used in the analysis of involuntary underemployment and voluntary part-time employment are the occupation of the person, industry to which the occupation belonged, and the employment status of the person. For crosstabulation analysis, the level of classification of the variable occupation was up to the three digit level using International Classifications of Occupations and for the variable industry, the four digit International Classification of Industries was used. Use of these classifications enabled detailed in-depth analysis of occupations and industries. For the regression analysis a single digit classification was used.

2.5 CONCLUSIONS

Neoclassical explanations for labour underutilization address only labour underutilization due to unemployment. These approaches are based on the assumptions of equilibrium of the labour market and prevalence of a constant labour supply. They do not explain the Asian situation, with disequilibrium in the labour market and high labour supply. New theoretical approaches based on the changing society and economy in Asia, lead one to understand 'the surplus labour' in Asia in a broader context, embracing not only unemployment but also underemployment and part-time work. Causes of labour underutilization in general, and female labour underutilization in particular, can be identified as due to high population growth and labour supply caused by demographic and educational transitions and low labour absorption due to slow growth or stagnant economies. Chapter Three examines the sources of data used here to

investigate labour underutilization in Sri Lanka, the definitions used and the comparability of the definitions.

CHAPTER THREE
DATA SOURCES, DEFINITIONS AND COMPARABILITY

3.1 INTRODUCTION

The original data tapes of three national surveys, the Socio Economic Survey of 1969/1970 (SES1969/70), the Socio Economic and Labour Force Survey of 1985/1986 (SE&LFS1985/86) of Sri Lanka, and the Sri Lanka Labour Force Survey (four quarters) 1990 (LFS1990/91) are the main sources of data employed in the present study. This chapter examines the sample sizes, coverage, sample design, reference periods, survey methodology, and definitions that were used by these surveys. The chapter also critically reviews the labour force information collected at the Census of Population and Housing in Sri Lanka conducted in the census years 1963, 1971, and 1981. Since 1981, a census has not been held in Sri Lanka due to the troubled situation prevailing in the country. It is critical for the interpretation of later chapters that the definitions relating to economic activity, given in the surveys and the censuses be carefully scrutinized. The measures of underutilization which can be obtained using the Sri Lankan sources will be examined in relation to the definitions recommended by the United Nations for the collection of data on economic activity and also the recommendations of International Conferences of Labour Statisticians.

This Chapter will also examine in detail the survey schedules used by SES1969/70, SE&LF1985/86 and LFS1990/91, the instructions given to the data collectors for completing the schedule, the type of respondents, how the questions

have been asked and answers noted down, the role of the enumerators and whether/how probing has been done etc. will be addressed. Finally, the framework that was adopted in the surveys and censuses for measuring the labour force will be discussed so that the strengths and weakness of operational definitions will be revealed. The comparability of definitions of SES1969/70, SE&LFS1985/86 and LFS1990/91 and the definitions used in the Censuses will be addressed, in addition to the problems that occur when comparing data based on survey and census definitions.

3.2 A DESCRIPTION OF THE MAIN SOURCES OF DATA

Table 3.1 indicates the main features of the SES1969/70, SE&LFS1985/86 and LFS1990/91 which are the main sources of data employed here. All surveys were conducted by the Sri Lankan Department of Census and Statistics using structured questionnaire schedules and they all collected demographic, labour force and socio-economic data.

Table 3.1 and Table 3.2 show that the surveys differ in several dimensions. Nevertheless, the differences are such that they do not pose serious problems of comparability for this study. One such difference is the sampling unit used in the three surveys. The primary sampling unit for SES1969/70 was household while that of SE&LFS1985/86 and LFS1990/1991 was the housing unit. In these surveys (Department of Census and Statistics, 1987a:11; 1991):

> a 'Housing unit' is defined as a place of residence,
> (a) which is separate from other places of residence, ie. where there are walls or partitions separating it, so that the persons occupying it can live separately from other persons in the building or in the locality

> and which has independent access, ie. it has a separated entrance to leave without passing through anybody else's living quarters. This definition was recommended by the United Nations(1980:92) to be adopted in the Population and Housing Censuses and Surveys. A housing unit may contain one or more households but living quarters other than housing units and non-housing units are excluded from the survey of 1985/86.

A household is defined (Department of Census and Statistics, 1973a:Appendix, 1987a:11) as a place consisting of

> one or more, related and/or unrelated persons, who pool their total income or part of it in the family budget, and who are living together and having common arrangements for food and other essentials of living. Domestic servants, boarders and lodgers (numbering less than five[1]) and who live and have their meals or share the other essentials of living with the family are considered as members of the household.

In an operational sense this would mean that SES1969/70 had selected the households (ie. those who had common living or eating arrangements) from the housing units and SE&LFS1985/86 and LFS1990/91 interviewed all the households in the housing units. Therefore, the basic unit investigated in all three surveys was a household and have used a household survey schedule. The difference in the unit of measurement between the former and the latter two surveys would have an effect on the selection of the household,

1 If the number of boarders and lodgers exceeded five, the household had been considered as an institutional unit and not included in the Survey (Department and Census and Statistics, 1987:11).

because of the predominance of the single household housing units in 1969. The SES1969/70 showed that 74.4 percent of

Table 3.1
Characteristics of the Surveys used in this Thesis

SES1969/70	SE&LFS1985/86	LFS1990/91
Duration of the Survey		
One Year 1.11.1969 to 31.10.1970	One Year 1.04.1985 to 31.03.1986	Quarterly Survey All quarters of 1990
Number of Rounds		
4 rounds	12 rounds	1 round for each quarter
Size of the Sample & Sampling unit		
9694 households	25,000 housing units and approximates with 24,818 schedules covered for households selected	1,0080 housing units which amounts to 2500 households each quarter
Sampling Procedure		
Two stage sampling	Two stage stratified sampling	Two stage stratified sampling
Primary Sampling Unit and size		
1205 Census blocks	2500 Census blocks	1008 Census blocks
Secondary Sampling Unit and size		
9694 households	25,000 housing units	10,080 housing units
Stratification		
22 districts each district to urban, rural and estate	25 districts each district to urban, rural, estate and Greater Colombo area	9 provinces each province to urban, rural, estate and Greater Colombo area
Method of Selection of Primary Sampling Unit		
probability proportionate to size	In each district number of Census blocks was equal to square root of population	probability proportionate to size
Method of Selection of Secondary Sampling Unit		
Equal probability of selection from each strata	Systematic sampling to get 10 housing units for each Census block	Systematic selection with a random start

Sources: Department of Census and Statistics, 1973a: 1987a:15-21, 1991c:11-17, 1991d:35

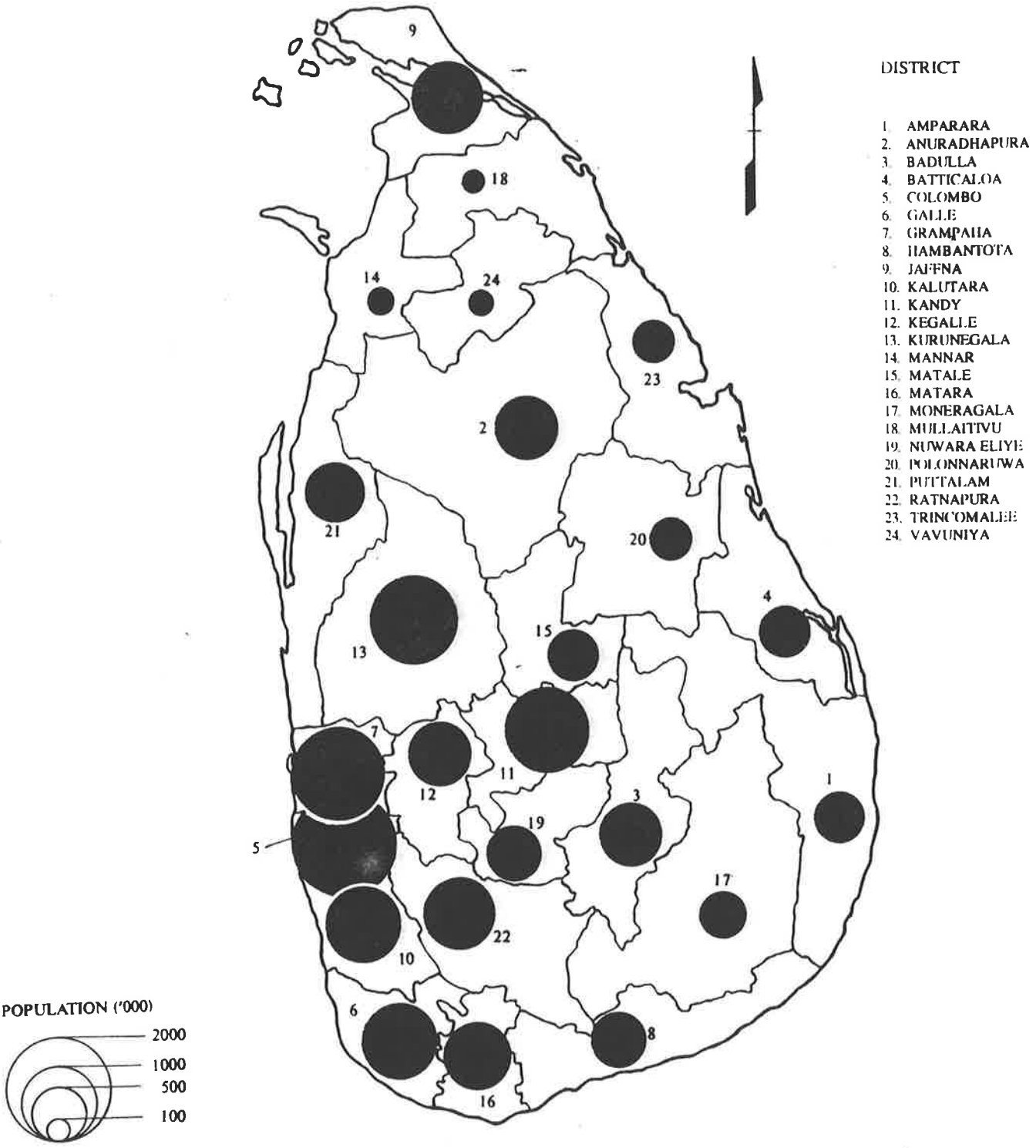
Notes: LFS covered only 7 provinces; coverage of the LF&SES1985/86 and LFS1990 is discussed in page 78.

all dwellings in Sri Lanka were single houses, 18.4 were attached houses or annexes and 1.9 were improvised housing

units. The majority of the housing units in the rural sector (88.8 per cent) consisted of single houses (Department of Census and Statistics, 1973a:xii).

An important difference in the three surveys is the size of the sample that has been used. While the SE&LFS1985/86 was the largest sample, all three surveys are nationally representative. The sampling proportions of primary and secondary sampling units are shown in Table 3.3. While the differences in the sample size are largely due to the differences in the objectives, such differences do not affect national comparability.

The first two surveys were designed to obtain district data on broad issues, while the last was only for estimation of national trends. The number of districts in which the surveys were conducted differ in the first two surveys because of the numerical increase in the number of districts originating from reclassification and reallocation from existing districts. The boundaries of the districts of Colombo, Vavuniya, Batticaloa, Hambantota, Nuwara Eliya and Badulla indicated in SE&LFS1985/86 and LFS1990/91 are smaller than for SES1969/70 (Figure 3.1). Nevertheless, a point of important difference is the fact that the two most recent surveys did not fully cover districts in the northern and eastern provinces. Therefore, the estimates for Jaffna, Trincomallee and Batticaloa in SE&LFS1985/86 have a high coefficient of variation (Department of Census and Statistics, 1991a:28), because these districts could not be fully surveyed due to the prevailing regional ethnic troubles. The LFS1990/91 did not survey any of the districts



MAP OF SRI LANKA SHOWING POPULATION DISTRIBUTION DISTRICTS 1991

Source: Department of Census and Statistics

in the Northern and Eastern provinces[2]. As a result direct numerical comparisons over time will not be attempted here. Nevertheless, these omissions would not have markedly affected the major trends because the bulk of population is concentrated in Western, Central, South Western and North Western Provinces. The districts that SE&LFS1985/86 covered amounted to approximately 92 per cent of the total population (Department of Census and Statistics, 1991a:25-26), while LFS1990/91 covered 85 per cent of the population (Department of Census and Statistics, 1991c:1). In the absence of any alternative data source to study the labour force, the broad trends indicated in these surveys can be considered as national trends.

Table 3.1 shows that all three surveys adopted a stratified sampling procedure whereby the country was divided into urban, rural and estate areas in the first two surveys and into urban and rural areas in the LFS1990/91 to obtain a better representation. However, the three surveys are biased in their sampling toward urban areas. For example, SES1969/70 selected approximately 1.1 per cent of households from 375,042 urban households, and only 0.2 per cent from 1,695,610 households in rural areas (Department of Census and Statistics, 1973a:i). The SE&LFS1985/86 'over sampled' the urban sector in each district by roughly one-third of the total sample (Department of Census and Statistics, 1991a: 13). Such biases were introduced to capture the "higher variability in income" or "to reflect

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2 The districts of Jaffna, Mannar, Vavuniya, Mullativu, Killinochchi in the Northern Province and Districts of Batticaloa, Amparai, Trincomallee in the Eastern Province have not been surveyed in this survey (see figure 3.1 for classification of districts).

changes" in urban areas at the time each of these surveys was conducted (Department of Census and Statistics, 1973a:i; 1991a:13; 1991c: 36).

3.3 REFERENCE PERIODS

Adoption of a reference period for the collection of data on employment allows such data to be related to the National Accounts data and comparisons to be made between income and employment data (United Nations, 1958: 23-24). The use of a reference period draws the boundary line between economic activity and inactivity during a specified period of time. The specified number of hours of work undertaken by the person in the reference period will define whether that person is economically active or inactive (ILO, 1989-1:ix-xii). Such a reference period may vary between one week to one year and the number of hours to have worked may vary from one continuous hour of work in a single day in the reference week, to a major part of a year. The activity status of certain groups such as unpaid family workers, own account workers, and seasonal workers will not be correctly identified by a narrow reference period. To identify these activities, a longer reference period is needed (United Nations, 1958:23-24; ILO, 1971b; Standing, 1978:29). In Less Developed Countries the adoption of a longer reference period is important because a large proportion of the labour force engaged in agricultural employment which is exposed to seasonal patterns (Oshima, 1987). The majority of these workers are either own account farmers or in case of female workers, unpaid family workers.

Table 3.2 shows the reference periods that have been used to collect data on economic activity in Sri Lanka. The table shows that they range from one year to one week or a

Table 3.2
Reference Periods used in Censuses and Surveys

Source and Date of Census/Survey	Reference Period	Number of Rounds	Survey/ Census Months
Census of Population & Housing 1963	n.a.	single day	08.07.1963
SES1969/70	30 days	4	01.11.69 to 31.10.70
Census of Population & Housing 1971	7 days one season	single day	09.10.1971
Census of Population & Housing 1981	30 days one year	single day	17.03 1981
SE&LFS1985/86	one week one year	12	01.04.1985 to 31.03.86
LFS1990/91	one week one year	4	01.01 1990 to 31.12.90

Sources: Department of Census and Statics, 1971:1-28; 1986b:1-21; 1973a: Appendix; 1987a:1-30, 1991c:1-28; 1991a:33-50

Table 3.3
Sampling Proportions Adopted in the Surveys

	Primary Sampling Unit Census blocks	Secondary Sampling Unit households/housing units
	Sampling Proportion	
SES1969/70	3.0 %	0.4 %
SE&LFS1985/86	4.0 %	10 housing units in each Census block selected
LFS1990	1.0 %	10 housing units in each Census block selected

Sources: Department of Census and Statistics, 1973a:i
Department of Census and Statistics, 1987a:15-24, Appendix D
Department of Census and Statistics, 1991a:35-36
Department of Census and Statistics, 1991c

combination of both these definitions in the identification of the economically active population. The table shows that two reference periods have been used to collect data on the economic activity. While Sri Lanka incorporated the United Nations requirement for using a reference period to collect labour force data, the Department of Census and Statistics has originated its own approach to capture the employment patterns dominated by seasonality in agricultural employment.

Census data are collected on a single day on a "de facto" basis, while survey data are collected by dividing the total sample among several survey rounds distributed throughout the year. The survey method of data collection incorporates the activity situation at several points in time during the reference period and investigates more details of changes that occurred during the survey period. It is an efficient instrument to catch more reliable and up to date information. Fluctuations in employment due to seasonality of economic activities in predominantly agricultural economies could be understood better by collecting data in several rounds rather than in a single round.

Table 3.4 indicates the main objectives of the surveys and the type of data collected. In a predominantly agricultural country where intensity of agricultural employment is seasonally defined, adoption of a longer reference period enables a better understanding of the long term employment, facilitating clearer identification of the principal occupation of a large majority of workers. Nevertheless, such a reference would not give an

understanding of the short term structural shifts in the agricultural labour, secondary or part-time employment patterns of short term workers or several short term employment opportunities that an individual may have had during the short periods.

Table 3.4
A Comparison of Survey Objectives and the Type of Data Collected

Survey Name	Objective	Type of Data Collected
SES1969/70	Collect data on living conditions, household income & expenditure	General characteristics[3] including labour force data housing conditions and facilities, health vital statistics, recreational, cultural and religious activities, income and expenditure data
SE&LFS 1985/86	Collect data on labour force characteristics, income, expenditure	Personal characteristics[4] labour force data, work patterns by hours of work, discouragement, income, expenditure
LFS1990/91	Collect quarterly data to measure levels and trends of employment and unemployment on a continuous basis	Personal characteristics, labour force data, work patterns by hours of work, income by wage employment

Sources: Department of Census and Statistics, 1973a:Appendix A, 1967:Appendix 1, 1971:1-28, 1986b:155, 1987a: 1-30, Appendices A-F, 1991a:28-50, 1991c:33-35

Sectoral shifts in work patterns among the same sample of workers in the agricultural and informal sectors would be understood better if the sample is spread within the long

3 Included demographic data, race religion, level of education, labour force.
4 Included demographic data, race, religion, level of education and details of members who are presently abroad.

reference period. The SE&LFS1985/86 collected data spreading the sample over a 12 months reference period (Department of Census and Statistics, 1987a:10). This method enabled estimation of seasonal variation in agricultural employment, but it does not show the shifts in employment among the same batch of workers.

One way of overcoming such a problem is to pursue the employment patterns throughout the year of a selected sample of long-term employed, so that their short-term employment patterns can be discerned. The United Nations recommend that such panel surveys be conducted when a long reference period is used (United Nations, 1958:24). In Sri Lanka, even though censuses and surveys have adopted a long reference period of one year or one season, panel surveys for statistical follow up of individuals have not been conducted subsequent to the survey or the census.

A method of avoiding loss of employment information by using a long reference period is to reconstruct an employment history that a person had throughout the past year. For a successful recording of such employment patterns, the investigators should be quite conversant with the art of conducting retrospective questioning to manipulate recalling of all the employment during the long reference period. In Sri Lanka, even though censuses and surveys have adopted long reference periods, only the 1981 Census of Population and Housing and SE&LFS1985/86 used probing to obtain employment history. Instruction manuals of this census and survey provided instructions as to how enumerators were instructed to do the probing. For example, the instruction manual of the 1981 Census of Population and

Housing show that enumerators were advised to use probing in order to obtain a record of the principal activity during the reference period. For those who answered 'no' to the question, 'whether the person was employed' the enumerator had to ask a second question as to what the person was doing mostly and decide carefully as to which category the respondent could be classified (Department of Census and Statistics, 1987a:Appendix G, 30). The SE&LFS1985/86 has also used probing to obtain specific information about the main occupation and the secondary occupation (Department of Census and Statistics, 1987a:A4) and the number of hours worked in these occupations. Nevertheless, even this survey did not probe into details of all the secondary occupations that the person had engaged in during the reference period.

The use of a short reference period results in the inclusion of casual employment and as such, there is a considerable proportion of underemployment included in the total quantum of work, when data are collected using such a reference period. Unless further probing questions such as the number of hours worked during the last week, last month or last year are asked, it is difficult to distinguish between the regularly employed and those who are involuntarily employed for only shorter hours. SE&LFS1985/86 asked several probing questions to collect more reliable data on the number of hours worked.

Employment data collected by the 1981 Census of Population and Housing show that at least 21 per cent of those employed in agricultural occupations are in paddy cultivation (Department of Census and Statistics, 1985a:98, Table 21). The data from the previous censuses of 1963 and

1971 show that the proportions in agricultural occupations were approximately 50 per cent or more (Department of Census and Statistics, 1976:89, Table 11; 1986b:196 Table 12.7; 1986a:142 Table 44). Peak activities relating to paddy farming are concentrated in the two monsoon periods, Yala and Maha. In a single year the Yala season extends from March to September and the Maha season from October to February. The peak activities are related to field preparation and planting in March to April and harvesting in August to September in the Yala and field preparation in October- November and harvesting in February in the Maha season. Just after harvesting there is no work associated with paddy cultivation until fields are being prepared or the next sowing season. Similarly, there would be no work other than periodic weeding and fertilizing when the paddy plants are small. In such circumstances, if a census or survey was held in a reference period (week/month) with such inactivity, the results could be quite misleading. Therefore, it is appropriate that data for a longer and a shorter reference period should be collected simultaneously as has been done in Sri Lanka. By adopting this method of dual referencing of the respondent's employment, the investigator will be able to obtain more information. The long period of referencing enables the investigator to find out the usual activity, and the shorter reference period will confirm whether he/she is engaged in that activity in the current week.

In circumstances where there is casual employment throughout the year, the shorter reference period is more appropriate. The simultaneous application of the longer

reference period may resolve the problem of finding more information about those who have been classified as employed even though they had worked only one hour in the current week. The 1981 Census of Population and Housing, SE&LFS1985/86, LFS1990/1991 (Table 3.2) adopted a long reference period, as well as a reference period to collect data on the labour force.

Chance factors associated with the selection of reference dates or census year could also affect the type of data collected. For example, the census of 1971 (October) was conducted after the occurrence of the Youth Insurrection in April of that year. There is a strong possibility that information about demographic and socio-economic characteristics of young persons, especially their retrospective economic activities in relation to a long reference period had not been completely revealed. Even though enumerator's records, as indicated by the officials, show that they had not encountered any difficulties in particular areas in collecting information on economic activity, there is a possibility that internal conflicts in Sri Lanka may have affected the data collection of SE&LFS1985/86. In such circumstances full coverage of the survey data would not be achieved.

3.4 FRAMEWORKS FOR DATA COLLECTION

The framework used for the collection of data relating to the economically active population depends on the type of predominant economic activity in the country. When employment is predominantly agricultural, a longer reference period is needed for total coverage of such activity (see Section 3.3). The 'labour force framework' which is designed

to collect current labour force information in industrialised economies (Standing, 1978:23-24) where the 'dominant type of employment is regular full-time paid employment' (ILO, 1989-1:xi), uses a short reference period to collect data and deals with the currently active population. In this framework, the boundary line between economic activity and inactivity can be as narrow as one continuous hour of work during the reference period. The one hour criteria was reviewed by the Fourteenth International Conference of Labour Statisticians who while agreeing to retain it, emphasized that the resulting employment should be classified by hours of work (ILO, 1989:xiii). The population measured by this framework is divided into three mutually exclusive and exhaustive categories: employed, unemployed and not currently active (ILO, 1989:XI). The labour force framework is the operational guide of the gainful worker approach (Standing, 1978:23-30). Literally, the concept of gainful worker denotes a person in gainful employment and receiving remuneration for work done during a given reference period. Such a framework would use a short reference period and define an age limit to collect data on employment.

The longer reference period of one year or one season is associated with the 'usual activity framework'. This framework for the collection of data was introduced by UN standards in 1982 (ILO, 1989-1:xi). The 'usual activity framework' is designed to collect information on activities performed for pay, profit or family gain. The family gain activities are those employment types such as self employment, own account work or unpaid family work. These

activities do not involve payment for the work done. In the 'usual activity framework', individuals are first classified as usually active or usually not active in the reference period and then the usually active may be further subdivided as employed or unemployed according to the main activity during the active period (ILO, 1989:XII). This framework does not collect data on short periods of employment within the reference year. Therefore, data collected on unemployment using this framework may be over-reported. Since the questioning procedure needs detailed retrospective questioning, the data collected by using this framework may be incomplete due to lapses of memory and difficulties in recalling events that happened several weeks/months ago.

The census of 1946 used the concept of 'gainful occupation' to collect data on employment. 'Gainful occupation' was defined as 'an occupation by which the person who pursued it earned money or money equivalent' (Ranasinghe, 1950:224-225). 'The principal occupation, ie. the regular occupation which brought highest income was treated as the gainful occupation' (Ranasinghe, 1950:224-225). Most Sri Lankan censuses and surveys undertaken since 1971 transposed these two conceptually different frameworks (that is the 'usual activity and the labour force frameworks) to collect data on economic activity (Department of Census and Statistics, 1971, 1986b:Appendix G; 1987a:Appendix A). These sources collect data on the usual activity based on a long reference period and also current activity based on a short reference period. By doing so, an efficient framework had been created to collect cross-sectional data on several labour markets that prevail in

the country. Only two of the three surveys that is SE&LFS1985/86 and LFS1990/91, used a long reference period[5] (See Table 3.2 and Section 3.3) while all three Surveys use a short reference period to collect current employment data.

3.5 DEFINITIONS

3.5.1 THE ECONOMICALLY ACTIVE POPULATION

The economically active population consists of persons of either sex who contribute to the production of economic goods and services during a specified time reference period. This group should include persons who are employed, employed but currently not at work and also those who are unemployed and actively seeking work (United Nations, 1958:24; ILO, 1989-1:ix). In countries where a high level of unemployment prevails, the United Nations recommends that persons who are unemployed, but not seeking work because they think that work is not available, should also be considered as economically active (United Nations, 1980:24). While such a labour force should include both civilians and the armed forces in the country, the police services should be regarded as civilian services. The United Nations further recommends that even though the members of the armed forces are included in the labour force, they should be shown as a separate category.

The definition of the economically active population adopted for official Sri Lankan censuses and surveys has been obtained from the United Nations guide lines (Department of Census and Statistics, 1967:Appendix 1; 1971:1-28; 1986b:154). Since the 1971 census, the censuses

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5 The SES1969/70 used a one month reference period and a person to be counted as employed had to work at least 10 days preceding the survey date.

of Sri Lanka have also collected information on discouraged persons (ie. persons who have been unemployed, but not actively seeking work because they thought that work was not available) and have included them in the economically active category (Department of Census and Statistics, 1976:vii; 1986b:155). Data on discouragement was collected to take note of the persons who left the labour force because of persistently high unemployment prevailing for a long time. Such data, other than that collected by SE&LFS1985/86, did not contain any details at all. Nevertheless, by collecting information on discouraged workers, Sri Lankan sources have expanded the scope of the labour force framework.

3.5.2 EMPLOYED PERSONS

The definition of employed, is associated with persons who are engaged in the production of economic goods and services which could be valued in terms of money, or by the time spent on producing them. It has been argued that the concept of employment, as understood in market economies should be differentiated from that in economies dominated by subsistence production (Standing, 1978:25-30; United Nations, 1958:15). Such an argument appreciates the difficulty in counting goods and services produced for pure consumption as differentiated from goods and services that had been accounted for by adding value in monetary terms. Also there are differences in the time spent in production of such goods and services. Non-value added goods and services are produced largely in predominantly subsistence agricultural economies. The international definition of employment as given by the ILO 1982 Standards (ILO, 1983-3:XI-XV) largely takes into account these differences in

underdeveloped economies. This definition denotes that all persons should be above the specified age for measuring the economically active population who, during a specified short period of either one week or one day, were in the following categories:

(a) Paid employment

(1) at work: persons who during the reference period, performed some work (ie. at least one hour) for wage or salary, in cash or in kind;

(2) with job but not at work: persons who, having already worked in their present job, were temporarily not at work during the reference period and have a formal attachment to the job;

(b) Self employment

(1) at work: persons who during the reference period performed some work (ie. at least one hour) for profit or family gain, in cash or kind;

(2) with enterprise but not at work: persons with an enterprise (which may be a business enterprise, a farm or a service undertaking) who are temporarily not at work during the reference period for any specified reason;

This concept of employment corresponds with the concept of economic activity that is 'working for pay, profit or family gain' has been derived from the United Nations System of National Accounts (ILO, 1989-1:XII-XIII). The procedure of counting those who worked even one day as employed, coupled with hours of work criteria allows short periods of employment during the reference week to be included. It enables one to understand the prevailing employment patterns

more clearly and therefore, it is a better instrument of comprehending the labour underutilization patterns undertaken in this study.

According to the guide-lines set out by the United Nations, employed persons (including unpaid family workers) should be those who had worked during the time reference periods, established for the collection of data on economic characteristics and also persons who have a job, but were temporarily absent due to illness, injury, industrial dispute, vacation or other leave of absence, absence without leave or disorganization of work caused by bad weather or mechanical breakdown (United Nations, 1958:25; 1967:59, 1980:93). Irrespective of the amount of the contribution in terms of time or energy, (except in the case of family workers, who should work at least one-third of normal working hours) the activities of such persons should contribute to the production of economic goods and services. The provision that an unpaid family worker should work at least one-third of the normal working hours was abandoned by the International Conference of Labour Statisticians in 1982, so that the unpaid family workers are to be considered as employed irrespective of the number of hours worked during the reference period, in accordance with other categories of workers (ILO, 1983:xi-xv). Work performed in anticipation of money earnings (to be received after the reference period) should be classified as employed. Even if only part of the work is performed for cash, wages or profit, and the bulk of the work consists of subsistence agriculture and related non-money activities, all such persons who did any amount of work (during the specified

time period) for money, should be classified as employed (United Nations, 1958:25).

3.5.3 DEFINITIONS OF EMPLOYMENT IN SES1969/70, SE&LF1985/86 AND LFS1990/91

Table 3.5 provides definitions of employment as adopted by SES1969/70 SE&LFS1985/86 and LFS1990/91. In Sri Lanka as in most of the developing countries, a large proportion of employment is 'own account' and less than normal duration. The definition of employment adopted by SE&LFS1985/86 and LFS1990/91 enabled the inclusion of family workers, full or partial subsistence workers, seasonal workers, and casual workers who would have worked for only a short period of at least one hour during the reference period. At the same time, these two surveys adopted a longer reference period to catch more of regular and agricultural employment. Thus, the use of two reference periods provides a collection of employment information about regular, part time and casual employment patterns in Sri Lanka which is crucial for the analysis of underemployment in this study.

SE&LFS1985/86 adhered to the guide-lines set by the Fourteenth International Conference of Labour Statisticians (ILO, 1989:xiii; Department of Census and Statistics, 1987a:1-10) and included additional questions in order to obtain information on the nature of secondary occupations, number of hours actually worked on the main occupation and on the second occupation and, the number of hours normally expected to work and the number of hours actually worked. Collection of such detailed data enabled a meaningful analysis of employment data. The SES1969/70 excluded those persons who had not worked regularly and who had worked on a contract, temporary or casual basis less than 10 days. Thus

Table 3.5
Definitions of Employment used by SES1969/70, SE&LFS1985/86, LFS1990/91

Survey Name	Definition of Employment Used
SES1969/70 30 days	All persons in regular employment and in receipt of remuneration either of as employers employees; Apprentices receiving allowances; own account workers; Persons who were mainly engaged in seasonal occupations such as farmers fishermen, even though they may not have been fully employed during period of investigation; Persons who worked on contract or on temporary basis, if they had worked for at least 10 days during the month preceding the survey; Unpaid family workers who had worked for 10 days or more during the reference month.
SE&LFS1985/86 One week One year	A person who works at least one hour during the last calendar week as employer, employee, own account worker operating his/her own enterprise[6]; A person having a job or enterprise but not at work[7]; Unpaid family workers assisting in an enterprise owned by the family
LFS1990/91 One week One year	All household members who during the reference period worked as paid employees employers, own account workers (self employed), or unpaid family workers in family enterprises. Also included are persons who had a job, but were temporarily absent from work because of vacation, illness, bad weather, and labour management disputes.

Sources: Department of Census and Statistics, 1973a:Appendix A; 1987a:12 Appendix A, C; 1991c, Appendix 1

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6 If the enterprise is a home garden, it should be more than 20 perches; if the output is very small or if it is not systematically cultivated, that cultivation should be ignored.

7 Such a person should have a formal attachment to his/her paid employment; if he is operating an enterprise he should continue to have other factors of production involved in the enterprise such as land, building, machinery, equipment or tools available for use and the enterprise should not have been formally or informally wounded up disposed of, abandoned, or the work undertaken through the enterprise not given up.

part-time casual work in non-agricultural employment in the informal sector, as well as in the agricultural sectors would have been excluded. The data provided by SES1969/70 to understand underemployment is thus inadequate. In this survey the prevailing pattern of underemployment could only be guessed by examining the pattern of seasonal work and unpaid family work.

The treatment of unpaid family workers in the surveys differed. The SES69/70 included own account-workers only if they had worked for more than 10 days. This was in line with the United Nations recommendation (International Conference of Labour Statisticians, 1954) that this category of the employed should work at least one-third the normal duration of work. The SE&LFS1985/86 and LFS1990/91 included the unpaid family workers if they had worked for one continuous hour in the reference week. According to the present International Standards, the unpaid family workers are to be considered as employed irrespective of the number of hours worked during the reference period. Thus SE&LFS1985/86 provides more details in relation to the hours of work done by the unpaid family workers.

The way in which the surveys gave instructions to the investigators also differed. SES1969/70 gave very little or no instructions to ask certain questions, while SE&LFS1985/86 gave specific instructions to the investigators as to how to ask, to probe and to record data on questions (Department of Census and Statistics, 1987a:Appendix C). For example, the SES1969/70 did not instruct the enumerator as to the definition of regular employment. Was the meaning of regular employment working in

a major part of reference month; or was it the entire month; or was it working at least ten days as was the case for unpaid family workers? The enumerator would have to use their own subjective judgement. However SE&LFS1985/86 and LFS1990/91 gave specific instructions as to who should be considered as working, ie. 'a person who works at least one hour a day during the last calendar week/year'. SES1969/70 does not define who an own-account worker is, hence in this survey the own account worker is as the enumerator understands such a person. The SE&LFS1985/86 defines an own account worker in great detail so that persons who do not qualify are eliminated (Department of Census and Statistics, 1987a:Appendix C). Thus in SE&LFS1985/86, several probing questions were asked to get adequate information before a person is considered to be an own-account worker. For example, several questions were asked to find out whether the person is an owner of an enterprise or a home garden; the size of the home garden plot; the type of activity that it is being used for; whether non agricultural activities are for home consumption in which case the circumstances the persons are not enumerated as own-account workers.

With regard to seasonal workers, the SES1969/70 asked the enumerators to consider as employed those persons who were mainly engaged in seasonal occupations such as farmers and fishermen, even though they may not have been fully employed during the period of investigation. The usual activity of these persons is taken for granted. There were no probing questions to find out the continuity status of these occupations. The SE&LFS1985/86 included questions to find out the current status of the usual activity and gave

instructions to include only those who are currently operating their holdings.

3.5.4 CENSUS DEFINITIONS OF EMPLOYMENT

Table 3.6 shows the definitions of employment used in the Censuses of Population and Housing of 1963, 1971, and 1981. The definitions of employment in these surveys accept guide-lines recommended by the United Nations. In spite of the wide coverage of the national censuses, information available on employment and unemployment is of a restricted nature because of the limited number of labour force questions that can be asked in a census. Such problems originate from the constraint of space on the household questionnaire which limits in-depth questioning. Accordingly, there are no questions asked in any of the Censuses regarding employment by hours of work.

The SES1969/70 did not give any instructions regarding the persons who are temporarily absent from work. It is left to the enumerator to decide whether they are included in the regularly employed category. It is not clear at all from the existing documents whether such persons were included or not. SE&LFS1985/86 included a number of probing questions to understand the persons who are temporarily absent from work and why they are absent, and gives instructions as to now to include such persons.

In the case of information obtained on occupations and place of work of each individual person, census data can be regarded as quite detailed information. Such information is classified using detailed international classification codes for occupations (International Standard Classifications of

Table 3.6
Census Definitions of Employed, 1963, 1971 and 1981

Census Year & Reference Period	**Definitions**
Census of Population & Housing 1963 Reference period not adopted	Persons working for salaries or wages; Persons doing a profession or cultivation of their own; Seasonal workers; Unpaid family workers.
Census of Population & Housing 1971 one week one year	Persons engaged in work for pay or profit; Persons doing a profession or a business of their own; Apprentices receiving allowances; Seasonal workers eg. cultivator working in cultivation season; Unpaid family workers.
Census of Population & Housing 1981 one month one year	Persons engaged in work for pay, profit or family gain; Persons getting salary, wages, commissions, payment at piece rate or in kind; Self employed persons such as a doctor, lawyer, worker in a cultivation of his own; Apprentices or trainees in receipt of allowances; Unpaid family workers who work without payment for at least 15 hours in cultivation, trade, business or other, operated by a member of the household; Clergy receiving payments; Persons temporarily absent due to illness leave, industrial dispute, mechanical break down and not due to off-season reasons.

Sources: Department of Census and Statistics,
For 1963: 1967:Appendix A, For 1971: 1976:vii
For 1981: 1986b:154

Occupations) and industries (International Standard Classifications of Industries). Thus data collected in the censuses would be useful in a detailed analysis of employment by occupations and industries to study the structural changes of employment. Nevertheless, a difficulty

that may arise when in using census data to understand trends in employment is the difference in the reference periods that have been used. The 1963 census adopted the usual activity approach. The reference period of one month used by the census of 1981 would have excluded casual employment of short duration, while the one week reference period used by the 1971 census would have collected more information on casual and short term employment. Such difficulties do not arise with regard to regular employment. Breakdown of the definition by the types of employment provided in Table 3.6 shows that the 1981 census definition is more detailed and incorporates more categories of persons than the previous census. An important point of comparison between the censuses and surveys is that both of these sources have adopted the definitions provided by the United Nations and the International Conference of Labour Statisticians.

3.5.5 UNDEREMPLOYMENT

The literal meaning of underemployment denotes that there is a degree of inadequacy in terms of the number of hours worked, productivity and remuneration of employment. The concept of underemployment has been described in various terms based on the nature of underemployment (ILO, 1971a:33; Hauser, 1974:1-15; Standing, 1978:33-53; Mazumdar, 1989:25). Turnham(1971:13), Oshima, (1981:1-27; 1987) cautioned that the effect of seasonality on work availability should be taken into account when measuring underemployment. In agricultural employment, underemployment is very much related to fluctuations in work intensity by seasons (Myrdal, 1968:209; Wellisz, 1969:45; Oshima, 1987:26-27).

Uppal(1973) describes such agricultural underemployment as 'disguised unemployment'.

Mazumdar(1989:66-71) and Kannappan(1985:21-24) point out that there is a considerable amount of underemployment associated with non-agricultural activities, particularly those associated with 'own-account work' and the urban informal sector activities. However, the assumption that all the underemployed are available for further work is a misconception. As early as the late 1960's Myrdal (1968:1011) pointed out that much more research was needed to understand the labour underutilization issues in Asia and that empirical studies should focus on the readily available underutilized labour.

3.5.6 VOLUNTARY VERSUS INVOLUNTARY UNDEREMPLOYMENT

Differentiation of work done for periods less than normal (35 hours in this case) by voluntary and involuntary nature of such employment is crucial to understanding the real extent of labour underutilization due to underemployment. A person has not only to be inadequately employed, but also should be willing to work additional hours and should demonstrate that they are looking for additional or alternative employment. This differentiation is important because there are many different reasons why persons are working less than normal duration (ILO, 1989:XVIII) and a segment of the population working less than normal hours may not be seeking additional employment (Godfrey, 1993:1-25). There are also situations where persons decide voluntarily to work less. This is the case of many working women with children, young persons combining studies with employment or elderly persons in phased

retirement schemes (ILO, 1989). Therefore if voluntary and involuntary aspects of underemployment are not investigated separately, all of these persons who are not interested in working additional hours will be included in the category of underemployment. This study takes into account the voluntary/involuntary nature of underemployment.

3.5.7 VISIBLE UNDEREMPLOYMENT

The international standards distinguish between two principal forms of underemployment; visible and invisible underemployment (ILO, 1989:XVIII). 'Visible underemployment reflects an insufficiency in the volume of employment and is thus a statistical concept which is directly measurable by surveys' (ILO, 1989:XVIII). Existence of invisible underemployment is suggested when there is a mis-allocation of labour resources or a fundamental imbalance between labour and other factors of production. Low income, underutilization of skill, or low productivity are characteristic symptoms of invisible underemployment. In operational terms invisible underemployment may occur when a person's job is incompatible with his highest existing skill or capacity, when his/her remuneration from employment is very low or when he is employed in an establishment or economic unit whose productivity is low (ILO, 1971b:33-34). Recognizing the problems involved in measuring these invisible underemployment symptoms, the 1982 international standards state that 'for operational reasons the statistical measurement of underemployment may be limited to visible underemployment' (ILO, 1983:XV; 1989:XVIII). Visible underemployment exists largely in developing economies which are currently undergoing structural transition (Oshima,

1987:58-60). According to international standards, persons visibly underemployed comprise 'all persons in paid or self employment, whether at work or not at work, involuntarily working less than the normal duration of work determined for the activity, who were seeking or available for additional work during the reference period' (ILO, 1989:XVIII). This definition advocates use of three measures to identify underemployment which include (1) persons working less than normal duration (2) they are doing so involuntarily (3) they should be seeking or be available for additional work (ILO, 1989:xviii). Hauser(1974:2) developed a conceptual framework and operating procedures to obtain the measurement of both visible and invisible underemployment (Hauser, 1974:1-15; 1977:10-25). He saw the total workforce as two functional categories, ie. (1) that part of the workforce that is utilized adequately and (2) that part of the workforce which is utilized inadequately. The inadequately utilized workforce is seen in the following functional categories; (a) by unemployment, (b) by hours of work, (c) by income level and (d) by mismatch of occupation and education. Hauser(1974:1-15) further asserts that 'if an effort is made to measure visible underemployment, the 'part time employed' can also be obtained in the labour force approach by collecting information on hours worked during the week and whether the person 'wants more work'. Thus when using the hours worked criteria to measure involuntary underemployment, the ILO,(1971b:52-53; 1989:xii) definition of visible underemployment and Hauser's definition of visible underemployment are comparable. The following criteria needs to be satisfied for a person to be considered

as visibly underemployed. The person should be involuntarily working less than normal duration and should be seeking or be available for additional work during the reference period. SE&LFS1985/86 provides information that satisfies the above criteria. In this survey several questions were asked of the already employed to collect data on hours worked and whether they were seeking additional or alternative employment. LFS1990/91 collected data on hours worked, but did not seek information regarding whether already employed persons were seeking additional or alternative employment. Hence trends in visible underemployment from 1985/86 to 1990/91 cannot be derived from the second survey. Nevertheless, LFS1990/91 did collect data on secondary employment.

In circumstances where no other information is available to understand the current labour underutilization patterns in Sri Lanka at a national level, researchers are compelled to use the available sources of data, however deficient such sources are. By using the hours worked information and data on principal and secondary employment provided by LFS1990/91 prevailing levels and patterns of underemployment (unrefined) can be understood.

3.5.8 HOURS OF WORK LESS THAN NORMAL DURATION

The number of hours of work that an employee supplies to the economy to produce economic goods and services is deemed to be a function of choice and the wage (Hamermash and Rees, 1984:31). Use of hours of work criteria to measure the amount of labour supply to the economy is a concept adopted by developed countries with a large proportion of labour force in industries and services (Hamermash and Rees,

1984:30). Hauser(1974:1-15, 1977:10-25) illustrated that labour underutilization in developing countries can be measured using among other criteria the number of hours of work. In adopting the hours of work criteria to measure visible underemployment, an important issue for consideration is 'the definition of the normal duration of work for a country; in this context Hauser asserts that it is desirable to ask the question, 'below what number of hours of work should the government be concerned and feel obligated to generate more work in its program for economic development and increased levels of living' and that 'the answer to this question constitutes a good cutting point for hours of work for national policy purposes' (Hauser, 1974:10). Another criteria advocated by the ILO (1989:xviii) is to compare the number of hours worked by a particular worker with that of the normal hours of work for workers in a corresponding activity. Either the respondents could be asked whether or not they are working less than normal hours; or information on normal and individual hours of work could be obtained and compared.

In investigating the employed who seek additional employment, what is the upper limit of such working hours norm criteria? To abide by the answers given by the respondents may be a bit risky in a developing economy where only a proportion of workers are employees and the short hours of work is directly related to the type of activity in which a large majority are engaged. Reports prepared by the Department of Census and Statistics in Sri Lanka show that different country norms have been accepted from time to time. For example, the Report of the Survey on 'Unemployment

and Underemployment 1959/60 (ILO, 1963:1-11) shows that a norm of 40 hours per week was used for analysis. The Report of SE&LFS1985/86 (Department of Census and Statistics, 1991a:64) shows that a norm of 35 and more hours was used. The ILO publication (1994:24-27) shows that in Sri Lanka different norms have been accepted from time to time. The forty hour week used in private and public sector employment as the normal duration of work, contains five hours of lunch break per week and therefore the actual working time for these employees is 35 hours. In view of these considerations, an arbitrary norm following the country trends as at 1985/86, is accepted in this thesis as the normal duration of work, ie. the workers who work less than 35 hours of work in a week would be considered as working less than normal hours.

3.5.9 RELEVANCE OF INCLUDING UNPAID FAMILY WORKERS IN THE UNDEREMPLOYED CATEGORY

Unpaid family workers comprise a substantial component of the employed in most developing countries and Sri Lanka is no exception. Each of the sources other than SE&LFS1985/86 include unpaid family worker in the labour force so long as they worked at least fifteen hours during the reference week. The SE&LFS1985/86 used the same definition of employment as had been applied to other categories of unpaid family workers (ie. persons who worked at least one hour during the reference week) so that it did not exclude any unpaid family workers (Department of Census and Statistics, 1987a:Appendix C). In doing so the SE&LFS1985/86 abided by the standards laid down by the ILO (1983:XI-XV) as applicable to unpaid family workers. However there is a lot of scope for under-reporting of female family

workers from male heads of the household (Durand, 1975:231; Ware, 1981:212-215; Lim, 1984:618-628), because such work is treated lightly. The important question to ask is whether an unpaid family worker is an underemployed person. Any person who satisfies the conditions; (a) working less than the normal duration, ie. working less than 35 hours per week and (b) seeks additional or alternative employment should be considered as underemployed. There is no reason why an unpaid family worker satisfying this criteria should be excluded. In terms of remuneration for employment such a person is certainly underemployed because the person concerned does not get any payment at all. If an unpaid family worker has worked less than 35 hours in a week and is seeking employment, this study will consider such a person as underemployed.

3.5.10 UNEMPLOYED PERSONS

The ILO (1971b:51) in commenting upon excessive unemployment in labour surplus economies remarks that unemployment is the limiting and extreme case of underemployment. The international standard definition of unemployment (ILO, 1971; 1989:xii)) requires the following congruent criteria be met. A reference period should be used to measure unemployment and during the reference period an unemployed person should not be in paid or self-employment; should have taken specific steps to seek employment; and the search period of such a job quest may go beyond the reference period. Application of the reference period of one week and one day (ILO, 1989-1:xii) enables the identification of absolutely unemployed more correctly. Unemployed persons are defined as persons above a specified

age who during the reference period are not working and are seeking work for pay or profit and include those persons who have never worked before. It is generally assumed that remuneration sought for expected employment will be in terms of wages/salaries available in the market. To ascertain that these persons have been actively seeking work, the relevant question should be carefully formulated, and asked of the respondent (United Nations, 1967:25; 1980:92). In application to developing countries, the difficulty with this definition of 'active unemployment' is that 'most people cannot afford to be both not working and seeking work. Most of those who are not working will be women engaged in unpaid housework, working extremely hard but not counted as economically active by the statisticians unless they are also seeking work and therefore unemployed' (Godfrey, 1986:7; 1993:3-7).

The two concepts of employment and unemployment are mutually exclusive and originate from the labour force approach to measure the 'actively working' ie. the employed and 'actively seeking work' unemployed population (Hauser, 1974:1-15). The labour force approach was designed originally to measure the activity status of the labour force in developed countries such as the United States of America (Standing, 1978:23; Hauser, 1974:1-15, ILO, 1989:ix-xix). It is easier to distinguish between employment and unemployment in the labour force framework if the shorter reference period is used. Such a clear distinction is easy in a economy where goods and services are measured in monetary terms and where the largest proportion of the labour force are in regular employment (Hauser, 1974:1-15).

A major deficiency of the labour force approach for 'use in developing nations stems from the fact that in such countries 'underemployment' may often be more important than 'unemployment' (Myrdal, 1968:994; ILO, 1971b:52-63; Hauser, 1974:1-15; Standing, 1978:). Thus when the labour force approach of measurement is applied to Sri Lanka, the deficiency in measurement stems largely from the fact that a large number of persons who technically are reported as being unemployed may be intermittently working for a living, because payment of social security allowances are absent in Sri Lanka as in other developing countries. Secondly, a substantial proportion of the employed are in self employment, in agricultural or non agricultural activities (Hauser, 1974:1-15) or in informal manufacturing or service trades (ILO, 1971a:53). For these persons the work time is flexible and therefore the distinction between the employed and the unemployed is not clear. By formulating the question to ask whether the person had worked at least one hour in a single day during the reference week (ILO, 1989:xiii), a wider coverage of the intermittent work patterns of the person can be understood.

3.5.11 DEFINITIONS OF UNEMPLOYMENT USED IN SRI LANKAN CENSUSES AND SURVEYS

Table 3.7 shows definitions of unemployment used in the SES1969/70, SE&LFS1985/86, LFS1990/91. Each of these surveys have used a labour force approach to collect data and have used the criteria recommended by the United Nations. However there are notable differences in the criteria used by both the surveys. The SES1969/70 used a longer reference period of one month which would have resulted in excluding all the

persons who did not have regular employment for at least 10 days during the one month period. Persons who would have had

Table 3.7

Survey Definitions of Unemployed in Sri Lanka, SES1969/70 SE&LFS1985/86 LFS1990/91

Survey Name & Reference Period	**Definition of Unemployment Used**
SES1969/70 (one month)	All persons of employable age (15-55) years who did not fall into the employed category as defined earlier and who were seeking work. Persons who were mainly engaged in household work as well as students were not included here.
SE&LFS1985/86 (one week and one year)	Persons 10+ years not employed, and available for employment during the last week or any time during the last year and indicate evidence that he/she is actively seeking work[8].
LFS1990/91 one week one year	A person who is not employed, but have seeking work for the last four weeks or during a major part of the past 12 months

Surces:
Department of Census and Statistics,
1973a:Appendix A; 1987b:12, Appendices B, C; 1991c:34

employment for shorter periods would have been classified as unemployed.

The definition of the shorter reference period of at least one hour in a single day in the reference week adopted by the SE&LFS1985/86 enabled identification of persons who virtually did not have any employment at all during the reference week. The 'usually unemployed' definition of SE&LFS1985/86 and the definition used by LFS1990/91 are more

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8 The indicated evidence may be one or more of the following; 1. registered with private or public employment agencies; 2. applied to prospective employers; 3. checked at farms, estates, factories, markets, work sites etc. 4. placed or answered advertisements; 5. sought assistance of friends or relations; 6. looked for land, building, machinery, equipment or finance for setting up own enterprise.

comparable with the SES1969/70 definition. The long term unemployment definition is more suitable to measure the unemployment situation of developing countries where even though persons report themselves as unemployed, they in fact do some work for their livelihood. 'In the absence of a social security system most people cannot afford to be both not working and seeking work' in developing countries (Godfrey, 1986:7; Sen, 1975:31). The notion of absolutely no work for a large number of persons cannot exist in a developing country like Sri Lanka. Therefore in terms of policy, it is important to distinguish between, the number of persons who are involuntarily working less than normal hours and the number who involuntarily are absolutely unemployed.

Each of the surveys use an age limit in the measurement of unemployment and the SES1969/70 had an upper age limit of 55 years and a lower age limit of 15 years to measure unemployment[9]. This would have excluded several employable persons aged over 55 years from the unemployed category. Probably the decision to adopt the upper age limit of 55 years would have been influenced by legislation enacted at this time to bring down the age of retirement in the public sector to 55 years of age. The lower age limit excluded those young people who probably are early dropouts from the school system and are currently seeking work. The SE&LFS1985/86 adopted the lower age limit of 10 plus years as has been done in previous censuses to catch the 10-14 age school dropouts who would be looking for employment. Quite

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9 The facility to retire at the age of 55 is available for government employees. The prevailing high unemployment among younger persons influenced such a government regulation.

appropriately, the upper age limit was kept open to include all persons who are looking for employment even beyond the age of 55 years. All three surveys included questions to establish whether those reporting unemployed were actively seeking work. The SES1969/70 had also asked whether persons had registered at the employment exchange, to identify persons who are actively seeking work. The SE&LFS1985/86 used a number of probing questions to find out whether the person was (a) available for work and (2) actively seeking work.

Table 3.8 shows the definitions of unemployed as adopted by the censuses of Sri Lanka since 1963. All three

Table 3.8
Census Definitions of Unemployment in Sri Lanka

Census Year	Definition of Unemployment
Census of Population and Housing 1963	All persons who have not been employed and are looking for work; All those persons who have been previously employed but currently unemployed
Census of Population and Housing 1971	All persons who are not employed and are seeking work Persons who are available for work even though they may be not actively seeking work because they think that suitable work was not available.
Census of Population and Housing 1981	All those persons who are not employed and seeking work[10] Persons who are available for work even though they may not be actively seeking work because they think that suitable work is not available

Sources: Department of Census and Statistics, 1967:Appendix A; 1975:i-xi; 1983b:i-xi

10 The person should indicate evidence of seeking work. Such evidence may be one or more of the following; registered with private or public employment agencies; applied to prospective employers; checked at farms, estates, factories, markets, work sites etc.; placed or answered advertisements; sought assistance of friends and relations; looked for land, building, machinery, equipment or finance for setting up own enterprise.

censuses adhered to the United Nations recommendations of unemployed and used both a long and a short reference period to collect data on unemployment. The 1981 census differs from the previous two censuses in that it used a one month reference period. In using a longer reference period the census would have included a fair number of persons who would have been employed for short periods during the reference period in the unemployed category. Unlike the previous two Censuses the census of 1981 asked additional questions to find out whether the persons who reported as unemployed were actively seeking work. While for all three censuses the upper age limit was open, the lower age limit was 10 plus years in 1971 and 1981, but 5 plus years in 1963 census. Since the 5-9 year age group of unemployed could be excluded from the unemployed through tabulations, the age definition could be adjusted for comparability.

3.5.12 MAIN OCCUPATION

If a person has more than one occupation, the one in which the person spends more of his working time and earns more income is considered as the main occupation. If a person is engaged in only one occupation then that will be his or her main occupation. The word principal occupation is used synonymously and denotes the same meaning. All three surveys collected information on the principal occupation.

3.5.13 SECONDARY OCCUPATION

Any activity carried out by a person for pay profit or family gain in addition to his or her main occupation is considered as the secondary occupation. The SE&LFS1985/86 and LFS1990/91 investigated secondary occupations, but there were no questions about secondary occupations in SES1969/70.

Data on secondary occupations provides supplementary information about the underemployment with which this study is concerned with. If a person is working less than 35 hours in the principal occupation and is also working in a secondary occupation, that can be treated as adequate evidence to show that such a person has taken steps to resolve an underemployment situation in the principal occupation. The SE&LFS1985/86 and LFS1990/91 collected information on only a single secondary occupation.

3.5.14 SECTORS OF RESIDENCE

The definition of sectors of residence has been used for all the urban, rural and estate sectors of residence (Department of Census and Statistics, 1975:V-VI). Persons enumerated in municipal councils, urban councils and town councils have been classified as living in the urban sector. Those living in village council areas had been classified as being in the rural sector and all the estates having an acreage of more than 20 acres has been classified as the estate sector. Municipal, urban town and village council areas are administrative divisions created initially by the colonial government of Ceylon, and later by the independent governments of Sri Lanka for the purposes of local government (Mendis, 1976:1-20; Leitan, 1979:53-54). Currently the responsibility of deciding whether an area should be categorised as urban or rural is a responsibility of the Minister for Local Government. Therefore the definition of urban and rural sectors adopted by censuses and surveys for the collection of data is not based on the distinctive categorisation of urban or rural features. An important outcome of adopting such a definition is that

there is no sharp urban-rural dichotomy (Department of Census and Statistics, 1987c:67). Because of these shortcomings in data collected for urban and rural sectors this study will not attempt an analysis of urban-rural divisions.

3.6 CONCLUSION

The original data tapes of three national surveys, the Socio Economic Survey of 1969/1970 (SES1969/70), the Socio Economic and Labour Force Survey of 1985/1986 (SE&LFS1985/86) of Sri Lanka, and the Sri Lanka Labour Force Survey 1990/91 (four quarters) (LFS1990/91) are the main sources of data employed in the present study. Investigation into the sample sizes, coverage, sample design, reference periods, survey methodology, and definitions showed that there were differences between the sources, but that such differences would not adversely affect the necessary comparisons. Important guide-lines are available from international agencies such as the ILO for the collection of labour force data in developing countries. The frameworks of data collection adopted in the more recent surveys and censuses in Sri Lanka are local adaptations of a labour force framework based on international guide-lines. Definitions relating to economic activity, employment, unemployment and underemployment etc. which are important to this study, had also followed the international guide-lines and are largely comparable. Periods of internal trouble have affected the collection of data in the Northern areas of Sri Lanka and such difficulties must be taken into consideration when interpreting the data. Finally it can be concluded that the available sources of data provide

substantial amount of information to study labour underutilization in Sri Lanka. There are other factors such as patterns of economic development in the country that have greatly influenced it's labour utilization levels and patterns. Chapter Four examines the patterns, levels and causes of economic development in Sri Lanka since Independence and how such development has affected labour utilization.

CHAPTER FOUR

ECONOMIC DEVELOPMENT IN SRI LANKA SINCE INDEPENDENCE

4.1 INTRODUCTION

A period of accelerated development in political, social and economic development in Asian countries commenced at the end of the second world war. Most Asian countries achieved political independence after the war. For example South and South East Asian countries such as India, Pakistan, Nepal, Burma, Sri Lanka, Indonesia, Malaysia and Singapore were able to negotiate political independence from colonial rulers (Wint, 1965; Vinacke, 1959:759-837). This was followed by a period of social change and development which saw dramatic improvements in mortality especially infant mortality, literacy and education in these countries which later led to rapid declines in fertility. The economic development during the post war period was as spectacular as the socio-political development for some of the East and South East Asian countries while it was less so for the South Asian region (Oshima, 1987:3-4). Countries such as Japan, Taiwan, South Korea, Hong Kong and Singapore who experienced rapid economic growth, industrialization and expansion in the modern services sector had achieved a level of full employment[1] (Oshima, 1987; 1991:30-74) and had completed an agro-industrial transition in the economy. South East Asian countries such as Indonesia, Malaysia and Thailand are also experiencing a rapid growth momentum and

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1 'The East Asian experience indicates that around three per cent unemployment or less correspond to full employment' (Oshima, 1991:78).

consequent structural changes in the economy (Oshima, 1991). Most of these Asian countries are also experiencing labour underutilization partly due to climatic reasons (Oshima, 1987; 1991) and partly to the level and pattern of economic development that has taken place. Persistence of labour underutilization due to unemployment and underemployment in South Asian economies is attributed to the existence of traditionality in agricultural and non-agricultural production (Myrdal, 1968:1147-1148, Oshima, 1987:3-4; 1991) and a fast growth in the number of potential workers (Jones, 1990b:219-236) in relation to a slow growth in the economy (ILO, 1971b:5-10, Oshima, 1987:315-321) and in case of Sri Lanka adherence to a welfare oriented policy by successive governments (Oshima, 1987). This chapter examines the growth patterns of the Sri Lankan economy and the sectoral potential of labour absorption in order to provide an understanding of the economic background to the problem of labour underutilization in the country.

In this chapter the overall growth levels, patterns, trends and sectoral development in the agricultural, manufacturing and service industries are investigated. The chapter examines the patterns of economic change in Sri Lanka during the last forty years and the shifts in the structure of Gross Domestic Product (GDP) in relation to the structural changes in employment. The nature of demand in the economy for goods and services is briefly examined with a focus on how that demand affects labour absorption.

4.2 THEORETICAL CONSIDERATIONS

Oshima(1987:57) asserts that in the long run the economy of a country will experience a structural shift from

a predominance of agriculture to non-agriculture in a series of sequential stages. He asserted that currently developed and developing Asian economies have either undergone or are in the process of undergoing such a structural change (Oshima, 1987). In such a long run process, firstly the predominantly agricultural labour force will lose its structural predominance, while the share of manufacturing industries in the economy will increase. The second structural transition is from an industrial to a service predominance, when the proportion of labour employed in the service sector overtakes the industrial sector in size. The course of these changes can be understood in the framework of a structural transition of the economy (Oshima, 1987:57) and these transitions are accompanied by a demographic transition (Oshima, 1987:315-343). Improvement in agricultural productivity, mechanization in agriculture, development of infrastructure, labour intensive industrial development which later develops to more capital intensive development, adoption of western technology and development of institutions and development of human capital resources through the expansion of education are some of the stepping stones in this process.

In Asian countries improvement in agricultural productivity is achieved through the introduction of modern methods of agricultural production (Oshima, 1987:315-327; Hugo, 1985:46-85), infrastructural development due to the introduction of modern communication systems Hugo, (1985:62-63; Jones, (1990b:224-225), the development of human capital resources due to the break up of patriarchal systems of production and social values (such as the value

of children to the parents as a means to increase production, the status of females in the family) resulting from 'westernization' (Caldwell, 1982:354-365), (Jones 1984:25-60). Education has played a major role in these changing processes (Caldwell, 1982:259-330, Jones, 1992:24-25, Oshima, 1987:332-342).

4.3 ECONOMIC GROWTH IN SRI LANKA

The post independence period from 1948 in Sri Lanka is associated with continuous growth of the economy under successive governments and different policy regimes (Jayatilleke and Gunawardana, 1989:2-3). The growth rates of Gross Domestic Product (GDP) indicated in Table 4.1[2] are suggestive of an expanding and changing economy in Sri Lanka since 1950 (see also figure 4.1 which shows trends in secoral shares of gross domestic product). The substantial but fluctuating growth in GDP is observed throughout the period, and is particularly evident in the manufacturing, transport and banking sectors which reflects the pace of change and orientation in the economy under different policy regimes. From the mid 1950's until the late 1970's, import control and protectionist policies were important in guiding development and from 1977 liberalization of the economy and development through export promotion were adopted. Change of policy towards more liberalized trade and the subsequent inflow of direct foreign investment to the country during the 1980-1990 period infused faster growth in the economy.

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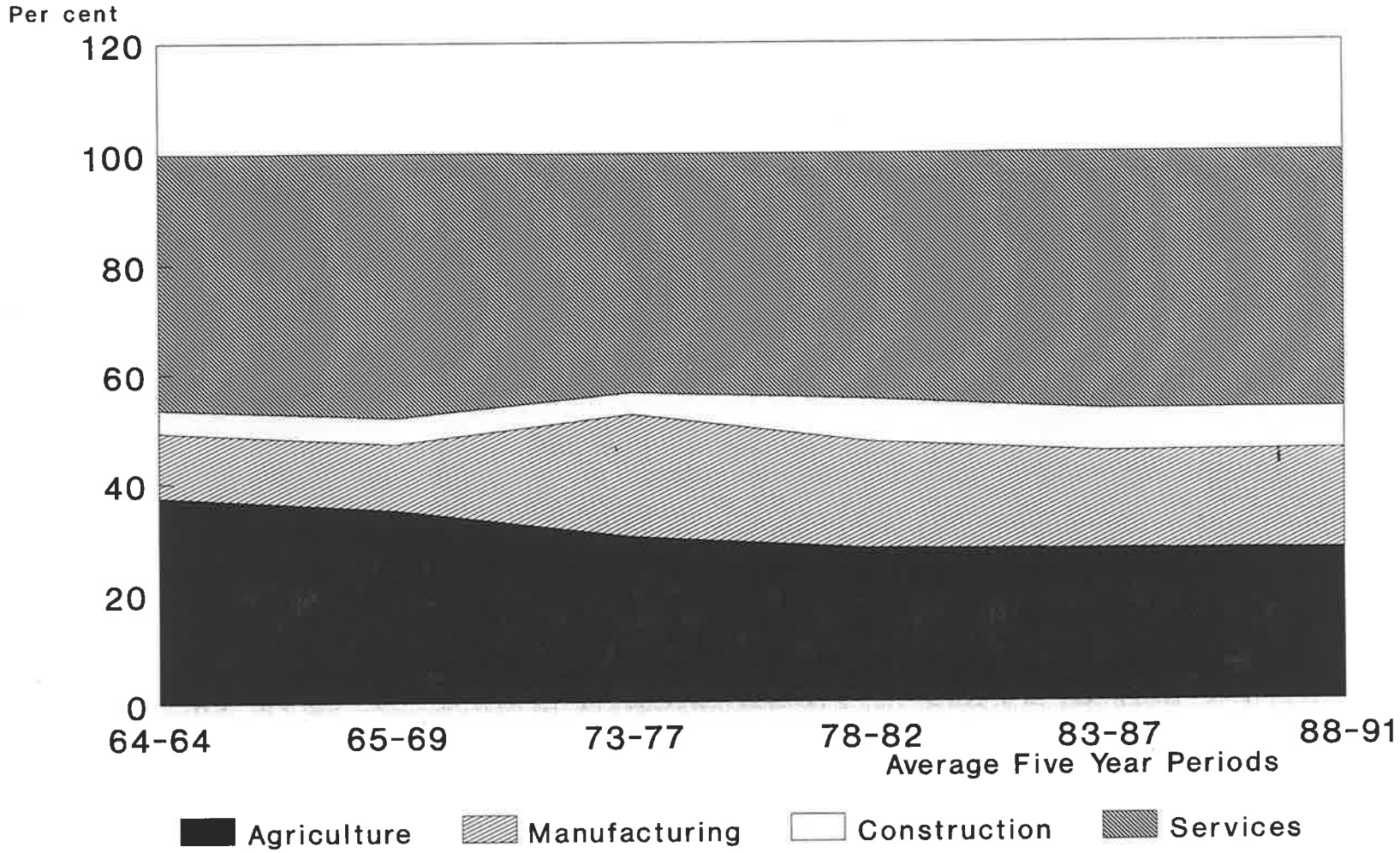
2 Table 4.1 and figure 4.1 indicate the growth trends in the Gross National Product in Sri Lanka during the period 1950 to 1990. The GDP data for each five year period given are averaged to clarify the longer term trends.

Figure 4.1 TRENDS IN SECTORAL SHARES OF GROSS DOMESTIC PRODUCT
SRI LANKA, 1954-1991



Source: Table 4.1

Table 4.1
Average Annual Growth Rates (per cent) of the Gross National Product, Employment and Growth Rates by Sectors (Averaged Periods) Sri Lanka

Sector	Averaged Periods 50-54/ 55-59	60-64/ 65-69	65-69/ 73-77	78-82/ 83-87	83-87/ 88-91
Agriculture, hunting forestry & Fishing	2.1	0.2	5.7	6.9	6.7
Mining & quarrying	0.6	29.5	8.4	10.8	7.4
Manufacturing	5.7	14.5	4.1	4.3	7.4
Construction	2.4	-1.0	21.2	6.6	6.6
Electricity Gas and Water	8.6	28.8	15.8	13.0	7.7
Transport Storage and Communications	2.5	-1.0	10.0	10.2	6.4
Wholesale & Retail Trade	2.2	7.5	6.7	7.8	4.6
Banking, Insurance and Real Estate	13.7	5.0	23.2	11.5	11.1
Ownership of Dwellings	4.1	-6.0	9.9	8.2	4.8
Public Administration and Defense	12.7	-4.2	6.7	13.1	12.5
Services nec	4.5	-4.9	2.9	-2.4	6.5
Gross Domestic Product (GDP)	3.8	3.1	7.3	7.0	6.8
Gross National Product (GNP)	3.8	3.1	7.2	6.8	6.8

Table 4.1 continued
Growth Rates of GDP and Employment for Selected Years

	Selected Averaged Periods				
	52/62	62/75	75/80	80/85	85/90
Growth Rates per cent Gross Domestic Product	-2.4	5.1	7.3	7.0	6.8
	53/63	63/71	71/82	82/85	86/90
Growth Rates per cent Total Employment	0.7	1.7	2.4	2.7	0.1

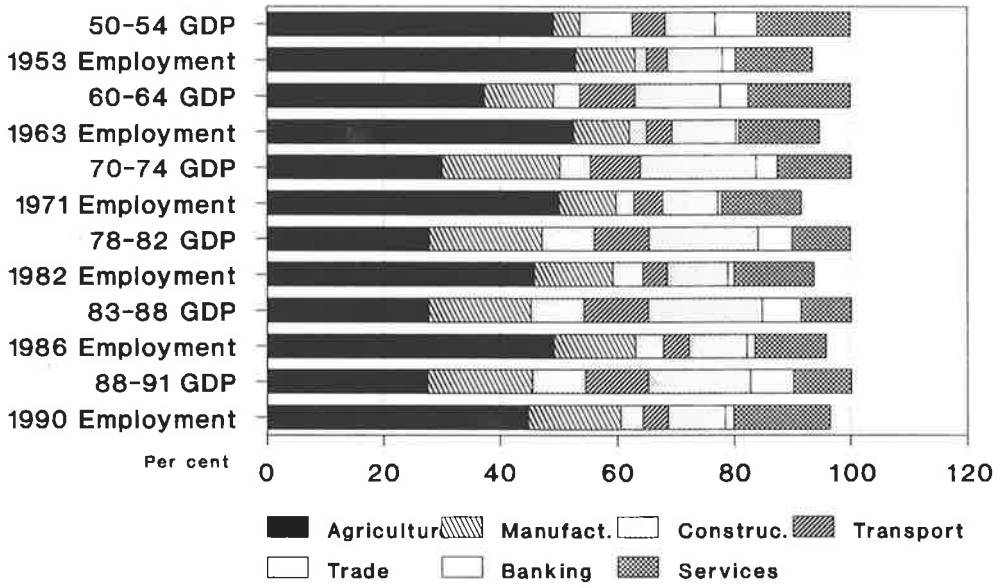
Sources: Computed using the following sources:
Central Bank of Ceylon 1967:Statistical Appendix, 1971: Table 5, 1981:Table 2, 1991:Table 3, Snodgrass, 1966:279 Table A-8.
For employment: Department of Census & Statistics, 1974:81 Table 5.14, 1976:61 Table 8, 1992:9 Table 3, 1990/1991 Data Tape.
Notes:The growth rates are calculated assuming exponential growth in the sectors of the economy and in population.
The averages were for five year periods; the current factor cost rupee values were converted to US$ values using the existing exchange rates for the period. The growth rates were calculated using Dollar values. See Appendix 4.1 for details.

Relative to the growth in GDP, the growth in employment as shown in Table 4.1 had been quite slow which reflects capital intensive rather than labour intensive growth. The slow growth in employment in relation to high growth in the working age population (see Chapter Five) and their increased labour force participation has resulted in increased levels of labour underutilization.

The sectoral composition of GDP during the last four decades has undergone substantial changes (table 4.2, see also figure 4.2). The agricultural sector was the largest single contributor to GDP throughout the period but the relative contribution of the sector to total Gross National Product (GDP) declined substantially. Since 1978 the relative share of agriculture has stabilized at approximately 28 percent of GDP. The contribution of commercial agriculture which dominated the value added (in real terms) to the agriculture sector until the 1960's had declined (Jayatilleke and Gunawardana, 1989:14) while the relative contribution of other sectors to the GDP had increased. Nevertheless, numerically the contribution of the agricultural sector shows an increase.

The agricultural sector provided the greatest share of employment, however the relative sectoral share of employment has declined over the four decades examined in this chapter; nevertheless, the decline is not as substantial as the share of agriculture in GDP (figure 4.2). The observed slow decline is a result of the continuing labour intensive nature of employment (Department of Census and Statistics, 1986b:184-191) in the sector. A larger proportion of females were in this sector. They were either

Figure 4.2 SECTORAL SHARES OF THE GROSS DOMESTIC PRODUCT AND EMPLOYMENT IN SRI LANKA, SELECTED YEARS



Sources: As indicated in Table 4.1

Notes: Detailed titles of the sectors are as in Table 4.1

Table 4.2
Sectoral Shares of Gross Domestic Product (A Percentage Distribution of Averaged Numbers for Five Year Periods)

	Averaged Periods							
	1950/ 54	1955/ 59	1960/ 64	1965/ 69	1973/ 77	1978 82	1983/ 88	1988/ 90
Agriculture Forestry Hunting & Fishing	49.2	45.2	37.4	35.0	30.2	27.9	27.7	27.5
Mining & Quarrying	0.1	0.1	0.5	0.5	1.9	2.0	2.5	2.5
Manufacturing	4.4	4.8	11.3	11.5	20.3	17.3	15.1	15.5
Construction	8.4	7.9	4.3	4.9	4.0	7.9	7.8	7.7
Electricity Gas and Water	0.5	0.6	0.2	0.2	0.6	1.0	1.3	1.4
Transport Storage and Communications	5.7	5.4	9.4	10.0	8.1	9.3	10.9	10.7
Wholesale and Retail Trade	8.5	7.9	14.6	15.4	19.2	18.7	19.4	17.4
Banking Insurance and Real Estate	0.4	0.7	1.0	1.3	1.4	3.1	3.9	4.8
Insurance Ownership of Dwellings	6.8	7.0	3.7	3.7	2.4	2.7	2.9	2.6
Public Administration and Defence	5.7	8.8	5.1	4.8	3.3	3.2	4.3	5.8
Services nec.	10.2	10.6	12.5	12.8	8.6	6.9	4.3	4.2
Gross Domestic Product	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Gross Domestic Product Number US$ '000	942	1134	743	986	1440	3245	5389	7349
Net Factor Income from Abroad	-0.5	-0.7	-0.7	-0.7	-0.9	-1.4	-2.5	-2.5
Gross National Product	99.5	99.3	99.3	99.3	99.1	98.6	97.5	97.5

Sources: Central Bank of Ceylon 1967: Statistical Appendix Table Central Bank of Ceylon, 1971: Table 5, 1975: Table 3 1981: Table 2, 1991:Table 3, Snodgrass, 1966:279 Table A8

self employed farmers, unpaid family workers or employees in tea rubber and coconut estates (Department of Census and Statistics, 1976:68 Table 9; 1985a:114 Table 23). These trends suggest that the shift in labour from agriculture to other sectors of the economy is occurring very slowly for females.

Since the 1960's the contribution of the services sector to the GDP dominated. A substantial share of the services sector comprises wholesale and retail trade which reflects the increased commercial activity due to expanding internal trade in the country. Prior to the 1960's external trade was the most important component because of the key contribution of export trade to commercial crops and the large scale importation of staple food and other intermediate products (Snodgrass, 1966:5). Open economic

policies since 1977 further augmented the contribution of the sector through liberalized trade (Jayatilleke and Gunawardena, 1989:15). Services relating to wholesale and retail trade, transport services and banking increased several fold and informal services[3] increased substantially in the early years under consideration (Department of Census and Statistics, 1978:Table 9 Appendix A ix, The EIU, 1990:11, 26-32; 1993:Appendix 2)[4]. Increases in the relative share of banking, wholesale and retail trade is a sign of increased commercialisation and the operation of modern market mechanisms[5] in the economy.

Table 4.3 and figure 4.2 shows that wholesale and retail trade[6] and community social and personnel services were the two key sub-sectors that provided a substantial proportion of employment in the service industry. Employment in education and health services was almost entirely provided by the government (Department of Census and Statistics, 1976:85: Table 10), therefore any increases in employment in these sub-sectors was dependent on government policy. Increases to a lesser extent in recreational and

3 The service category not else where mentioned denotes informal services

4 Wholesale and retail trade included trade in exports, goods produced for the local market, rice, flour and sugar purchased and distributed by the government, imported consumption goods by the private sector, imported intermediate and investment goods by the private sector and government imports.

5 Refers to monetary transactions in goods produced and sold; increased importance of consumerism; development of elementary market mechanisms reacting to demand and supply of goods; establishment and use of banking, investment in real estate etc.

6 The four digit classification of employed persons by industry show that these increases were largely in the retailing of vegetables, fish and meat, other food stuffs and beverages, hardware and building material, jewellery, restaurants and other eating and drinking places, hotel rooming houses and other loading places (Department of Census and Statistics, 1976:83 Table 10, 1985a:108 Table 21)

cultural services, household services and domestic services show that the informal services sector is expanding. A

Table 4.3
Sectoral Shares of Employment by Major Industries 1953-1990 selected years (Percentage Distribution)

	Census/Survey Years				
	1953	1963	1971	1982	1990
Major Industrial Sectors of Employment					
Both genders					
Agriculture Hunting Forestry & Fishing	52.9	52.6	50.1	45.9	42.6
Mining and quarrying	0.5	0.3	0.4	1.3	1.2
Manufacturing	9.7	9.2	9.3	12.0	15.4
Electricity Gas and Water	0.1	0.3	0.3	0.4	0.4
Construction	1.9	2.7	2.8	4.8	4.1
Wholesale and Retail Trade	9.4	10.9	9.4	10.4	11.2
Transport Storage and Communication	3.5	4.3	4.9	4.1	4.1
Financing, Insurance, Business Services	2.2	0.5	0.7	1.1	2.1
Community Social & Personnel Services	13.2	13.8	13.5	13.7	14.8
Activities nes	6.6	5.5	8.6	6.3	4.1
Total Percent	100.0	100.0	100.0	100.0	100.0
All Industries	2993	3195	3649	4738	5159
Females					
Agriculture Hunting Forestry & Fishing	60.3	63.5	61.8	51.0	56.3
Mining and quarrying	0.2	0.1	0.1	0.4	1.0
Manufacturing	12.4	9.7	12.2	15.8	19.0
Electricity Gas and Water	0.0	0.0	0.3	0.2	0.1
Construction	0.4	0.2	0.1	1.1	1.0
Wholesale and Retail Trade	4.1	3.6	2.9	7.2	6.0
Transport Storage and Communication	0.7	0.4	0.4	0.7	1.0
Financing, Insurance, Business Services	1.1	0.1	0.2	1.2	1.0
Community Social & Personnel Services	15.2	18.9	16.3	18.4	13.0
Activities nes	5.5	3.5	5.8	4.0	1.6
Total Percent	100.0	100.0	100.0	100.0	100.0
All Industries '000	725	655	810	1182	1445

Department of Census & Statistics, 1974:81 Table 5.14, 1976:61 Table 8, 1992:9 Table 3, 1990/1991 Data Tape

substantial proportion of females were employed in services (Table 4.2) such as educational and health (Department of Census and Statistics, 1976:85, 1985a:108).

The share of the manufacturing sector was much smaller than that of the agricultural sector and fluctuated between 11 and 20 per cent of GDP (Table 4.2 and figure 4.2). The high share of manufacturing in the early to mid 1970's was due to the dominance of public sector industries owned by

the state and operating under protected cover (De Mel, 1979:16-19). This is also due to the development of small manufacturing enterprises resulting from a well protected local market for the manufactured goods (Jayatilleke and Gunawardana, 1989:7). In the early 1980's the total government transfer payments to public industries declined (Karunatilake, 1987). A decline in the sectoral share was caused by the changing ownership of public sector industries in late 1980's which had performed at a continuous loss. Policy reforms after 1977 entailed privatising such state industries that showed continuous losses (De Mel, 1979:17). Thus, about 40 state owned enterprises were subjected to processes of rehabilitation, reorientation, and privatisation during the 1980s and 1990s (National Planning Division/Department, 1987:76; 1991:76-78). In spite of the decline in the sectoral share, there was a substantial numerical increase in the manufacturing sector from the mid 1980's to the 1990's. This is due to increased private sector participation and increased foreign and local private sector investment in the sector (Fernando, 1992).

While the relative share of manufacturing industries in the GDP fluctuated during the period under consideration, the share of employment in manufacturing industries was constant at 9 percent during the period up to 1971 and increased by at least three percentage points since then. Such increases were largely seen in food and beverage, wearing apparel, pottery, china and earthenware and other manufacturing industries[7] (Department of Census and

7 Comparison of the 4 digit classification of employment data between 1971 and 1981 show that in the food manufacturing subsector, the manufacture of bakery products, and paddy hulling had increased, and while the manufacture

Statistics, 1976:69-71 Table 9, 1985b:99-102 Table 21). The annual survey of industries which examines all industrial establishments employing more than 5 employees recorded a decline in the number of establishments engaged in the manufacture of food and beverages and the number of persons employed in these establishments during the 1980's (Department of Census and Statistics, 1989:5 Table 1). The the increase in manufacturing was in the small scale sector ie. in establishments employing less than five persons. Important questions relevant to this study are; Whether the growth rate of manufacturing industries is fast enough to achieve agro-industrial transition? Whether the labour supplied by persons working in these small manufacturing units has been fully utilized ? Did they have normal hours of work and were they seeking additional or alternative employment?. Is there a potential in the economy to create these additional avenues of employment?.

4.4 PATTERNS OF GROSS NATIONAL EXPENDITURE

4.4.1 GENERAL PATTERNS

The examination of patterns of public or private consumption show that they comprised the largest proportion of expenditure (at least three quarters) in the country (Table 4.4 and 4.5). The large proportion of private as well as public consumption shows that there is a substantial demand in the economy for goods and services which if produced inside the country have the potential for employment creation in the manufacturing and services

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of textiles had declined the manufacture of wearing apparel had increased. Similarly, the manufacture of pottery and china had increased several fold (Department of Census and Statistics, 1976: Table 9, 1985a: Table 21).

sector. The Table 4.4 shows that a substantial proportion of (between 14-21 percent) of private consumption throughout

Table 4.4
Patterns of Gross National Expenditure

	1967	1970	1975	1980	1985	1990
I. Private Consumption	71.8	67.8	74.6	65.5	70.3	70.0
A. Imports of Goods & Services	16.3	14.4	15.2	16.7	18.2	20.8
B. Locally Produced Goods & Services	55.5	53.4	59.3	48.8	52.1	49.2
II. Public Consumption	13.3	12.6	9.9	7.0	9.0	9.1
i Current Expenditure of Central Government	12.8	12.6	9.9	7.6	9.0	9.1
ii Current Expenditure of Local Government	1.2	0.9	0.6	0.5	0.3	0.2
III Imputed Rent on Government Buildings	0.2	0.2	0.1	na	na	na
Gross Domestic Fixed Capital Formation	14.7	18.1	14.6	25.6	20.3	20.6
Change in Stocks	0.1	1.5	0.8	2.0	0.3	0.2
Gross Domestic Expenditure	100.0	100.0	100.0	100.0	100.0	100.0
Net Interest from Abroad	-3.1	-2.7	-3.0	-13.4	-3.0	-5.3
Less Net Receipts	-0.2	-0.5	-2.2	5.7	6.2	5.7
Gross National Expenditure Total percent	96.6	96.8	94.7	81.0	90.8	89.0
Rupees millions	8984	12640	23933	66096	315085	368023

Sources: Central Bank of Ceylon (Annual Series 1967-1990)

the period had been for goods and services produced outside the country.

4.4.2 EXPENDITURE ON CAPITAL INVESTMENT

Gross Domestic Fixed Capital Formation (GDFCF) is an important indicator of the capacity of the economy for capital investment which would lead to an increase in labour absorption (Nurkse, 1962:4-31; Oshima, 1989:39-44). Table 4.5 provides details of (GDFCF) trends in the Sri Lankan economy during the last four decades. The Table 4.5 shows that GDFCF in the country during the period under consideration was low comprising about 15 to 26 per cent of the Gross National Expenditure. The low percentage of Gross Domestic Capital Formation (GDCF) in general indicates that

the capacity of the economy to invest in capital goods such as machinery, building of dwellings and other structures for industrial production is low. This situation worsened by high levels of inflation prevailing (see Appendix 4.1).

Table 4.5

Gross Fixed Capital Formation in the Economy
(As a Per cent of Gross Domestic Expenditure)

	1950	1960	1970	1980	1985	1990
1.Gross Fixed Capital Formation	10.1	13.8	17.5	31.5	24.3	22.3
1. Private & Public Sector Corp	4.7	7.6	13.3	24.4	19.4	18.1
1.1 Planting and Replanting and Land Development	na	na	0.7	0.4	0.4	0.4
1.2 Building & Other Construction	1.9	2.6	7.4	9.4	9.0	10.9
1.3 Plant & Machinery	na	na	2.4	5.8	5.2	3.9
1.4 Transport & Equipment	na	na	1.8	6.9	2.4	1.8
1.5 Other Capital Goods	na	na	1.0	1.8	2.4	1.0
2 Government and Public Enterprises	5.6	6.2	4.2	7.1	4.9	4.2
Changes in Stocks	-0.5	-0.9	1.7	2.4	0.1	0.3
Gross Domestic Capital Formation	9.7	12.9	19.0	34.0	24.4	22.7
Summary						
Gross Domestic Capital Formation						
1. Private Sector			10.9	13.8}	19.5	14.1
2. Public Cooperations			3.8	11.6}		
3. Government & Public Enterprises			4.5	8.6	4.9	4.3
Gross Domestic Expenditure at C M Prices Rs.mns	3949	6073	13444	23843	66096	158337

Sources: Computed using the following Sources
Snodgrass, 1966: Table
Central Bank of Ceylon Annual Series 1965-1990

In a situation where the rate of inflation is assumed to be very low or zero the increasing GDCF indicates increasing capital formation in the country (Oshima, 1989:39-63). 'A great deal of physical infrastructure must be put in place to convert traditional agriculture into modern, commercialized agriculture and to transform handicrafts into output produced in factories and plants in addition to the construction of infrastructure' (Oshima, 1989:39-41). Larger proportions spent in private public and cooperation sectors (Table 4.5) are mainly capital intensive and do not provide substantial employment opportunities. Nevertheless, such

capital investment is needed in the early phase of the agro-industrial transition (Oshima, 1987;1989). Over the last forty years a continuous increase in the Fixed Domestic Capital Formation (FDCF) occurred. FDCF more than doubled during the period, and constituted nearly a quarter of the total gross domestic expenditure in 1985. A larger proportion of these changes had occurred in the private sector and public cooperations for building and construction purposes and for plant and machinery. These investments in Sri Lanka can be associated with the capital investment needed for the development of infrastructure in the transport and irrigation sectors during the early stages of the agro-industrial transition.

A large proportion of the GFCF Occurred in the private sector thus indicating the important role played by the sector in the fixed capital formation. Development which occurred in the latter half of the observed period saw the GFCF of the private sector overtaking that of government or public enterprises.

4.5 AGRICULTURAL SECTOR

When Sri Lanka emerged as an independent nation in 1948, the economy was agricultural, dualistic and export oriented (Snodgrass, 1966:56-21; Karunatilake, 1971:1-25; Murdoch, 1980:230-235)[8]. The plantation sector of the economy was modern in organizational structure and production technology, and produced for world markets. In the early years of economic development, the national income of the country depended a great deal on foreign trade

8 Dualism in the economy has been defined as capitalistic versus subsistence, monetized versus non-monetized, export versus domestic and a positive versus a zero marginal product of labour (Snodgrass, 1966:56)

generated from plantation industries and had a high capacity for labour absorption (Karunatilake, 1987:68-69).

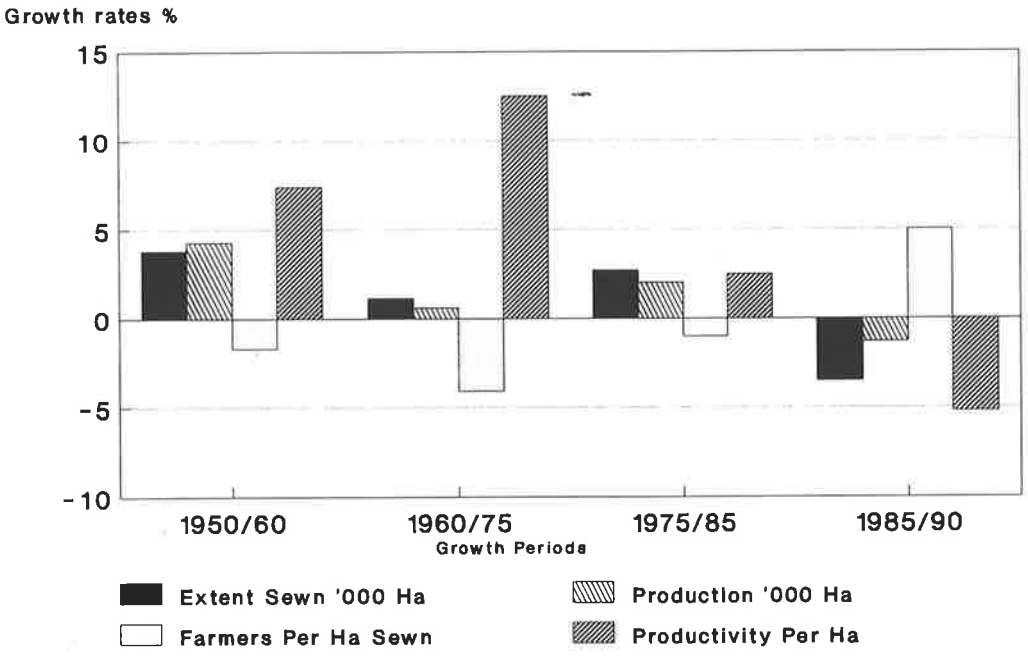
4.5.1 TRADITIONAL AGRICULTURE

The paddy sector is dominated by individual farmers working on small holdings, (a result of traditional patterns of inheritance), largely practising traditional technology and producing for subsistence (Snodgrass, 1966:153; IBRD, 1956:287; Murdoch, 1980:227; Department of Census and Statistics, 1983a:239-256). Figure 4.3 and table 4.6 show some indicators which measure the level of agricultural production in Sri Lanka. Planned agricultural land ownership and expansion, increased use of modern technology and the provision of more and better agricultural services were introduced to the traditional sector mostly after independence (Snodgrass, 1966:153-154; Richards and Gunaratne, 1980:100-127). With these changes, modern methods of agricultural production became part of the sector. Average annual growth rates in Table 4.6 show that the fastest growth in land area sown, production per hectare, and productivity was in the first decade after independence. The extent of paddy land sown increased dramatically over the period. Progress in agricultural development by expanding the sown area was achieved largely by cultivating new land using irrigation (Snodgrass, 1966:107-108; Central Bank of Ceylon Series, 1961-1991) and expanding colonization schemes in the dry zone. As early as 1951 the World Bank Mission suggested the merits of colonizing the dry zone[9] to

9 The dry zone areas comprise the Northern, North Central, North Western, North Eastern, Kurunegala, Moneragala and part of Ratnapura districts. These areas are associated with the ancient civilization of Sri Lanka with a history of more than 2500 years. Paddy cultivation using irrigation is the predominant pattern in these areas.

Figure 4.3

INDICATORS OF PADDY PRODUCTION
AVERAGE ANNUAL GROWTH DURING GROWTH PERIODS



Source: Table 4.6

enhance paddy production (IBRD, 1956:100). Successive governments improved paddy production

Table 4.6
Indicators of Agricultural Production: 1950-1990

	1950	1960	1975	1985	1990
Gross Extent Sown '000 HA	431	594	696	882	727
Fertilizer Issued '000 MT	na	20	98	153	156
Credit Granted Rs Milns	na	na	55	120	148
Production '000 MT	688	1344	1729	2661	2063
Purchase under Guaranteed Price Scheme '000 MT	7	682	354	101	5
No of Cultivators '000	1484	1689	748	851	902

Average Annual Increase/Decrease (Per cent)

	1950/60	1960/75	1975/85	1985/90
Gross Extent Sown (9)	3.8	1.7	2.7	-3.5
Fertilizer per HA	na	20.9	2.2	4.7
Credit Granted Rs (10)	na	na	7.2	9.8
Production per HA	4.3	0.6	2.0	-1.3
Purchase Under GPS (11)	0.0	-	-9.2	26.6
Farmers per HA sown	-1.7	-4.1	-1.0	5.0
Productivity per HA	7.4	12.5	2.5	-5.2

Sources: Computed Using Data Obtained from
Central Bank of Ceylon 1975: 1985: 1990
Snodgrass, 1966:101 Table 5.2, 157 Table 6-14, 162 Table 6-17
Notes:
'000 HA - Thousand Hectares '000 MT Thousand Metric Tons
Rs Milns - Rupees Millions
(9) per '000 ha (10) Rs per ha (11) per ton of production

in Sri Lanka by expanding colonization schemes in the dry zone areas. The Interim Development Plan of 1951-1955, The Ten Year Plan of 1959-1969 and The Five Year Plan of 1972-

1976 spell out schemes for agricultural development by expanding irrigation in the dry zone areas. The Gal Oya, Udawalawe, Mahaweli located in the North Eastern, Eastern, North Central, Monaragala and Hambantota districts are some of the river valley development schemes (district locations are given in figure 3.1) that been successfully implemented to bring additional land in the dry zone areas under cultivation. The latest of such major irrigation schemes, the Mahaweli development scheme contributed 8.2 percent of the total rice production of the country in 1987, while it accounts for approximately 6 per cent of the country's total land area (National Planning Division, 1987:58). Increasing yields of existing paddy lands was an important aspect of improved production. The use of modern methods of farming, easy and fast transportation and the marketing of produce with a profit to the farmer led to a gradual breakdown of traditional methods of production.

Non-availability of fertilizer and lack of know-how to use such modern methods are among important reasons why use of fertilizers was not prevalent among traditional farmers. The government was in a position to impart the knowledge, provide the necessary fertilizers at a subsidized rate and play a major role as the agent of change (Kuranatilake, 1971:56). In the period 1956 to 1962 fertilizer consumption in the paddy sector increased by about 250 per cent as a result of the government fertilizer subsidy and the production of fertilizer through (Kuranatilake, 1971:91) the State Fertilizer Cooperation from 1970 (Central Bank of Ceylon, 1970:). The 1982 Agricultural Census showed that the use of fertilizer was still below the optimum level in all

the major crops (Department of Census and Statistics, 1983a:274), specially among small holders (Department of Census and Statistics, 1983a:274).

Modernization in agricultural production also came through the adoption of improved techniques while maintaining the labour intensive nature of the sector. Increased use of appropriate modern techniques helped hard manual work, such as preparing the land for sowing and harvesting. The use of tractors (mainly hand tractors) in paddy cultivation increased to 7736 in 1963 compared to 559 in 1955 (Kuranatilake, 1971: 101). By 1979 this number had almost trebled to 27,763 (Central Bank of Ceylon, 1983:89 Table 9.3) and at least 4588 new tractors had been registered since 1979 (Central Bank of Ceylon, 1983:77 Table 4.7). Various improved practices such as various methods of transplanting, such as broadcast sowing produced striking results (Snodgrass, 1966:159).

In the early stages of the agro-industrial transition the productivity of the paddy sector was expected to increase, but inducing farmers to produce more than their consumption requirements was a challenge. During a quarter of a century after independence, the Guaranteed Price Scheme had to be increased several fold (Table 4.6) as a way of such inducement. The role of the government in sensitizing paddy farmers to increase production and produce beyond their consumption requirements was important in the first three decades after independence. The Guaranteed Price Scheme (GPS) was one of the important policy instruments used by the government to popularise the concept of producing for a market among the paddy cultivators. The

idea was to create a situation where the traditional farmer would be tempted to produce beyond subsistence level and sell a part of his/her produce at a profitable price. At certain periods the price guaranteed by the government was twice the prevailing world market price for paddy (Moller, 1972:28; Karunatilake, 1971; Snodgrass, 1966:161-162; Central Bank of Ceylon, 1970-79: series and 1980-89: series). A second objective of the GPS was to free the farmer from foreign competition. The cost of imported paddy was very much lower than the cost of local production. Sri Lanka prior to the late 1980's imported a larger proportion of rice which was the staple diet of the people. Availability of cheaper foreign rice in the market acted as a disincentive to the farmer to increase production. Improving marketing facilities of rice production was another step towards improvement in the paddy sector.

The cooperative system with a wide network of branches also played a role in modernizing the agricultural sector. Cooperatives bought and sold goods at a price level fixed by the government[10] so that the farmer received a fair price for his produce and pocketed the total profit. The guaranteed price produce was collected in the respective areas of cultivation through agricultural production and sales societies. Cooperatives provided the storage facilities needed by the farmers. In the mid 1980's when paddy production increased with modernization in the sector, and the country was becoming close to self

10 In this way the private traders who would buy the produce at a low price from the farmer and sell at a higher price were eliminated. Such activity would have strengthened the internal trading activity but the farmers would not have any incentive to produce more, since producing for commercial purposes was not practised.

sufficiency, the government opted to play a lesser role in strengthening the private sector and reducing intervention in paddy price determination.

Provision of experimental and research services to strengthen non-commercial agricultural production increased productivity in traditional agricuwlture. The Rice Research Institutes in Batalagoda (dry zone) and Bombuwala (wet zone) were set up to conduct experiments involving rice varieties and yields (Karunatilake, 1971:56).

Agricultural credit helped farmers to increase the use of technology in the paddy. Provision of banking services to provide credit created additional employment avenues. Credit services for farmers were needed as most of the farmers were poor and could not afford even the most essential of capital investment for their land (Karunatilake, 1987). Agricultural insurance services were needed to help with the natural hazards that affected the paddy production. A vast array of credit societies and branches attached to commercial banks came into being to facilitate such services. New agricultural credit schemes attached to The People's Bank, The Bank of Ceylon and Rural Credit Societies were some of these societies.

Thus a striking feature in the agricultural sector after independence during the 1950-1960 decade has been the rapid increase in output of paddy. This was an outcome of the development activities evident due to increased area under paddy cultivation, fertilizers marketing, and modern technology introduced to the sector. The average paddy yields per hectare were higher in the Accelerated Mahaweli Development Project area where planned modernization in

agriculture had been introduced (National Planning Division, 1987:59).

Table 4.7 shows that paddy cultivators comprised a substantial proportion of the total employed population. Historically, the paddy sector contained a large proportion of workers in agriculture sector. Along with the increase in paddy production, the number of farmers working in the

Table 4.7
Proportion of Paddy Cultivators in Total Employment

	% of Paddy Cultivators[11]		% in Agricultural Industries[12]		Total Employment Number and %	
	Both Sexes	Females	Both Sexes	Females	Both Sexes	Females
1946	10.8 (282)	na	52.9	10.6	100.0 (2611)	19.1 (499)
1953	12.6 (378)	na	52.9	14.6	100 (2993)	24.2 (724)
1963	19.5 (624)	na	52.7	13.0	100 (3194)	20.5 (655)
1971	22.2 (804)	3.1	50.4	13.8	100 (3622)	22.4 (810)
1980	16.6 (786)	2.3	45.9	12.7	100 (4738)	24.9 (1182)
1985	14.1 (723)	3.5	49.3	16.4	100 (5132)	30.2 (1550)
1990	13.8 (712)	3.3	47.7	19.3	100 (5160)	31.0 (1600)

Sources:
Ranasinghe, 1952:224-234; Department of Census and Statistics, 1974:73-75 Tables 5.9,5.10; 1976:68 Table 9; 1982a:21 Table 11; 1987a:98 Table 21; 1991c:2-3 Tables 4,5,6
Notes: Figures for 1980-1990 are based on inflated Survey data.
Numbers in parentheses are total numbers in thousands

paddy sector had increased. According to Richards and Gunaratne(1980:79) more farmers were absorbed into paddy cultivation by different means which ranged from 'new irrigation and colonization scheme and squatting in the Eastern and North Central Provinces, fragmentation on a

11 The proportions are out of total employment
12 The proportions are out of total employment

diminished land base in the Western Province, fragmentation and some expansion in the North Western and Central provinces and expansion into less favourable land in the Northern Province'. Nevertheless, Table 4.6 presented previously and figure 4.3 show that the productivity in paddy farming has declined since the 1980's.

Development in the paddy sector discussed above has been mainly directed towards the dry zone farmers, who handled the major proportion of the land area under cultivation. A larger proportion of the farmers were in the dry zone and the benefits accrued by the wet zone farmers whose land hold size was much less (Department of Census and Statistics, 1983a), were minimal leading to under employment among wet zone farmers.

The investigation of the pattern and level of development in paddy agriculture is important in the context of this thesis. Labour intensive traditional agriculture has been and still remains the major source of employment in Sri Lanka accounting for close to half of the total employment in the country and a major source of employment for females discussed previously (Table 4.3). In the period reviewed, some degree of modernization in the inherently traditional agricultural sector had occurred nevertheless, as shown previously (in Table 4.6) the productivity in this sector has declined. This study investigates the issues regarding female labour underutilization problems associated with agricultural employment.

4.5.2 PLANTATION AGRICULTURE

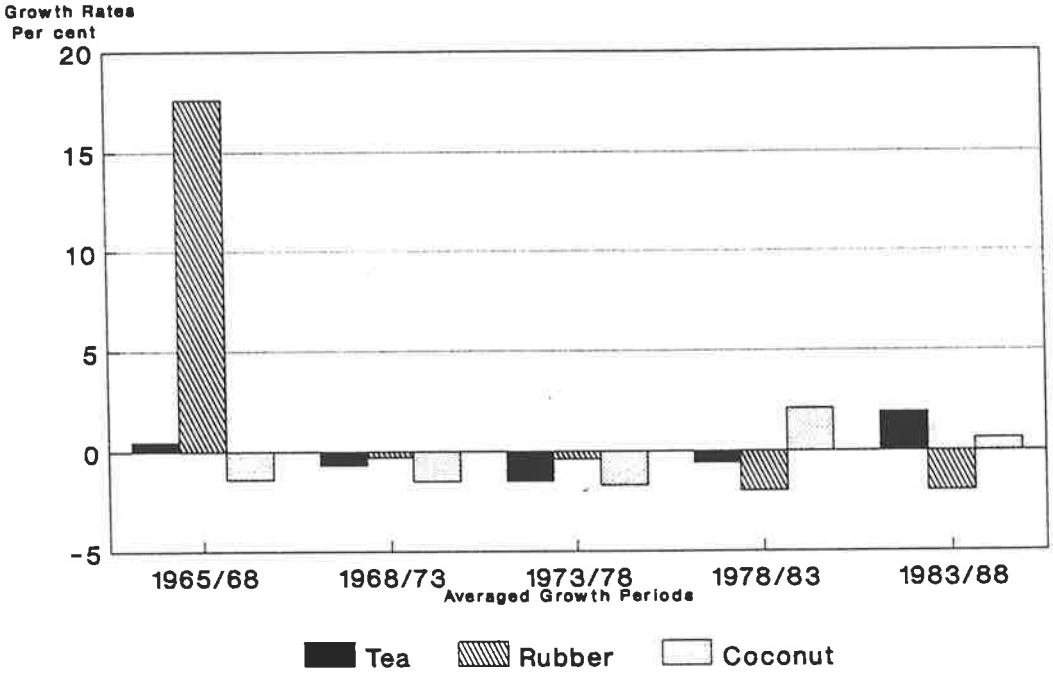
Initially privately owned commercial plantations became the modern sector of agriculture and production in this sector caters mainly to foreign markets. Figure 4.4 and table 4.8 show the patterns of growth in commercial agricultural crops. The major commercial crops of tea, rubber and coconut together earned the bulk of the country's export earnings and contributed a large share of revenue to the country, though various taxes levied on exports. The relative importance of the contribution of these crops as the major foreign income earners in the 1950's and 1960's (Snodgrass, 1966:59) has declined since the mid 1980's, mainly because of the increased contribution of the non-traditional exports and the contribution of domestic goods and services especially the manufacturing sector to the government revenue (Central Bank of Ceylon, 1989: Statistical Appendix, Tables 30, 31, 61).

At a time when monetary transactions were not prevalent in traditional agriculture, wage employment was introduced in plantation agriculture and the largest proportions of employees continue to be in commercial agriculture. According to 1971 census data, approximately 77 per cent of wage earners in agriculture were in plantations and the 1981 census showed that this proportion had increased to 88 per cent (Department of Census and Statistics, 1986b:198 table 12.9).

The fluctuations in the agricultural production shown in table 4.8 are due to the volatility of plantation agricultural production to the vagaries of climatic conditions and market forces (Central Bank of Ceylon,

Figure 4.4

PLANTATION AGRICULTURE
GROWTH RATES OF PRODUCTION: TEA, RUBBER AND COCONUT



Source: Table 4.7

Table 4.8
Growth Patterns in the Plantation sector: Tea Rubber and Coconut (Averaged Five Year Periods)

	(1) 1961/65	(2) 1966/70	(3) 1971/75	(4) 1976/80	(5) 1981/85	(6) 1986/90
Tea						
Acreage '000	582.4	597.4	598.0	650.0	581.0	548.0
Production in million lbs	480.8	485.0	467.6	433.2	419.6	460.4
Production per acre lbs	825.5	811.9	782.0	666.8	721.5	840.1
Rubber						
Acreage '000	651.4	569.0	565.2	506.0	507.4	496.4
Production million lbs	134.5	323.4	318.2	312.3	282.1	255.6
Production per acre lbs	462.4	1273.0	1261.2	1382.4	1245.4	1153.5
Coconut						
Production per acre million nuts	2721	2531	2343	2155	2398	2468

	Growth Rates per cent for Averaged Five Year Periods				
	1961-65/ 1966-70	1966-70/ 1971/75	1971-75/ 1976/80	1976/80/ 1981/85	1981/85/ 1986/90
Tea					
Acreage	0.5	0.0	1.7	-2.2	-1.2
Production	0.2	-0.7	-1.5	-0.6	1.9
Production per Acre	-0.3	-0.8	-3.2	1.6	3.0
Rubber					
Acreage	-2.7	-0.1	-2.2	0.1	-0.4
Production	17.6	-0.3	-0.4	-2.0	-2.0
Production per Acre	20.3	-0.2	1.8	-2.1	-1.5

Sources: computed using
Central Bank of Ceylon 1960-1991 (series)
Rasaputra et al, 1986:219-276
Notes: conversion measures
1 acre= .40469 ha
2.11 lbs= 1 kilogram

1975:243; 1976:16-17). Until the 1980's commercial agriculture had been the main foreign income earner in the economy. Nevertheless, fluctuating foreign demand for commercial agricultural products created problems in the balance of payments, monetary movements and public finance

of the country (Widanapathirana in Rasaputra et.al., 1986:219).

Declining growth as reflected in the negative rates of production in the tea sector since the 1960's as shown in table 4.8 were largely due to changes in the management or ownership of tea and rubber assets in Sri Lanka when the country became fully independent of British rule. During the 1970's production was further affected by Land Reform Laws of 1972 and the Land Reform Amendment Law Number 39 of 1975 which brought the privately owned commercial estates under state ownership. Thus, uncertainty of ownership prior to land reforms led to the internal deterioration of the plantation sector (Gooneratne and Wesumperuma 1984:39-40, 6-7).

In the early 1970's the government of Sri Lanka became the largest employer of plantation labour in the country, creating a new chapter in estate management as well as estate labour management. This change was due to the Land Reform Law which vested estate lands owned or possessed by public companies with the Land Reform Commission (Central Bank of Ceylon, 1976:). The state became the principle owner of plantation land and after the early 1970's the plantation sector of Sri Lanka was subjected to significant institutional changes which eliminated the foreign ownership of plantation land and restricted for the first time, Sri Lankan individual private ownership to an upper ceiling of 50 hectares.

A continuous decline in production is observed throughout the period commencing from the early 1970's due to the neglect of estate maintenance in relation to

fertilizer applications, regular vacancy filling and replanting, soil conservation, land development, building and factory improvement and other ancillary facilities such as housing and sanitation (Gooneratne and Wesumperuma, 1984:13-14). The high cost of fertilizer and the need to save foreign exchange imposed a general restriction on the use of fertilizer during the period although the new management would not have realized the immediate consequences of restrictions on fertilizer.

Under the new management there was a decline in realised replanting targets, which in the long term affected the volume of tea picked. Similarly with the government take over of tea plantations, a serious cut back was observed in the capital development of plantations particularly in relation to soil conservation, maintenance of buildings and improving factories and other ancillary facilities (Gooneratne and Wesumperuma, 1984:1-29).

An understanding of the economic contribution of the plantation sub-sector is important in the context of this thesis because it facilitates an understanding of the nature of employment in the sector. In this regard secondary and tertiary industries in terms of agricultural processing and services were initially introduced in the plantation sector. By far the most important contribution of plantations to the economy is the modernization in the agriculture sector itself through the introduction of wage employment into the sector. Survey and census data show that the largest proportion of wage earners in agriculture are among plantation workers (Department of Census and Statistics, 1976:68 Table 9; SE&LFS 1985/86 Data Tape, Samarasinghe and

Coughlan ed., 1991:151-191), however, the sector is also associated with low wage levels and poor living conditions among plantation workers (Kurian, 1985; Samarasinghe and Coughlan, 1991:183-191). A second aspect of the importance of the plantation sector to this study is the involvement of Indian Tamil workers who have become Sri Lankan citizens. Their cultural and demographic characteristics and behavioural patterns contribute to the patriarchal social values (Kurian, 1985:40-51) in the transitional society of Sri Lanka.

4.6 MANUFACTURING SECTOR

The growth level and pattern of manufacturing industries is a key determinant in the agro-industrial transition (Oshima, 1987). Table 4.9 indicates the composition and growth patterns in the manufacturing sector in Sri Lanka. At least four fifths of the total value of output in the manufacturing sector is determined by three broad groups of product comprising food and beverages; textiles, wearing apparel and leather products; chemical, petroleum, coal, rubber and plastic products. The dominance of these categories is observed throughout the period and a noteworthy trend is the emergence of textiles as an important contributor to the total value of output in the manufacturing industries (Daily News, 1992:February 19; 1993:December 17). This trend is a result of the expansion of the wearing apparel and textile industries through local and foreign investment enterprises associated with the Free Trade Zone industries (FTZ) and Foreign Investment Advisory Committee (FIAC) sponsored industries. Since late 1950's government policies were directed towards luring direct

Table 4.9
Percentage Distribution and Growth of Output in the Manufacturing Sector

	1971/74	1975/78	1979/82	1984/86	1987/90
Manufacturing Industry Sub-sectors	Percentage Distribution				
Composition					
Food and Beverages	32.4	29.6	21.1	26.7	19.4
Textiles Wearing Apparel and Leather Products	14.8	11.9	12.8	24.0	23.8
Wood and Wood Products	1.3	1.8	1.4	1.7	0.8
Paper and Paper Products	3.4	4.1	2.9	3.0	1.8
Chemical Petroleum Coal & Rubber Products	26.1	36.7	50.0	35.2	45.9
Non Metallic Mineral Products	7.2	5.9	5.8	5.0	4.1
Basic Metallic Products	2.7	2.2	1.9	0.6	0.7
Fabricated Metallic Products	11.1	7.3	3.7	3.3	3.4
Manufactured goods nes	0.9	0.4	0.3	0.3	0.2
Total Manufacturing Sector Percent	100.0	100.0	100.0	100.0	100.0
Total Manufacturing Sector Number '00	2848.5	5494.4	19501.5	36058.0	62791.0

	1971-74/ 1975-78	1975-78/ 1979-82	1979-82/ 1984-86	1984-86/ 1987-90
Manufacturing Industry Subsectors	Growth Rates Percent			
Food and Beverages	19.6	17.7	21.0	14.4
Textiles Wearing Apparel and Leather Products	16.5	27.8	30.9	22.3
Wood and Wood Products	29.4	20.7	19.8	2.0
Paper and Paper Products	26.5	17.7	15.9	9.2
Chemical Petroleum Coal & Rubber & Plastic Products	30.4	33.8	6.4	29.0
Non Metallic Mineral Products	16.6	25.7	11.8	17.4
Basic Metallic Products	17.3	22.5	-12.9	23.9
Fabricated Metallic Products	11.5	8.9	12.5	22.9
Manufactured nes	1.4	19.5	16.5	15.8
Manufacturing Industries	21.9	26.1	15.2	22.5

Sources: Central Bank of Ceylon, 1974-1990 (Series)
Notes: See annex 4.1 for details of Sectoral Shares of GDP during the periods

foreign investment to the country by offering concessions for such investments. This policy of offering concessions for foreign capital investments received a new impetus from the early 1980's.

Table 4.9 indicates that the share of some manufacturing industries declined over the period. The capital intensive public sector industries producing wood and wood products, non-metallic mineral products, basic

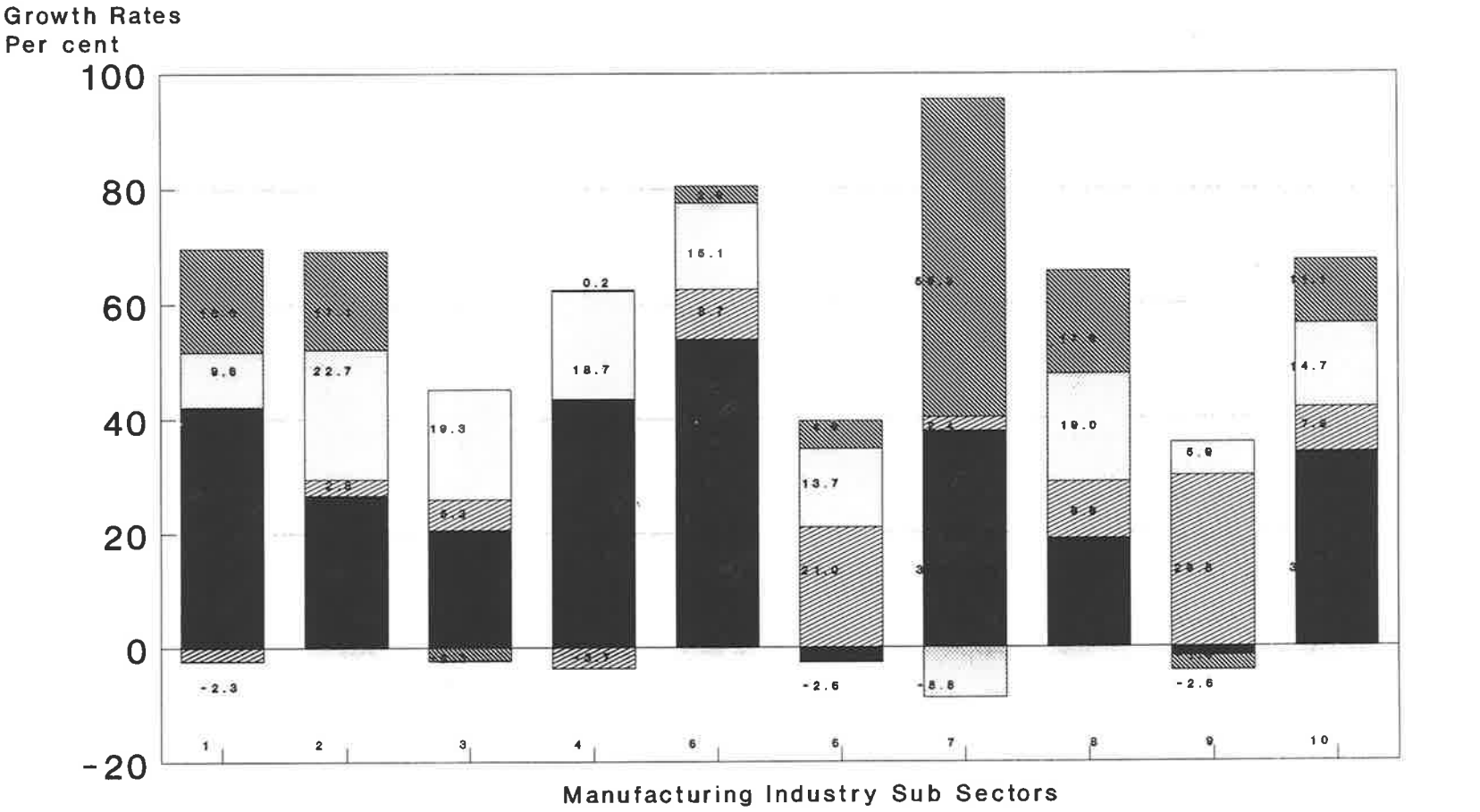
mineral products, and other manufactured products, functioned on imported raw materials. During periods of foreign exchange crisis the output was low because the supply of raw materials had to be restricted. Capital intensive manufacturing industries have a low potential for labour absorption and had been run on a low productivity basis because the emphasis of government policy was on social welfare (Richards and Gunaratne, 1980:1-35; issues such as high productivity and profit motives were secondary (Karunatilake, 1987:149-150). Therefore in spite of an expansion in the share of manufacturing in the sectoral composition of GDP during mid 1970's there was no solution to the problem of labour underutilization.

4.6.1 PRODUCTIVITY IN THE MANUFACTURING SECTOR

Figure 4.5 (see Appendix 4.2) indicates the growth rates in productivity in manufacturing industries for selected years. Productivity is calculated as the value of output per capita obtained by dividing sector output by the total employed in the sector. The years indicating output are selected to compare with available employment data for those years.

Figure 4.5 shows that the period 1973/1975 was associated with a high level of productivity for all the manufacturing industries except non-metallic mineral products. The output in relation to employment in the sector was substantial. Nevertheless, the manufacturing industries contributed only in a limited way to the expansion of employment in the sector during the 1973/1975 period. In fact during the period, some industries such as food and beverages and fabricated metal products experienced a

Figure 4.5 GROWTH RATES IN PRODUCTIVITY IN MANUFACTURING INDUSTRIES



1. Food and beverages
2 Textiles
3 Wood Products
4 Paper Products
6 Chemical Products
6 Non-Metallic Products
7 Basic Metal Products
8 Fabricated Metal Products
9 Manufacturing nes
10 Total Manufacturing

Appendix 4.2

decline in employment. The only group of industries which experienced a substantial amount of employment growth was the textiles[13], wearing apparel and leather products group (Department of Census and Statistics, 1976:70-73, Table 9; 1985a:98-110, Table 21). Probably this is a result of the expansion of labour intensive as well as capital intensive aspects of this industry.

Growth rates of productivity for 1975 and 1978 show a drastic decline from the previous period. This is largely because of the substantial increase in employment without relative adequate increases in output (Karunatilake, 1987). However the productivity of non-metallic mineral products and manufactured products was not affected and hence, these industries suffered a decline in employment.

4.6.2 RECENT DEVELOPMENTS IN MANUFACTURING INDUSTRY PROMOTION

The balance of payments difficulties that the country constantly faced after the mid 1950's brought to light not only the importance of developing import substituting industries, but also the need to look for foreign exchange from sources other than the traditional plantations (Karunatilake, 1971:60). Since 1977 the policy of import substitution industrial development was abandoned for export-led industrial development. Export-led manufacturing industrial growth was experimented with even before 1977 in an attempt to develop non-traditional exports (Colombage and Karunaratne, 1986). The private sector played a major role in the development of the manufacturing industry under the guidance of (1) the Greater Colombo Economic Commission, (2)

13 Manufacture of textiles include International Classification of Industries Category 221 & four digit categories 2211-2219

the Foreign Investments Appraisals Commission, and (3) the Local Investments Appraisals Commission. A very favourable investment climate was created by the government through a propaganda campaign and by offering a package of investment incentives, together with the establishment of free trade zones and tax free investment zones outside the FTZ to implement foreign investment in the country. Concessional loan facilities of international lending institutions were harnessed to provide credit to potential investors. Liberalization of imports of raw materials machinery and spares began to show results in terms of increased output.

Public sector industries also experienced a change in management policy. The government gave up the protectionist policy and the industries were exposed to foreign competition resulting from the relaxation of import controls on a wide variety of consumer goods making the industry more dynamic, productive and efficient in the long run. The government monopoly in these industries was gradually given up and several public sector industries were opened up for the private sector 'know-how' management, experience and capital. One result of such liberal policies was the higher capacity utilization of foreign raw material starved industries.

4.6.3 PROBLEMS FACING MANUFACTURING INDUSTRIES

Increasing dependence upon imported raw materials became a dominant feature of the development of manufacturing industries in Sri Lanka. After the liberalization of trade in 1977 the dependency of manufacturing industries on imported raw materials

increased (table 4.10). This indicates not only the vulnerability of industrial production to the variation in world market prices of raw materials, but also of net foreign exchange earnings which would be used to import the necessary requirements (Jayatilleke and Gunawardana, 1989:2-36).

Table 4.10
Percentage of Imported Raw Material in Manufacturing Industries

Description	1976	1985
Food, Beverages and Tobacco	37	20
Textiles, Wearing App and Leather Products	74	97
Wood and Wood Products	43	10
Paper and Paper Products	60	60
Chemical Petroleum		
Coal and Rubber Products	94	98
Non Metallic Mineral Products	100	100
Basic Mineral Products	83	59
Fabricated Mineral Products	77	ns
All Manufacturing Industries	70	89

Source: Central Bank of Ceylon, 1986:
National Planning Division,
Department of National Planning, 1983-1989

One effect of such dependence on imported raw materials is that markets have to be found for the finished goods and the local industry had to compete with other international competitors producing the same finished product. Devoid of protection, any industry that could not survive such competition had to be closed down.

In spite of the export oriented policy, a large proportion of foreign earnings have to be spent outside to buy the necessary raw materials for the industry. Thus, the residual major effect should be the substantial provision of employment for a large number of unemployed young persons.

Sri Lanka has experienced persistently high unemployment among the educated young people since the 1960's (ILO, 1971a) which is an outcome of inward oriented development which does not have the capacity to absorb the output from the schools in productive employment.

Table 4.11 indicates that the capacity utilization of some manufacturing industries is quite low. The lower capacity utilization of some industries such as basic

Table 4.11
Capacity Utilization of Manufacturing Industries

	1975	1978	1987
Food and Beverages	69	70	87
Textiles Wearing Apparel	53	62	99
Wood and Wood Products	49	78	89
Paper and Paper Products	60	72	87
Chemicals Petroleum Coal Rubber Plastic Products	61	67	68
Non Metallic Mineral Products	58	77	75
Basic Metallic Products	34	63	32
Fabricated Metal Products	51	64	82
Manufacturing nes	48	79	96
All Manufacturing Industries	64	70	79

Sources: Central Bank of Ceylon, 1975:, 1978: 1987:
Notes: Each industry=100

metallic products is partly a result of heavy import dependency for raw materials in manufacturing and partly the scarcity of finances for the importation of raw materials on which the industry depends (Colombage and Karunaratne, 1986; Karunatilake, 1987). Over the period vast improvements in the capacity utilization of more labour intensive industries such as textiles, wearing apparel and leather products have led to increased employment. In the context of the prevailing level of labour underutilization an important aspect of manufacturing development is to increase the

capacity utilization of industries that can absorb more labour resources.

4.6.4 COTTAGE AND INFORMAL INDUSTRIES

The expansion of informal manufacturing and service activities has been observed in the early stages of the agro-industrial transition when agricultural productivity increases and the transference of labour occurs from agricultural to non-agricultural activities (Oshima, 1987). Unique features of informal activities are the complexity and heterogenity of such activities (Jones and Manning 1991). A drawback in analysing such activities is the paucity of employment data which differentiate between formal and informal. The specific contributions of cottage industries or the informal sector to the national economy are not identified by the national accounts.

Nevertheless, cottage industries which included both formal and informal economic activities play a vital role in the rural economy of many Less Developed Countries. In early 1950's the World Bank Mission which made an evaluation of the economic potential in Sri Lanka for industrialization (IBRD, 1956:505-605) noted the importance of the development of cottage industries for the development of the rural economy[14]. A considerable proportion of the village population were engaged in cottage industries such as textile weaving, coir making, pottery making and Seri culture (Department of Census and Statistics, 1951:193-194). Largely these industries are informal and have been the source of home-based employment for women (Department of

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14 Hewavitharana, (1990:5-58) points out that rural non-farm employment is an important aspect of the lives of a large number of people in rural areas.

Census and Statistics, 1951:231; Hewavitharana, 1990:15). The development of cottage industries has been hampered by the paucity of trained personnel, improved equipment, funds and markets for the finished products. In the late 1940's to the early 1950's several government departments played a role in helping these industries adjust to a competitive market (Department of Census and Statistics, 1951; 1952-53; 58-60:series; 1960). From the late 1950's to the present cottage industries have been relatively neglected[15], even though the establishment of cottage industries on a wider scale in rural areas would have provided avenues of employment for underutilized labour in those areas.

4.7 SERVICES SECTOR

Since independence there has been a rapid increase in the services sector of the economy which resulted in substantial increase of employment in the public sector. Massive infrastructural investment occurred to cater for the increasing demand for a modern telecommunication system in Sri Lanka (Department of Census and Statistics, 1960:234-235; Central Bank of Ceylon, 1979:95 Table 9.5; National Planning Division, 1987:92) which helped to bring modern ideas closer to the far rural areas of the island. Since 1977 road passenger services provided by the state is open for public ownership, and the private sector is also allowed to provide passenger transport. The state transport services have been an important avenue of employment creation (Central Bank of Ceylon, 1970:78).

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15 For example the The Ten Year Plan 1959-1969, The Public Investment Programmes since 1980's do not indicate any planned development for cottage industries.

The expanded consumption of energy reflects increased levels of modernization in the economy due to the use of vehicular transport and to enhance the quality of life. Petroleum thermal electricity and hydro-electricity were the main sources of energy (National Planning Division/Department, 1987:96; 1988:84; 1991) however, they accounted for only 30 percent of total energy consumption in the country as at 1988 (National Planning Division, 1988:82-83). Fuel wood and agricultural waste constitute the main source of non-commercial energy.

Table 4.12 indicates trends and indicators in the development of educational facilities. In transitional Asia two service industries that provided a better quality of life while being the agents of change towards westernization were education and health services (Caldwell, 1982; Jones, 1992; Jayaweera, 1979; Department of Census and Statistics, 1981). In Sri Lanka the rise and expansion of massive service delivery in health and education in the public sector created employment for a large segment of educated population particularly for females. Under British colonial rule the policy in Sri Lanka was influenced by the British education policy which was the 'tacit acceptance of the fact' that in the long run the education had to be secular, compulsory and at public expense (Ministry of Plan Implementation, 1981:52). Since the free education was introduced in 1945 a rapid expansion of educational facilities took place (Ministry of Plan Implementation, 1981:55). The government expenditure on education increased and table 4.13 shows that in a matter of two decades from 1950-1960 the school-going population doubled. The increased

Table 4.12
Growth of Infrastructure and Services Related to Education

	1950	1960	1970	1980	1985	1990
Number of Schools	6636	7806	9038	9777	10051	10375
Of which						
Primary	na	na	7957	4156	3998	9857
Secondary	na	na	1537	4961	5636	4369
Other	na	na	287	677	417	5488
Number of Govt Schools (1)	3391	7373	8555	9117	9634	9857
School Going Population '000 (1)	902	2138	2829	3390	3739	4111
Teachers '000 (1)	46	62	95	141	148	184
Expenditure on Education Rs millions	105.9	244.2	527.0	1284.0	2337.8	3980.0
Expenditure on education as % of GDE	2.7	4.0	4.2	4.8	1.9	1.0
5-14 population '000	1824.0	2531.0	3280.0	3460.5	3557.5	3654.0

Period Increase Percent	50/60	60/70	70/80	80/85	85/90
Number of Schools	17.6	15.8	8.2	2.8	3.2
Number of Government Schools	117.4	16.0	6.6	5.7	3.8
School going Population	137.0	32.3	19.8	9.3	9.9
Number of Teachers	36.0	53.1	48.9	4.5	24.7
Expenditure on Education	148.6	115.8	143.6	82.1	70.2
5-14 Population	38.7	29.6	5.5	2.8	2.7

Average Annual Growth of Educ. Infrastructure and Services					
Number of Schools	2.3	1.3	0.8	0.5	0.5
Number of Government Schools	11.0	1.3	0.6	1.1	0.4
School going Population	12.3	2.5	1.8	1.9	1.9
Number of Teachers	4.4	3.9	4.0	0.9	4.4
Expenditure on Education	11.9	7.0	8.9	12.0	10.6
5-14 Population	3.3	2.3	0.5	0.6	0.5

Sources:
Department of Census and Statistics, 1953:84, 1960:185-185
Statesman's Year-Book Series 1946-1970
Central Bank of Ceylon, 1971:207 Table II(1)2
Central Bank of Ceylon/Sri Lanka, 1985, 1992:95 Table 10.2
Notes: (1) Refers to the situation as at 1952
Number of schools, school going population, number of teachers, & expenditure on education under are for 1959 and the number of government schools are for year 1958.
5-14 population is estimated using census populations of 1963 1971, 1981 and projected for 1986 and 1990 using exponential growth rate.

consumption of educational services was partly a result of the government policy which focussed on increasing school attendance and included the expansion of educational welfare services to provide a midday meal and free books

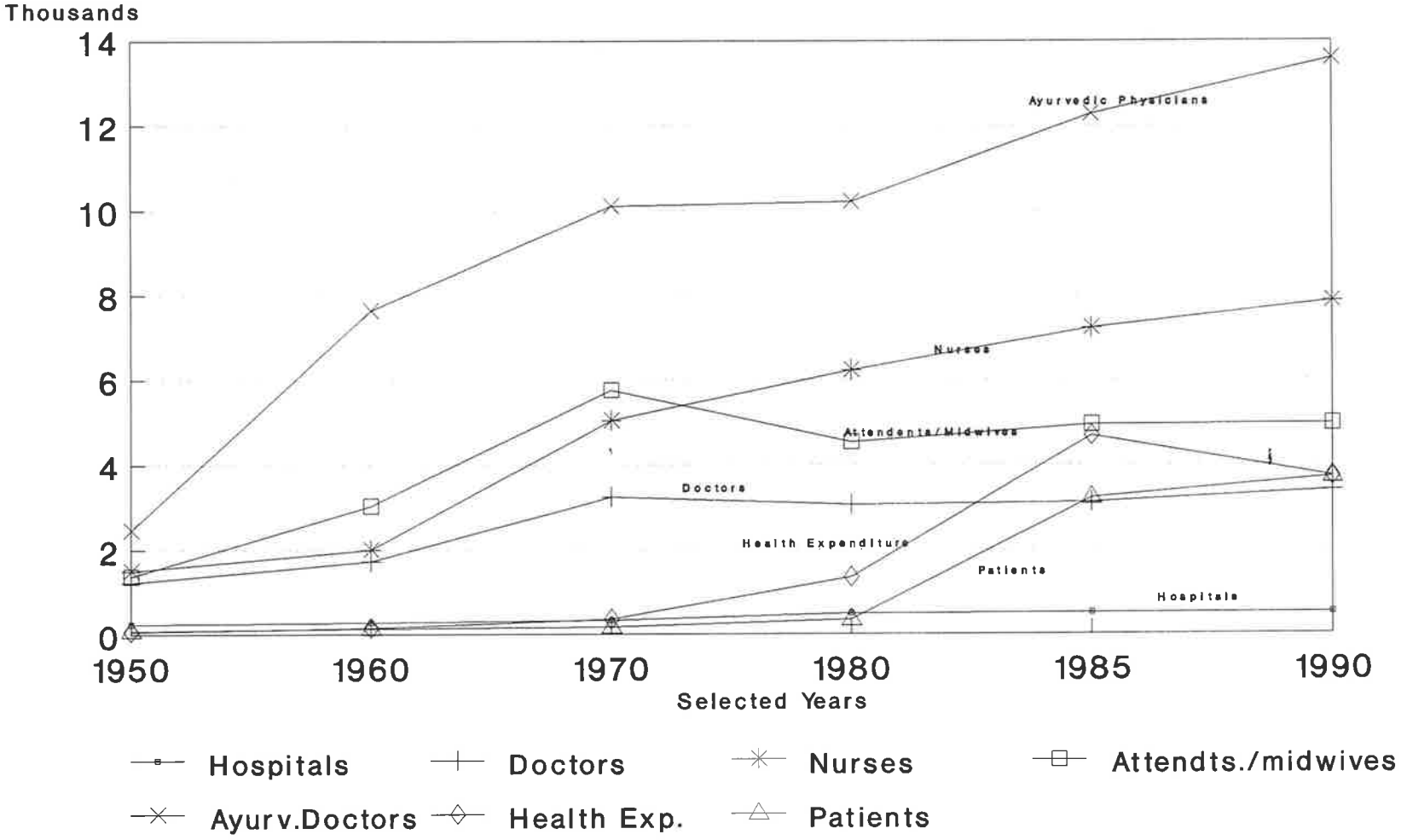
(Ranasinghe, 1950; Department of Census and Statistics, 1953; 1958; 1960). The supply of infrastructure and services in terms of the number of schools and teachers had to be increased accordingly. The growth rates of schools and teachers although higher in the earlier periods, levelled off in the latter periods when the incidence of participation was associated with the declining school-age population resulting from fertility[16] declines.

Increased demand for health services delivered by both an indigenous system of medicine which created employment in the private sector and a western system is related to the massive increase in population and the ability to meet the demand for better quality life. Figure 4.6 and Appendix 4.4 indicate the growth of health services and infrastructure for selected years. Such service delivery necessitated the expansion of health services creating employment for a large number of persons in the public as well as the private sector (National Planning Division, 1988:95). Over the last 30 years, substantial investments have been made in the development and improvement of health services (Department of Census and Statistics, 1973a:20 Table 16). Figure 4.6 shows that during the first two decades after independence the number of doctors increased rapidly in response to the increasing demand for western medical services (Ministry of Planning and Employment, 1971; Ministry of Plan Implementation, 1981:110). Increases in the number of para-medical personnel such as nurses, midwives and attendants indicate the expansion of health services in the economy through out the period concerned. A part of such services

16 patterns of fertility and mortality decline are discussed in chapter 4

Figure 4.6

GROWTH OF HEALTH SERVICES AND INFRASTRUCTURE



Source: Appendix 4.4

Note: Health Expenditure is in Rs. Millions

were field workers who helped to make dramatic improvements in the health conditions of the peripheral populations.

The share of expenditure on health services in the total domestic expenditure had more than doubled between 1960 to 1980 (See Appendix 4.3.). Such expenditure reflects the investment in infrastructure, technical capital and professional services which is discussed above.

Oshima (1987:6) notes that technologies and institutions which have been borrowed and adapted from the west play an important role in the economic transition of Asia. Development of a large number of institutions to cater for demands of a modern economy is a third aspect of the development of the services sector in the economy[17]. This was mainly in the field of trade and finances that spilled over to the other sectors of the economy from the plantation sector. These institutions catered mainly for the public sector but in recent times were vastly expanded to service the private sector demands. These ancillary services included the development of banks and other financial institutions such as the Central Bank and a number of commercial banks. Expansion of the public administration is seen and the development of a massive clerical in the public sector as a result. Thus the government turned out to be the main employer in the services sector.

4.8 THE ROLE OF THE PRIVATE SECTOR IN THE ECONOMY

The private sector played an important role in the initial stages of modernization to develop a commercial

17 Importance of technological development and the role played by the institutions in adopting new technology is discussed in Oshima, 1987 as well as 1991. The experience of Japan, Taiwan and South Korea, Hong Kong and Singapore, Thailand and Philippines, Malaysia and Sri Lanka is contained in these references.

export agricultural sector within the traditional agricultural economy. Prior to that period the contribution of traditional farmers to the national income was minimal and the IBRD mission (1956:43) even advocated that the key role of industrialization in Sri Lanka should be through the private sector. The Ten Year Plan 1959-69 envisaged a role for investment in the private sector and saw the private sector as playing an equally important or even more important role in the investment in the commercial crop sector, animal husbandry, housing and other services and a substantial role in the large scale industrial development (Karunatilake, 1971:85).

During the period 1960 to the late 1970s a change of attitude towards the role of the private sector in economic development could be observed. The direct control of foreign exchange, import controls on merchandise trade and a protection of internal trade affected the independent functioning of the private sector. Direct government involvement in production, trade and services could also be seen (Jayatilleke and Gunawardana, 1989:1-29). The public sector came to play the most important role in economic development with large scale public sector industrial development and land reforms enabling the government to take under control the privately owned commercial estates (Ministry of Employment and Plan Implementation, 1971). Thus several policies like nationalization of private assets, land reforms etc. that were implemented at the time, almost amounted to harassing the private sector to economic inaction (Colombage and Karunaratne, 1986).

Policies since 1977 as outlined in the budget speeches, expected the private sector to play a more important role in the industrial development of the country (De Mel, 1978; 1979). In the services sector, this was done by extending direct support and relaxing the restrictions imposed by the previous regime. The government's support for private non-fee levying schools, legislating for the establishment of independent tertiary level degree or diploma granting institutions to provide training for a large number of school levers and the removal of restrictions on private practice for the doctors in the public sector were some of these steps. The private sector was expected to be an effective partner with the government in achieving growth and equity goals in the economy (Fernando, 1993). The investment promoting liberal policies gave a substantial impetus to local and foreign private sector investment in industry (Central Bank of Ceylon, 1978-1990:). The high growth rates that have been achieved in manufacturing industries indicates the effective role of the private sector in the economic development of Sri Lanka.

4.9 CONCLUSIONS

The share of non-agricultural sectors dominate the structural composition of the gross domestic product. Nevertheless, agriculture is the main source of employment for more than half of the employed female population. This pattern of development leads to the conclusion that transference of female labour from agricultural to non-agricultural sectors is occurring at a slow pace. The growth pace of manufacturing industries has fluctuated during the period examined in this chapter and the sectoral share of

manufacturing is relatively low, comprising approximately one fifth of current GDP. The share of employment of females in the services sector was found to be high but the growth has been static. This pattern of growth is due to government role in creating employment in education and health services. The conclusion that can be drawn from such a pattern of development is that productivity in the agricultural sector has not improved even though the non-agricultural sectors in the economy have expanded, and the structural transition of the economy from agriculture to industry is happening at a slow pace. Unlike other newly industrialised or industrialising countries in East and South East Asia (Oshima, 1987) where the agro-industrial transition has occurred, in the case of Sri Lanka the growth pace of the transition is slow. The level and pattern of the economic development in the country had defined to a great extent the pattern of labour utilization in the country. An equally important determinant of labour utilization is the growth levels and patterns of the potential labour force. Chapter Five investigates the growth patterns and determinants of the potential labour force.

CHAPTER FIVE

THE POTENTIAL LABOUR FORCE: GROWTH PATTERNS AND DETERMINANTS

5.1 INTRODUCTION

This chapter examines the growth patterns and determinants of potential labour supply in the context of demographic, educational and mobility transitions that have taken place in Sri Lanka during the last four decades. In this context it is argued that the mortality, fertility and migration transitions that occurred had accelerated the growth of the working age population during this period. The system of education played an interrelated dual role in the process of demographic transition. It was an important agent of change in introducing modern skills and values to a traditional society as well as a leader in the westernization process, which in turn accelerated the process of demographic transition in a country which was still economically backward. Increased supply of potential labour with higher educational levels to an economy which was not developed enough to absorb such labour, lead to labour underutilization.

5.2 THEORETICAL CONSIDERATIONS

Demographic transition theory seeks explanation of the changes that occur in birth rates and death rates as countries experience economic development and social change. The model however does not include examination of the subsequent implications of the transition for the potential labour supply within populations. Jones(1992:27) notes 'in East Asia and much of South-East Asia population growth trends have had important implications for a "human capital

deepening". The most straight forward connection is that during the later stages of the demographic transition, the labour force continues to grow for some decades after fertility decline, causing the aggregate labour-force participation rate to rise'. The determinants and levels of growth of the current potential labour supply and the quality of human capital in Sri Lanka are a lagged effect of population growth of several phases of the demographic and education transitions. Therefore the growth patterns and trends of labour supply of different age groups analysed in this study can be best understood by investigating in the context of the demographic, education and mobility transitions that occurred in the country.

The basic argument in the traditional model of the demographic transition theory is that economic change and social development is accompanied by a sequential decline in the natural increase rates over periods of time; the initial decline is in mortality which is followed by a decline in fertility and there are identifiable stages of such a transition (Hugo, 1981:1-18). According to traditional theorists (Thompson, 1929:959-975; Notestein, 1945:36-57) fertility levels start to decline, in the later stages of the late transition phase due to a perceived increase in the burden of rearing and educating children (see table 5.1). Industrialization and urban economic growth create greater employment opportunities at higher wages; when costs and benefits of a high wage income and the costs and benefits of bearing, rearing and educating children are compared, further persistence of the supports of high fertility become economically irrational; the lagged effect

Table 5.1

A Summary of the Stages of Demographic Transition

The stage of Transition	Changes in Growth Components
(1) pre-transitional stage,	fertility and mortality are high and the rate of natural increase is low;
(2) the onset of mortality transition	modernization processes and epidemiological transition but the rate of natural increase is high because fertility still prevails at high levels
(3) the late transitional stage	the stabilization of death rates at low levels responding to modernization of health services; the improved health and living conditions bring about a sustained low level in death rates. At the initial stage of this transition, the level of population growth is high.
(4) the final stage of transition	slight or negative growth with birth and death rates both at low levels with some fluctuations in death rates due to ageing of population

of the greatly improved probability of survival of infants is an inducement to reduce fertility and hence the number of children; this desire to reduce fertility is supported by improved methods and more widespread knowledge and practice of contraception. Caldwell(1982:134-156) restated the demographic transition theory to provide an explanation for the demographic transition taking place in the "traditional and transitional societies" of Asia and Africa. According to him, in spite of prevailing low levels of economic

development, supports of high fertility were being relaxed, because of the social changes that were taking place due to 'westernization'[1] occurring in these countries. This pattern of demographic transition in some Asian countries is one explanation for their current labour supply and utilization patterns.

Zelinsky(1971:237) notes that the 'series of steps from a totally illiterate society to one in which most young adults attend college had been hinted to as an education transition'. The 'educational transition[2]' or the exposure of a larger mass of population to increased education through a modern school system had largely propagated western social concepts, attitudes and values in Asian and African countries (Caldwell, 1982:41, 65, 148, 301-364, 365; Caldwell, Reddy and Caldwell, 1988:161-195). Jones(1992:24) attributes the improved quality of human resources in Asian countries to the influence of the modern school system and formal education and notes that investment in human capital is as important as any other form of investment (Jones, 1992: 24). Other related benefits derived from the exposure of women to modern schooling were that it induced increased participation in economic activity among women (Corner, 1986:8), raised productivity and lowered reproductivity (Streeten and Meier, 1983:3). Underutilization of educated labour resources would occur in a situation where structural

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1 Caldwell clearly distinguishes 'westernization' from modernization and industrialization which are the pre-transitional requisites of demographic transition in Western countries (Caldwell, 1982).

2 Mass education brought in by modern schooling (Caldwell 1980:225-256) and the changes it created in the Asian and African societies and economies is referred to as the education transition (Caldwell, Reddy and Caldwell, 1988:29-51, 80-195)

changes in the economy are delayed and where consequently the economy is not developed enough to absorb the more educated job seekers.

Zelinsky (1971:220-249) hypothesized that (table 5.2) 'for any specific community, the course of mobility transition closely parallels that of the demographic transition and that of other transitional sequences not yet adequately described'. He identified five stages of the mobility transition (internal and international) and parallelled these stages with the five phases of demographic transition. With respect to international mobility, Zelinsky suggested that during phase 2, ie. the early transitional society there would be major outflows of emigrants to available and attractive foreign destinations and under certain circumstances a small but significant immigration of skilled workers, technicians and professionals from more advanced parts of the world. During the late transition periods circulatory migration for short periods will occur. There will be relatively large numbers of unskilled or low skilled migrant workers from relatively undeveloped regions to developed areas. Hugo (1984:1-24) observed that recent contract migrants from South and South East Asian countries circulate for short periods between the countries of origin and destination. Such contract migration to the Middle East could be identified as international circular migration.

5.3 THE SIZE OF THE WORKING AGE POPULATION

The potential labour supply for production of goods and services in any country is drawn from the working age population of that country. This thesis defines the working

Table 5.2
The Course of Transition According to Zelinsky's Hypothesis
(The First Three Stages of Transition)

VITAL TRANSITION	MOBILITY TRANSITION
PHASE	PHASE
1 PREMODERN TRANSITIONAL SOCIETY (1) A moderately high to quite high fertility pattern that tends to fluctuate only slightly (2) Mortality at nearly the same as fertility on the average, but fluctuating much more from year to year (3) Little if any long range natural increase or decrease	A Little genuine residential migration and only limited circulation sanctioned by custom land utilization, social welfare visits commerce or religious reasons
2 EARLY TRANSITIONAL SOCIETY (1) Slight but significant, rise in fertility, which then remains fairly constant at a high level (2) A rapid decline in mortality (3) A relatively rapid rate of increase, and thus a major growth in size of population	B (1) Massive movement from country side to cities old and new (2) Large movements of rural folk to natural land colonization frontiers; (3) Major outflows of emigrants to available and attractive foreign destinations under certain circumstances, a small but significant immigration of skilled workers,technicians and professionals, from more advanced parts of the world (5) Significant growth in various kinds of circulation
3 LATE TRANSITIONAL SOCIETY (1) A major decline in fertility, initially rather slightly and slow later quite rapid, until another slow-down occurs (2) A continuing, but slack growth in population (3) A significant, but decelerating Natural increase at rates below those in Phase B	C (1) Slackening, but still major movement from country to city (2) Lessening flow of migrants to colonization fronts (3) Emigration declines or may have ceased altogether (4) Further increases in circulation with growth in structural complexity

Source: Zelinsky, 1971:230 (Table 1)
Note: Only selected details of the Table are given.

age population as comprising of persons who are 15 and more years of age because 10-14 age group is mostly enrolled in formal schooling. According to Ministry of Education (1986:13-14) at least 85 percent of this age group is enrolled in schools. In most developed countries the lower level of working age population is 15 or more years of age and the upper age limit is considered to be 64 plus years of age (ILO, 1992a:XI, 52-80). In most developing countries the lower age limit is taken as 10 plus because a considerable proportion of children are engaged in economic activities. In Sri Lanka the early censuses, do not define an upper or lower age limit of the working age population (Ranasinghe, 1950:303-306) while the Census of Population in 1971 and 1981 defined the lower age limit as 10 years (five years in 1963 census) and the upper age limit as being open (Department of Census and Statistics, 1971:1-28; 1986b:30 Appendix G; Department of Census and Statistics, 1967:Annex A). The upper age limit of the working age population is kept open ended because persons who are more than 64 years of age also participate in economic activity. Lack of social security at the old age[3] compels most workers to stay at work beyond the age of 65 years. The upper and lower age limits of the working age population could be relaxed depending on the participation patterns and the socio-economic conditions of the countries concerned (UN, 1980:91-92).

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3 There is no system of old age social security currently operating in Sri Lanka. However for those who had been employed in permanent and pensionable jobs there is an old age retirement pension scheme

In 1991 the working age population of Sri Lanka was estimated to be 7.1 million males and 6.8 million females (Official Projections of the Department of National Planning, 1989, Sri Lanka). The total population is projected to grow at least to 9.7 million males and 9.6 million females by 2011 A.D.. The age structure of the current working age population is dominated by younger ages with nearly two thirds being aged less than 34 years. Nearly half of both genders are between the ages of 15 to 34 years however, the proportion of females in these age groups is slightly higher than males.

5.4 DEMOGRAPHIC FACTORS DETERMINING THE POTENTIAL LABOUR SUPPLY

The growth patterns of the working age population during the period 1946 to 1986, had been determined by the fertility and mortality levels of different phases of the demographic transition. Table 5.3 shows selected fertility and mortality rates (at the national level) and the phases of transition that took place in Sri Lanka during the period 1947 to 1986. On the whole, the entire period is seen to be associated with mortality decline and nearly a quarter of a century of this transition can be associated with rapid declines in mortality. The gains in mortality reductions specially among infants after 1946 was largely a result of the control of the malaria epidemic (Meegama, 1969:297; Jones and Selvaratnam, 1972:20-23; ESCAP, 1976:140; Meegama, 1980:15 Table2)[4] and to the dramatic expansion of health

4. However Meegama(1980:1-4) contends that in Sri Lanka in 1940's and 1950' there were regional disparities. For example the IMR of Estate Sector was much higher than the National figure.

Table 5.3
Selected Fertility and Mortality Rates 1946 to 1986

YEAR	CBR	TFR	CDR	IMR	MMR
PHASE 1 Decline in mortality and high fertility					
1946	38.9	5.6(1)	22.1	145.0	20.1
1947-51	38.9	5.1(2)	14.7	95.0	12.0
PHASE 2 Rapid decline in mortality & destabilized fertility					
1952-56	38.1	4.9	11.4	72.0	4.4
1957-61	36.5	4.9	9.0	60.0	4.4
1962-66	34.3	4.8	8.5	55.0	2.2
1967-71	31.1	4.4	7.8	49.0	2.2
PHASE 2 Stabilizing mortality at a lower level & decline in fertility					
1972-76	28.7	3.9	8.2	46.0	1.3
1977-81	28.1	3.7	6.5	36.0	0.8
PHASE 3 Stabilized mortality at lower level & substantial declines in fertility					
1982-86	24.1	2.8	6.2	26.0	0.6
1987-91	20.9	na	5.8	18.5	na

Sources: Computed using data obtained from
Registrar General's Office, for years 1947-1981; Department of Census and Statistics, (1974:115-117 Table 10), ESCAP, 1976:

Notes (1) The number given is the number of children ever born to all mothers according to the Census of Population and Housing 1946 and(2) estimated based crude birth rates and the age structure of respective years

Explanations of Abbreviations:-
CBR - Crude Birth Rate per '000 population;
CDR - Crude Death Rate per '000 population;
TFR - Total Fertility Rate,
IMR - Infant Mortality Rate per '000 live births,
MMR - Maternal Mortality Rate per '000 live births) ,

services and primary health care and sanitation services, particularly during the last five decades (ESCAP, 1976; MOPI, 1981:107-110). Fertility decline is gradual and had lagged for more than a decade since the decline in mortality (see Table 5.3). Table 5.3 shows that it is only in the quinquennial periods after the 1980's that substantial declines in fertility could be observed. Sri Lanka had experienced several phases of mortality and fertility changes and these changes are associated with the demographic transition that is taking place in the country (Caldwell, 1982).

5.5 GROWTH OF THE POTENTIAL LABOUR FORCE

Table 5.4 and figure 5.1 give total and age-sex specific annual growth rates of ten and above, for the male and female population during the years 1946 to 1985. The levels and patterns of age specific growth rates for different periods of time, as shown in the table5.4, have been shaped by demographic and mobility transitions. The working age population of Sri Lanka had been increasing at a declining rate since 1953, with the decline being slightly more intense among males. The high growth rates of the young adult cohort from the 1970's onwards is a lagged effect of the phase 2 of rapid decline in mortality and destabilized fertility as is shown in table5.3. The growth patterns are a result of the early phases of the demographic transition that is taking place. The higher growth rates of the female working age population in more recent years would have contributed to their entering the labour force in increasing numbers. Labour force participation patterns of females will be investigated in the next Chapter.

Table 5.4
Growth Rates (per cent) of Population aged 10-49 years by Age Group and Gender 1946-1985.

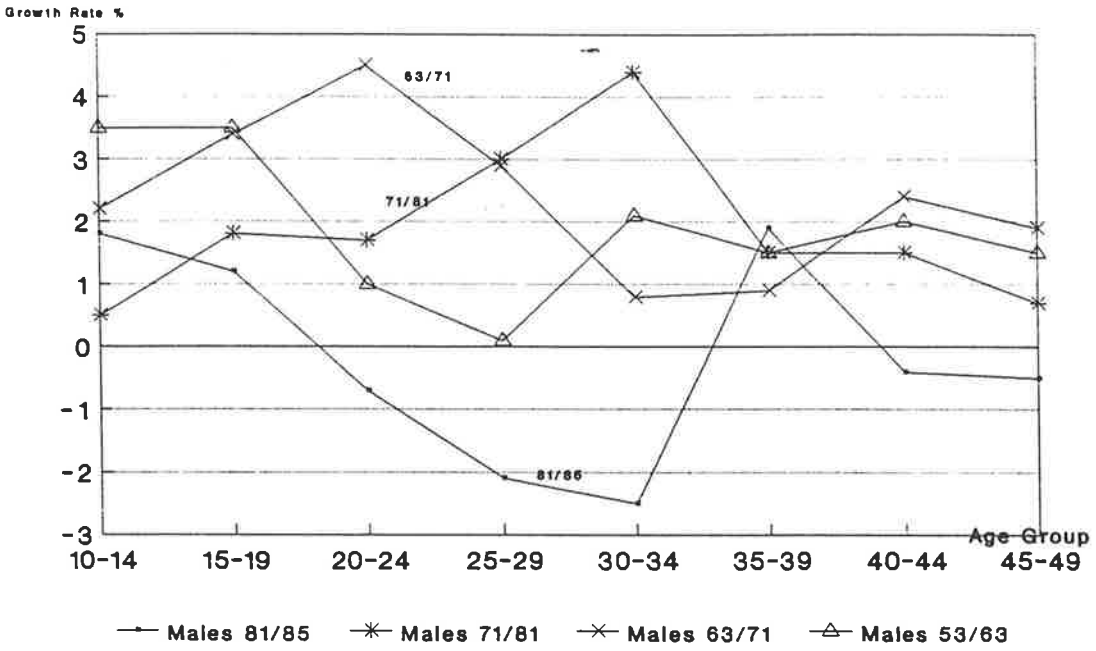
	Growth Rates Per cent									
	1953/46		1963/53		1971/63		1981/71		1985/81	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Age Group										
10-14	1.9	1.9	3.5	3.7	2.2	2.3	0.5	0.5	1.7	1.6
15-19	0.0	1.0	3.5	3.8	3.4	3.5	1.8	1.8	1.2	1.1
20-24	2.7	2.4	1.0	1.7	4.5	4.2	1.7	1.9	-0.9	0.3
25-29	2.7	3.2	0.1	0.9	2.9	3.0	3.0	3.1	-2.0	1.3
30-34	2.1	2.1	2.1	2.8	0.8	1.3	4.4	4.8	-2.3	0.5
35-39	1.6	2.3	1.5	2.4	0.9	1.8	1.5	1.6	1.8	3.7
40-44	2.0	2.1	2.0	2.7	2.4	3.0	1.5	2.3	-0.3	2.2
45-49	2.0	2.2	1.5	2.1	1.9	3.1	0.7	1.7	-0.5	2.4
Total 10+	2.1	2.2	3.3	2.8	2.5	2.8	1.8	2.2	0.3	2.0
All Ages	2.7	2.9	2.8	2.5	2.3	2.2	1.8	1.7	0.2	1.3

Sources:- The Department of Census and Statistics, 1986a:12-15 Table 5; 1975:13 Table 7; 1985a:7 Table3;
1987a:77 Table 1; ESCAP, 1976: Appendix A.

5.5.1 MORTALITY TRANSITION AND THE SUPPLY OF LABOUR

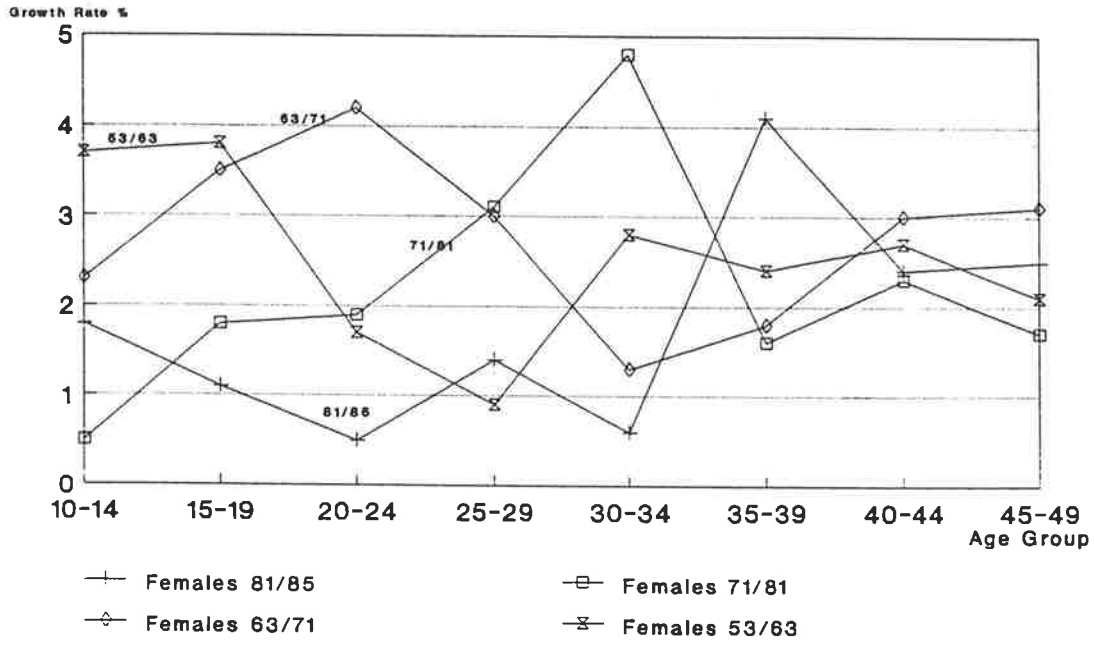
While the total population growth rates incorporate the effects of fertility, mortality and migration on all age groups, the growth rates of the working age population indicated in table 5.1 indicate the impact of mortality and migration and the lagged effect of fertility on labour supply. The growth rates of those who were born before 1946 (ESCAP 1976:27), ie prior to phase 1 as indicated in table5.3, are generally associated with low rates of natural increase. Cochrane and Zachariah (1983:19) found that 'when the effect of post neo-natal mortality on fertility is

Figure 5.1 AGE SPECIFIC POPULATION GROWTH RATES MALES SELECTED PERIODS 1953-1986



Source: Same as Table 5.4

AGE SPECIFIC POPULATION GROWTH RATES: FEMALES SELECTED PERIODS 1953-1986



Source: Same as Table 5.4

larger the lower the level of income'. Study by Meegama(1980:15-50) show a high level of neo-natal and post neo-natal mortality in Sri Lanka in 1950's and even extending up to 1974. He observed that high infant mortality was caused by low income levels, living conditions and other environmental factors. Table 5.1 suggests that in the mid 1940's and 1950's high fertility prevailed in Sri Lanka, along with high infant mortality. Dangalle(1982:9) sees this pattern as common to 'all less developed countries which have experienced a high rate of mortality in the immediate past'. During the 1950's and 1960's there were also reasons other than the high level of infant mortality, for the continued prevalence of high fertility in Sri Lanka. Infant mortality was highest among families where father's occupation was related to agricultural activities (Meegama, 1980). The economy was largely agricultural[5] (Department of Census and Statistics, 1974:73 Table 5.9) and because additional farm hands to the family were an asset in the long run (Oshima, 1987; Caldwell, 1982:143) it was rational to build larger families. Such large families in turn helped the continuity of the patriarchal production system (Caldwell, 1982:108).

The cohorts of working age population of the pre-transition phase who were also exposed to other devastating experiences like the Second World War and other natural calamities like epidemics, economic recessions, show lower growth rates (Hugo, 1981:1-18). The growth associated with the 10-14 year, 15-19 year and 20-24 year age groups of

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5. The percentage of persons who were engaged in agricultural occupation were 68 percent of total employed population in 1953; and 63 percent in 1963

1946-1953 period and 20-24 age group of 1953-63 period shown in table5.4, are a by-product of such situations. Among these cohorts are those who were either born during the Second World War or experienced it as children. They were victims of devastating epidemics like malaria, with the worst years of the malaria epidemic in Sri Lankan history being 1934 and 1935. In 1935 infant mortality exceeded 260 per thousand births (ESCAP, 1976; MOPI, 1981:106-108). There were also food shortages due to restrictions on food imports (Karunatilake, 1971) during the world war. From the mid 1930's to 1946, infant mortality was still high, ranging between 195 and 146 per thousand births (ESCAP, 1976:115), this was also due to other causes such as premature births, convulsions, pyrexia, influenza, phenomena and other plagues (MOPI, 1981:108).

The growth rates as shown in table5.4, of population cohorts since 1946, who were born during periods of high fertility and declining mortality are high. The period of stability during the post-independence period as well as the provision of basic needs in terms of free health, education and essential food items at subsidised prices to the population increased the longevity of the population immensely[6] (UNICEF, 1985:V; Richards and Gunaratne, 1980:1-5,15). The life expectancy of the population increased from 46 years in 1946 to 68 in 1963 (ESCAP, 1976:93). Generally all the cohorts who lived from 1946 onwards were beneficiaries of this mortality decline (ESCAP, 1976:93).

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6. Bills were introduced to ensure free health and free education to the Nation by the Minister of Health George E de Silva and the Minister of Education CWW Kannangara and the Ministers of State under the Donoughmore Constitution in 1946.

The high growth pattern of the 10-14 year and the 15-19 year age group of 1963, and the 20-24 year age group of 1963-1971 are a result of this mortality decline.

Improvement and extension of health services were important causes of decline in mortality (Richards and Gunaratne, 1980:33 Table 6). The indigenous system of medicine known as the **Ayurvedic system** was reorganized along western lines during this period (MOPI, 1981:115; MOPI, 1981:115). Such changes greatly improved an important curative health care service which was readily accessible to and used by the majority of the population. Expanding to new departments of medicine (MOPI, 1981:107), the provision of specialized curative health services to the periphery (MOPI, 1981:107), and enacting legislation to reorganize health services and build up networks (MOPI, 1981:108) are some of the improvements in the western type of medical services. The budgeted expenditure for health care services increased from Rs. 1.82 percapita to Rs. 8.74 percapita (MOPI, 1981:107). The improvement of preventive health care services enabled the health department to control effectively several parasitic and epidemiological diseases (MOPI, 1981:107-109). Mortality of women in reproductive age groups declined due to improvements in antenatal and maternal health care services (ESCAP, 1976:741). As shown in table5.3, the crude death rate in the 1982-86 period had been reduced to one-third the level seen in 1946 and the infant mortality had declined to one-sixth of its original level in 1946. The decline in mortality had thus begun and continued until mortality levels reached a low ebb. In the 1960's the crude death rate reached approximately 8 per

thousand mid year population (The Department of Census and Statistics, 1974:115-117, Table 10; 1981:35). Ruzicka(1977:567) was of the opinion that during the decade of the 1970's in Sri Lanka and Western Malaysia, the infant and child mortality stagnated at previous levels of 40 per thousand births for infants and 10 per thousand deaths for children of the 1-4 year age group. More recent investigations (Gaminiratne, 1984:1-43; UNICEF, 1985:23 Table 5.2; UNICEF 1987:20) show that in Sri Lanka the child and infant mortality rates in fact had declined.

Decline in mortality led to the destabilization of high fertility and that had led to an increase in the potential labour supply. However according to Caldwell, (1982:85-89) There is no consensus as to what level of fertility could be regarded as high because such a level will be governed by the prevailing economic rationality of the country and the individuals concerned. It is only when the 'great divide had been reached', ie. when the flow of wealth is reversed from parents to children, that fertility could be increasingly controlled (Caldwell, 1982:143). A total fertility rate of 5 or more may be considered as high (Jones, 1977:3-4) and on that basis a total fertility rate of less than 5 can be considered as the threshold of the declining trend and a total fertility rate of 2.1 would be considered as replacement level (Jones, 1990b:223, Figure 10.1). The declining growth rates shown in table 5.4 associated with the 10-14 year and 15-19 year age groups of 1971/1981 and 1981/1985, and the 20-24 year age group of 1981/1985, are a result of the period of transition associated with stabilizing mortality at a lower level and the substantial

declines in fertility in the more recent period in Sri Lanka (see table5.3).

Patterns of international mobility have also shaped the growth rates of the working age population. There is a notable decline in the growth rates of the 15-34 year age group for both males and females in the 1981/1985 period and one explanation for this phenomena may be the increased out migration of young males and females for employment purposes (Korale, in Employment and Manpower Planning Division, 1985:6 Table 2; ILO,1985:3). (How emigration patterns had affected the growth of the working age population is discussed in further detail in section 5.6).

5.5.2 FERTILITY TRANSITION AND THE SUPPLY OF LABOUR

The lagged effect of fertility on the labour supply was hypothesized and tested by Bloom and Freeman (1986:381-385). An immediate effect of fertility decline in women was an increase in female labour supply. Three important determinants of fertility decline among women in Sri Lanka are namely (1) delayed marriages (2) increased prevalence of contraception and (3) exposure of more women to higher levels of education, also had an effect on their potential labour supply. This third cause will be discussed in a later section.

The fertility decline as a result of delayed marriages in the initial phase of the fertility transition can be considered as a time saved from the commencement of the reproductive life cycle of the fecund age group females. Never married young females are an important source of potential supply of labour because they are in the prime

working ages[7]. Table 5.5 shows the proportions of never married women by age group. Delay in marriage have accounted partly or fully for the fertility decline in the initial

Table 5.5
Proportions of Never Married Women by Age Group (per cent)

Age Gp	1946	1953	1963	1971	1981
15-19	75.4	75.7	85.0	89.4	89.7
20-24	29.4	32.5	41.3	53.2	55.3
25-29	11.8	12.8	17.8	24.3	20.1
30-34	6.6	7.5	8.3	10.9	16.0
35-39	4.3	5.4	4.8	5.8	9.2
40-44	4.1	5.0	4.3	4.7	6.0
45-49	3.4	4.4	3.9	4.1	4.4

Sources: Ranasinghe, 1950; Department of Census and Statistics, 1986b:42, Table 11; 1975:16-17, Table 8; 1982:24, Table 10

stages of the demographic transition (Caldwell, 1982:346; Botev, 1990:107-126; Leete, 1987:107-206). In a context where fertility occurs mostly within marital unions, an important explanation for the decline in fertility is the delayed exposure of females to the fertility behaviour, due to increased age at marriage (Botev 1990:120; Watkins, 1989: 27-55). In Sri Lanka the decline in fertility during the early stages of the fertility transition has been attributed largely to the postponement of marriage (Langford, 1981:285-306; Fernando, 1972:445-453; ESCAP, 1976:180; Department of

7. The female average age at marriage increased by 0.2 years between 1946 and 1953, 1.2 years in 1953-1963, 1.4 years between 1963 and 1971 (Department of Census and Statistics, 1974:12) and 0.9 years from 1971-1981 (Department of Census and Statistics, 1986b:100). The singulate mean age at marriage for females in 1981 was 24.4 years.

Census and Statistics and Westinghouse, 1983). Why marriages were delayed will not be investigated here other than to say that one of the main causes is increased participation of women in education (Jones, 1992:25).

During a period of approximately half a century, there had been a considerable increase in the proportion of never married women in the younger work age group females even though, when they were 45 years of age only 4 percent of them were never married (Department of Census and Statistics, 1974:12; 1986b:100); Table 5.5 shows that during the period under consideration the proportions of never married fecund women had increased with age. For example the 15-19 age group had increased by at least 14.3, the 20-24 group by 25.9 and the 25-29 age group by 8.3 percentage points.

Langford(1981:285-306) and Watkins(1989) argued that declines in overall fertility due to marital change can and have been reversed, while declines in marital fertility have been with few exceptions irreversible. Availability and adoption of contraception have been largely responsible for the decline in marital fertility (Leete, 1987:187-206; Jones, 1990b:224; Department of Census and Statistics and Westinghouse, 1983:23). Currently contracepting women in Sri Lanka (Table 5.6) increased, because since the 1950's and much more strongly since 1960's the successive Governments of Sri Lanka, have adopted population policies aimed at curbing unplanned population growth and have implemented family planning programmes (ESCAP, 1976:176-180; MOPI, 1981:1-30; Department of Census and Statistics, 1983a:6-7).

For example, in 1986, at least 28 percent of women in the 15 to 19 age group and 41 percent of the 20 to 24 age group

Table 5.6
Currently Contracepting Married Women By Age and Method

Age	Number of Women	All Methods	Modern Methods	Traditional Methods
15-19	148	27.7	7.4	20.3
20-24	622	41.3	17.2	22.5
25-29	888	51.6	29.1	27.2
30-34	848	63.8	36.6	27.2
35-39	722	70.8	43.8	27.0
All ages	6163	54.9	30.4	24.5

Source : The Department of Census and Statistics and Westinghouse, 1983:

had adopted family planning practices (Department of Census and Statistics, 1987c:, Table 6.9, 71).

Table 5.7 indicates quinquennial age specific fertility rates in five year age groups calculated for women in the age category 15 to 39 years, during the period 1952-1986. There has been a substantial decline in fertility among all the age groups under consideration. The fluctuations of rates over the years for the 15-19 and the 20-24 year age groups may be attributed to the occurrence of "marriage clusters" particularly in the 20-24 year group and hence "bunching of births" in these age groups. Another explanation for the slight increases observed during the 1977-1981 period may be the effect resulting from the temporary subsiding of insurgent activities (MOPI, 1981:45), coupled with the relaxation of food restrictions since 1977 with the commencement of a new government and increased

economic development in the country (National Planning Division, 1982:4-6). When compared with the earlier period 1967/71, the

Table 5.7

Quinquennial Age Specific Female Fertility Rates 1952/86 (per cent)

	Age Groups				
Year	15-19	20-24	25-29	30-34	35-39
1952/56	63.3	238.5	284.8	226.2	132.3
1957/61	67.9	224.1	262.8	248.1	150.6
1962/66	54.0	215.0	257.0	234.2	153.7
1967/71	46.3	203.9	246.0	197.8	141.1
1972/76	36.9	171.1	222.5	186.2	107.8
1977/81	40.2	178.5	229.7	182.0	93.4
1982/86	38.0	173.0	197.0	149.0	89.0

Sources: ESCAP, 1976: Appendix, Department of the Registrar General, 1980-1985 series; 1983:1-30 Table 27

observed increase in the 1977/81 period is slight and the rate for 1982/86 show that the fertility rates are declining again. This reflects time use changes in the life cycles of females in the 15-39 age group. Cumulative time used for reproduction had contracted substantially during the period under consideration making it possible for these married women to divert their saved time from reproduction to production of economic goods and services. How this has happened will be investigated in the next chapter. A drop in the fertility rate may quickly raise the number of women seeking jobs (Streeten 1988:1-55). These women had time saved from reproduction because they were called upon to

produce a lesser number of children (Caldwell, 1982:262-266). The children they produced had the increasing capacity to survive because of dramatic improvements in infant mortality (UNICEF 1985). Standing (1978) found that there was a positive relationship between declining household size and increased participation of married women in economic activity.

5.6 THE MOBILITY TRANSITION AND EFFECTS ON THE GROWTH OF THE POTENTIAL LABOUR FORCE

Zelinsky(1971:227) illustrated that a mobility transition occurred parallel to the vital transition[8]. He drew parallels between 'five stages of vital transition' to 'a temporal sequence of a five stage mobility transition' (see table5.2). The inferred effect to labour supply within a country from Zelinsky's hypothesis on mobility transition (phase 2 and phase 3 which is related to international migration), is that there would be fluctuations in the supply of qualitative and quantitative, potential labour due to patterns of migration (table 5.8). The effects of such international migration on the available labour supply is an aspect generally neglected in the labour force literature. Incidence of out-migration means a withdrawal of manpower from the domestic labour market permanently or temporarily. Even where such movement is temporary, the exodus would have its short term as well as long term repercussions on the available labour supply. During the short periods of contract labour the available potential labour force in the country of origin is reduced by numbers but this out-flow is counter balanced by an in-flow of contract migrants

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8. He comments that the vital transition had been mistakenly referred to as demographic transition (Zelinsky, 1971:229).

creating short period fluctuations in the potential supply of labour in the country.

Zelinsky (1971:230) stated that in different periods of the demographic transition, specific international mobility patterns could be observed. Table 5.8 shows Zelinsky's outline of international migration patterns and the parallel phases of the demographic transition in Sri Lanka. In this regard an important observation made by Zelinsky, applicable to this study is that during the second and third stages of the demographic transition there had been a great increase in population which in turn had produced pressure on local employment opportunities and created a substantial out migration. Zelinsky(1971) predicts that emigration of skilled and unskilled migrants from relatively under developed parts of the world would occur creating significant international migration and skilled labour circulation. In Sri Lanka the net migration rate was initially quite low but increased substantially during later years (see table5.7). In the early to mid 1970's there was a substantial emigration of professionals from Sri Lanka (Karunatilake, 1980). During this period, ie. between May 1970 and December 1976, 1254 doctors, 1074 engineers, 499 accountants, 144 university teachers and other skilled personnel left Sri Lanka to take up jobs abroad. On a very rough basis, those persons constituted about 15 percent of the total number of professionals and technical personnel that were available to the country at that time. They had migrated to the richest countries of the world such as the United Kingdom, United States of America and New Zealand (Karunatilake, 1980:4). Such migration had taken place in

Table 5.8
The Demographic Transition and Mobility Transition Patterns in Sri Lanka

Transitional Phase in Sri Lanka	Zelinsky's Observations on DT & Out-migration	Observed Net MR /1000 Population in Sri Lanka	Observed Emigration by Skill Level
	Pre Transition		
Decline in Mortality and High Fertility 1946 1947-51	Pre Transition to Early Transition		
Rapid Decline in Mortality and Stabilized High Fertility 1952-56 1957-61 1962-66 1967-71	Early Transitional Society Major outflows of emigrants to foreign destinations Under certain circumstances a small but significant emigration of skilled workers	-.31 to -.50	
Stabilized Mortality at Lower Level and Declining Fertility 1972-76 1977-81	Late Transitional Society Emigration on the decline or may have ceased altogether	-2.72 to -3.47	
Stabilized Mortality at Lower Level and Substantial Decline in Fertility 1982-86 1987-90	Late Transitional Society to Advanced Society	-3.47 to -5.28	High emigration of skilled & unskilled labour; emigration of housemaids to Middle East
	The Advanced Society Significant net immigration of unskilled and semiskilled workers from relatively underdeveloped lands A significant international migration or circulation of skilled and professional people		
	A Future Superadvanced Society further immigration of relatively unskilled labour from less advanced areas		

Source: Zelinsky, 1971

spite of several measures[9] that had been taken to curtail the brain drain from the country.

Lack of comprehensive data to understand the continuity of migration and how it affected the growth of the working age population is a major set-back in this study. In more recent times the Department of Plan Implementation analysed the limited data obtained from embarkation cards of persons who had left and arrived in Sri Lanka from major air ports of Sri Lanka (Department of Census and Statistics, 1986; Korale, 1983; Korale, 1987; Editorial, Asian Migrant, 1993:1-16). Ad-hoc surveys had been also conducted on returned migrants. This section of the thesis is based on data collected by such sources.

Table 5.9 indicates the average annual net international migration rates during the period 1952 to 1991. In Sri Lanka at the commencement of the demographic transition, ie. in the mid 1940's and 1950's (presented previously in table 5.3) the net migration rate had been negative (table 5.7) mainly as a result of the outward movement of repatriated, Indian Estate labour and Indian temporary resident permit holders and European and Eurasian expatriate workers (ESCAP, 1976). The professional and highly skilled technical personnel who migrated to western countries including Australia up to the mid 1980's were only few in number when compared to these other categories

9. Several measures had been taken during this time to restrict the out flow of foreign exchange. For example restrictions on foreign exchange made it impossible for persons to migrate to any other country unless they received sponsorship and /or pre-paid tickets unless they had the necessary political and social clout to skip these regulations. Persons going as expatriates for employment at high professional levels or students doing post graduated studies in foreign universities, only received such sponsorship.

(Employment and Manpower Planning Division, 1985:2-5). However more recent data on private remittances to Sri Lanka during the period 1987-1991, show that at least 40 percent of the remittances came from North America, European countries and Australasia (Central Bank of Sri Lanka, 1992:83 Table 8.11; Editorial, Asian Migrant, 1993:13) which

Table 5.9
Quinquennial Net Migration of Sri Lankans, 1951-1991

Years	Rate per Thou pop	Av. Annual Net Migrat. '000	Average Total Population '000
1951-1955	-0.31	-2.543	8,297
1956-1960	-0.29	-2.699	9,399
1961-1965	-0.18	-1.977	10,665
1966-1970	-0.50	-6.084	11,980
1971-1975	-2.72	-35.560	13,127
1976-1980	-3.47	-41.515	14,252
1981-1985	-5.28	-80.460	15,195
1987-1991[10]	-3.20	-53.754	16,798

Sources: Computed using data obtained from Employment and Manpower Planning Division 1985:8 Table 3

shows that migration for employment to more developed countries have also increased.

Table 5.10 shows emigration of Sri Lankans by the level of skill. Some of the mobility patterns that Zelinsky has identified as being parallel with the Late Transitional and the Advanced Society phases of demographic transition

10. Figures for 1987, 1988 and 1991 were averaged because the net migration rate during most of 1989 and 1990 were affected by arrivals of Tamil refugees who came back to Sri Lanka.

Table 5.10
Percentage Distribution of Sri Lankan Migrants to All Countries by Level of Skills.

	1979		1980		1981	1988	1992
	Total	Female	Total	Female	Total	Total	Total
High Level	6	6	5	4	1	0.4	1
Middle Level	9	10	12	6	1	7	5
Skilled	24	27	21	20	1	29	18
Unskilled[11]	50	41	51	55	81	25	76
Not Classified	11	16	16	16	16	-	-
Total %	100	100	100	100	100	100	100
Total No. '00	259	427	286	574	301	190	1245

Sources: Employment and Manpower Planning Division, 1985:6 Table 2;
World Employment Programme/ International Labour Office, 1990:Statistical Report;
Editorial, Asian Migrant, 1993:14 Table 25

Notes: Classifications for females were given wherever data was available.

seem to have occurred in Sri Lanka, earlier than indicated by Zelinsky such as the migration of skilled workers which occurred in the Early Transitional Phase, during 1976 and 1986. This period is associated with large numbers of skilled, low skilled and unskilled workers migrating for short term contract employment to Middle Eastern and East Asian countries. A large number East South East and South Asian countries export contract workers[12]. Contract migration is temporary being only for a short period as defined in the contract, which usually is two to three years

11. This figure includes mostly domestic helpers.
12 Indonesia, Korea, Nepal, Philippines, Sri Lanka, Thailand, Vietnam are some of the more important countries who export labour largely to Middle East on contracted short term work permits (Editorial, Asian, Migrant, 1993). The countries of destination were largely Saudi Arabia, Kuwait, UAE, Lebanon, Oman, Bahrain, Jordan, Qatar, Maldives, Singapore (Editorial, Asian Migrant, 1993)

(Hugo 1984:1-18; Editorial, Asian Migrant, 1993; Atukorala, 1990:323-325) and the worker returns to his home country for permanent settlement. Incidence of this category of emigration is an outcome of increased demand for contract migrant workers from receiving countries[13] and a high level of unemployment at home in the countries of origin (Editorial Asian Migrant, 1993; Asian Employment Programme, 1985:6-7,83-104). Foreign employment was considered as a remedy for high unemployment among skilled and unskilled potential workers (Employment and Manpower Planning Division, 1985). Government policy promoted and established rules for the procedures to be followed for employment in foreign countries (Eelens and Speckmann, 1990:302). Government regulations brought in since 1980's allowed even government employees to obtain leave to migrate for contract employment (Employment and Manpower Planning Division, 1985:4-5; Rodrigo, 1988:). The opportunity to earn higher wages and sending remittances back is an added incentive to seek contract employment in foreign countries (Employment and Manpower Planning Division, 1985:4-5; Rodrigo, 1988; Gunatilleke, 1989; Editorial, Asian Migrant, 1993:5-13). The destinations of these contract migrants in the late 1970's to 1992 were mainly Middle Eastern Countries (Asian Employment Programme, 1985:105-114) where payments they

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13 'A recent conference sponsored by the United Nations Centre for Regional Development (UNCRD) in Nagoya, Japan examined the growing importance of labour migration for four Asian importers Japan, Hong Kong, Malaysian and Singapore and major labour exporters. The four major importing countries include over one million foreign workers. Persisting differences in wages, unemployment, economic growth rates, as well as events in the Middle East which have reduced the demand for foreign workers are expected to make international labour migration in Asia even more important (Martin, 1991: 176-193).

received as wages were many times more than they received in their home country for the same occupation (Rodrigo, 1988; BNSCSL, 1980:). These migrants had internationally acceptable technical qualifications and experience[14] and were in occupational groups such as machinery fitters and electrical workers, drivers, machinery operators and hotel workers.

Another important feature of emigration in Sri Lanka since the 1980's is that unskilled persons constitute a large proportion of international contract labour migration and this is (shown in Table 5.9, Editorial, Asian Migrant, 1993:12-13; Gunatilleke, 1989:6-10; Employment and Manpower Planning Division, 1985; Korale 1983; Korale and Karunawathie, 1981). Eelens and Speckmann (1990:300) found that at least 99 percent of unskilled female migrant labour in the Gulf States were working as housemaids. Although females who migrated for domestic work have often been categorised as unskilled, at least 66 percent of them had studied up to secondary level of education (APDC, 1989:115; Gunatilleke, 1989:6 Table 2; Employment and Manpower Planning Division, 1985:33 Table 7). In addition to all of these factors, the patterns of demand for Sri Lankan labour in the Middle Eastern countries was also an important determinant.

Evidence shows that in several years during the period 1977 to 1990 females outnumbered males in the gross annual outflow to Middle Eastern countries (Asian Migrant, 1993;4-12; Eelens and Speckmann, 1990:300; Employment and Manpower

14. These people had been trained in the Technical Colleges of the Ministry of Higher Education, or other recognized institutions like the German Technical College at Moratuwa, the Hardy Technical College at Ampara etc.

Planning Division, 1985:6 Table 2; Korale, 1983:19,). This phenomena, ie. the change of migration pattern from male dominated to female dominated (Hugo, 1990:6-7; Asian Migrant, 1993) is partly an outcome of the fertility decline in females, as irreversible fertility declines occurred with declines in marital fertility and a large number of women who migrated for domestic work were currently married (Athukorala, 1990:329; Gunatilleke, 1989). Increased migration of females was also caused by the prevailing high unemployment in the country of origin (Asian Migrant, 1993). However Atukorala(1990:329) notes that approximately 66 per cent of women who migrated to the Middle East on contract employment did not seek local employment. Attitudes towards females working outside their home and travelling abroad to find employment had changed with increased exposure to education and a changing society due to the education transition. These trends show a close link between the demographic and mobility transitions occurring in Sri Lanka and their effects on the potential work force.

International migration emerges as an important explanation for the fluctuations that have occurred in the potential labour supply of young and adult population in Sri Lanka. In the case of females, contract migration for employment as house maids is particularly selective of younger persons. (Asian Migrant, 1993; Gunatilleke, 1989:3; APDC, 1987:207; Korale, 1983:11) with about 80 percent of them found to be in the 20-39 year age group (Dias, 1989:207; APDC, 1989), however the age-sex composition of the migrants has usually been estimated based on surveys (Eelens and Speckmann, 1990:300-302). In the case of males

the unskilled categories included salesmen, shop assistants and demonstrators, waiters, bartenders and related, hospital workers, restaurant and hotel workers, launders and dry cleaners, cleaners, gardeners, housekeepers, houseboys, janitors and other such unskilled workers.

5.7 THE EDUCATIONAL TRANSITION AND THE SUPPLY OF LABOUR

5.7.1 EXPANSION OF EDUCATION

The educational transition or the exposure of a larger mass of population to increased education through a modern school system which largely propagated western social concepts and values in Asian and African countries, (Caldwell, 1982:41, 65, 148, 301-364, 365; Caldwell, Reddy and Caldwell, 1988:161-195; Psacharopoulos, 1987:141-205; United Nations, 1986:1-82; Jones, 1992:23-48; Hugo 1993,112-113) had the most profound impact on the demographic transition in developing countries (Caldwell, 1982:148, 301-364). 'In much of the Third World, the education systems are essentially a reflection of the West, because such systems are often imported more or less intact from the West' (Caldwell, 1982:148). The socio-cultural values infused through such a system recognized education as a means of gaining social mobility through wage employment. The expansion and diffusion of education to a larger number of persons in the society was responsible for a change in attitude among the younger generations towards traditional production systems (Caldwell, 1982:301). Tables[15] 5.11 and 5.12 indicate the interrelated developments of the

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15. Table 5.11 is based on data obtained from computer data tapes analysed in this study and 5.12 contains census and Survey data

Table 5.11

Stages of Educational Transition and Supply of Labour in Relation to Stages of Demographic Transition

Stages of Demographic Transition and Identified Age Groups in the Survey Periods				Stages of Education Transition Identified in the Survey Periods			
	SES69/70	SE&LFS85/86	LFS90/91		SES69/70	SE&LFS85/86	LFS90/91
1. Decrease in mortality and high fertility				Stage 1 Less than 10 % of persons with Junior S+ L			
1946	23+	39+	44+	15-19	-	-	-
1947-51	22-26	38-42	43-47	20-34	-	-	-
				35+	-	-	-
2. Rapid Decline in mortality & stabilized high fertility				Stage 2 10-20 % of persons with Junior S+ Level			
1952-56	17-21	33-37	37-41	15-19	-	-	-
1957-61	12-16	28-32	33-37	20-34	-	-	-
1962-66	23-27	23-27	-	35+	*	-	-
1967-71	-	18-22	-				
3. Stabilized mortality at lower level and declining fertility				Stage 3 21-50% of persons with Junior S+ Level			
				15-19	-	-	-
1972-76	-	13-17	18-22	20-34	*	*	-
1977-81	10-12	-	13-17	35+	-	*	*
4. Stabilized mortality at lower level and substantial declines in fertility				Stage 4 More than 51% persons with Junior S+ Level			
1982-86	-	-	10-12	15-19	*	*	*
1987-90	-	-	-	20-34	-	-	*
				35+	-	-	-

Source: Based on Chapter 5

Notes: * indicates the existence of persons with the junior secondary level of education or more
- No persons observed with this level:

This categorisation of labour into four stages is an arbitrary measurement and is based on the proportion of labour with more than junior secondary level of education
Stage 1 - Less than 10 per cent
Stage 2 - 10-20 Per cent
Stage 3 - 21-50 per cent
Stage 4 - 51 per cent and above

demographic and educational transitions during period 1963 to 1990. Increased proportions of males and females with higher levels of education shown in table 5.12 is evidence as to the rapidity with which the average level of education increased in each young adult age group. The proportions of population who had more than primary level of education increased from slightly more than one third in 1963 to more than 90 per cent in 1991.

Table 5.12 shows that a larger proportion of the female population had achieved more than junior secondary and above levels of education by 1991. The diversification of the economy under the Colebrook Reforms opened new avenues of salaried employment for persons who had an education in the commercial crop, export sector (Wriggins, 1960:65-68; De Silva, 1989). The expansion of administrative structures since independence opened more avenues of employment for educated persons (Wriggins,1960:29-33; De Silva, 1989). The idea that an increase in each extra year of schooling, made each individual more productive by increasing the potential for earning more (Schultz, 1981:31-34) caused more young persons to enter the education system.

The existing value structure of the largely subsistence economy and the values and expectations taking root due to the modern education were at variance. The new values were introduced through the formal institutionalized world of modern learning which replaced the informal structures of work and learning from which the vast majority of children came (Sanyal et al, 1983:62-87). Such a system rarely mirrors the life in a largely communal subsistence village (Caldwell, 1982:148). The society and the economy from which

Table 5.12
Percentage Distribution of 10-29 Population by Gender and Educational Level

	1963		1971		1981		1991	
	Male	Female	Male	Female	Male	Female	Male	Female
10-14								
No Schooling	8	13	6	10	6	7	-	-
Grades 1-4	51	46	42	37	20	17	-	-
Grades 5-9	40	39	45	48	74	75	100	100
GCE (OL)	*	*	*	*	*	*	-	-
GCE (AL)								
Degree								
Unspecified	1	2	7	5	1	1	-	-
Total	100	100	100	100	100	100	100	100
Number '000	681	650	821	788	864	826	1001	960
15-19								
No Schooling	8	16	6	12	7	9	*	*
Grades 1-4	27	25	21	19	11	10	9	7
Grades 5-9	53	46	58	52	62	58	76	61
GCE (OL)	10	10	14	14	16	19	14	27
GCE (AL)	*	*	1	*	3	3	*	5
Degree								
Unspecified	2	2	1	1	1	1	-	-
Total	100	100	100	100	100	100	100	100
Number '000	518	504	689	671	815	792	944	918
20-24								
No Schooling	6	18	10	12	6	9	2	1
Grades 1-4	26	24	18	19	11	9	5	1
Grades 5-9	36	29	44	39	55	51	61	32
GCE (OL)	28	25	25	26	25	28	25	41
GCE (AL)	1	1	1	1	2	3	7	24
Degree	*	*	*	*	*	*		
Unspecified	3	3	2	2	1	1		
Total	100	100	100	100	100	100	100	100
Number '000	516	506	112	631	753	757	890	884
25-29								
No Schooling	10	32	6	13	5	9	2	*
Grades 1-4	35	28	43	40	11	9	5	1
Grades 5-9	40	28	1	26	56	52	38	18
GCE (OL)	9	6	15	14	22	23	38	56
GCE (AL)	2	1	1	3	5	5	17	23
Degree & Above	1	*	1	1	1	1		
Unspecified	4	4	2	3	1	1		
Total	100	100	100	100	100	100	100	100
Number '000	1072	993	663	661	638	636	741	740

Sources: Department of Census and Statistics, 1975:42-53 Table 14, 1982:41-44 Table 16, 1987:94-97 Table 3.1; 1992:17 Table 11; Central Bank of Sri Lanka, 1992:6 Table 2.2

Notes: The distribution of age sex groups by level of education for 1991 is based on Survey data while population data are projected.

* - less than 0.5 per cent.

these children came was predominantly traditional and as the processes of learning were unleashed, a sharp distinction was created between the knowledge gained and the actual socio-economic identity of the child (Sanyal et al, 1983). The variance between the traditional "work and learn" value structure and the modern learning, resulted in the alienation of a large proportion of working age population from the traditional employment mechanisms allied to the family and its assets. Thus the interpretation of socio-economic reality was far removed from the tools of learning that the child received to enter this world. These changes resulted in discontinuity and disruptions in the subjective experience of the young which could only have a profound impact between generations and processes which incorporated the young into adult society (Sanyal et al, 1983:41-48). This variance was not obvious as long as these alienated proportions found employment outside the traditional economy.

In Sri Lanka the free[16] and modern system of education was the determining factor that accelerated the supply of potential female labour with higher levels of education (Wilson, 1974:61-66; 1981; Masinghe, 1991; Squire, 1981:19, Corner, 1986:16). In a situation where there was no restrictive choice for expenditure regarding the education of children, the participation of females in education (De Silva, 1990:) and in the labour force increased rapidly (De

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16. The free education system was introduced by CWW Kannangara in 1942 when he became the Minister of Education under the Donoughmore Constitution. Under this system the education was made free from the Kindergarten to the University;

Silva, 1977:120). There has been a substantial increase in the number of schools providing primary and secondary levels of education since independence in Sri Lanka (ESCAP, 1976:212; Sanyal et al:1983:62-89; De Silva ed., 1977:403-433; Masinghe, 1991) and table5.13 shows the numerical increase of the number of schools and the average number of children per school.

During the period 1948-1991 the number of schools more than doubled, but the momentum of increase declined during the 1975-1982 period and further declined during 1982-1985 period due to the closure of at least 243 single teacher

Table 5.13
Numerical Increases in Schools and School Going Population, 1948-1991

Year	Number of Schools	School Going Population '000	Children Per School
1948	4814	865	1180
1975	9675	2544	263
1982	9901	3485	352
1985	9634	3739	388
1991	10520	4259	405

Sources: Central Bank of Ceylon, 1982:85 Table 10.2; Central Bank of Sri Lanka, 1992:95 Table 10.2; Ranasinghe, 1950:212

schools (Ministry of Education and Higher Education, 1986:7 Table 1.2). During the period 1948-1991 at least three quarter of the total number of schools indicated above were primary schools.

Table 5.13 shows that as a result of the expansion of educational facilities, the school going population increased by at least eight fold. An important feature of this education expansion was that this growth occurred as a state monopoly where the state had control over educational institutions and the curriculum. A second outstanding

feature is the spread of education to rural areas where the majority of the population (at least 80 percent of the population lived (Department of Census and Statistics, 1986b). Since 1952, the expansion of secondary education in rural areas was made possible by changes in the medium of instruction. Prior to this change, in Sri Lanka, a secondary education could only be received in the medium of English. The educational structure that could impart junior and senior secondary education up to grade 10 (i.e. **vidyalays and maha vidyalays**)_increased dramatically (Central Bank of Sri Lanka, 1992:95). Between 1971 and 1991 the number of schools increased by at least four times, but the number of children per school increased more slowly (Table 5.13).

There were draw backs and prices to be paid in the early phases of this expansion. For example, science could not be taught in most of these schools for there were no facilities to teach science and maths in vernacular languages at junior secondary or senior secondary levels due to lack of facilities, textbooks in Sinhalese and Tamil and due to the paucity of qualified teachers. This is reflected in the admission criteria adopted by the Universities at the insistence of the government for example in 1981 30 percent of the students who had sat for the GCE (AL) examination were selected on merit, 55 percent on a district quota basis and 15 percent on under privileged districts criteria (University Grants Commission, 1984:37 Table 3.8). An imbalance in the distribution of students between arts, science and commerce was created which resulted in an educational output at terminal years at senior secondary level. In addition the quality of education imparted in the

schools in large urban centres like Colombo and some of the district capitals where all the facilities were available, was considered to be higher than in other areas. Even though attempts were made to rectify this situation during the 1960's and 1970's these attempts were largely inadequate. This situation existed up to the 1980's in most rural schools and the situation is still not completely rectified. Therefore most of these schools imparted an arts-biased education.

5.7.2 THE STRUCTURE OF THE SCHOOL SYSTEM

Table 5.14 shows the structure of the school system that prevailed in Sri Lanka from 1964 to the present, however the number of years of schooling had fluctuated

Table 5.14
The Structure of School Education

EDUCATION LEVEL	PERIODS OF CHANGE Pre 1964	1964/71	1972/78	1979/present
PRIMARY LEVEL	Lower & upper Kindergarten Grades 2 to 5	Grades 1 to 5	Grades 1 to 5	Pre School Grades 1 to 4
JUNIOR SECONDARY LEVEL	Grades 6 to 8	Grades 6 to 8	Grades 6 to 8	Grades 5 to 7
SENIOR SECONDARY LEVEL	SSC Prep SSC	Grade 9 Grade 10	Grade 9	Grades 8,9,10
	HSC Prep	Grade 11	Grade 10	Grade 11
	HSC	Grade 12	Grade 11	Grade 12

Sources: Department of Education, 1986:1-38; ESCAP, 1976

during the period. Generally, for the total of the three levels of education, twelve years of learning was necessary. For the primary level the six years in the pre 1964 period changed to 4 years along with one year in pre school in the period 1979 to present.

The 1972/1978 period saw a reduction in the total number of schooling years at all three levels to 11 probably to reduce the cost of education which was becoming a burden due to rapid increase in the school going population (Jayaweera, 1979:414). The devaluation of the quality of education due to curtailment of the school years was reversed in 1979 by adding one more year for the senior secondary education. These differences in the number of years of schooling did matter for occupations which needed a senior secondary level of education.

5.7.3 THE CONTENT OF THE GENERAL EDUCATION AT PRIMARY, AND SECONDARY LEVELS

The curriculum followed at each level of education gives an important insight to the knowledge and practical skills that had been imparted. Throughout the period the main emphasis in the curriculum of the primary level had been the provision of opportunities for observation, understanding the physical environment, acquisition of basic skills in literacy and numeracy and understanding the social life and elements of culture. The children were expected to learn 20 hours in the first year and second year and 22.3 in the third year. The number of periods increased to 40 when the children advanced to grades 3 and 4.

Table 5.15 indicates the secondary level curriculum taught at different periods of educational reforms. The curicula adopted at the junior and senior secondary levels

Table 5.15
Secondary School Curriculum in Grades (6-10) 1960-1990

1979/ to date	1978/72	1971/64	pre 1964
Religion Language	Religion Language	Religion Sinhalese Tamil	Religion English Sinhalese Tamil
Mathematics	Mathematics	Arithmetic Maths	Arithmetic Maths
Science	Science	Chemistry Physics	Chemistry Physics
Social Science	Social Science	History Civics Geography Accounts English Lit Sinhalese Lit	History Civics Geography Accounts English Lit Sinhalese Lit
Health	Health	Heath Sc.	Health Sc.
Life Skills	Pre-vocational Subject	Shorthand Typing Needlework Metalwork Woodwork Weaving Ceramics Home Science.	Shorthand Typing Needlework Metalwork Woodwork Weaving Ceramics Home Science
Aesthetic Education	Aesthetic Education	Art Dancing Music	Art Dancing Music
Physical Education	Physical Education	Physical Education	Physical Education
Technical Subject			
Library			

Sources: Ministry of Education and Higher Education, 1986:1-41

were more academically oriented and emphasised reading, writing and number skills and socio-cultural orientation for

the future citizens of the country. Throughout the period the more practical subjects failed to compete with the more academic subjects (De Silva, 1977:403-433).

The curriculum reforms of 1972 and 1981 tried to rectify the academic bias of the secondary level education by including a compulsory pre-vocational subject. Inclusion of life-skills in the post 1979 period was done in similar vain. In teaching the pre-vocation subject, the life skills subject should be related to the environment and the resources available in the area where the child came from. The practical learning experience was to see how the combination of resources and labour led to the production of goods and the value of such goods.

The teaching profession in general suffered from a dearth of trained teachers to teach these craft-oriented practical subjects. Even though an attempt was made to train academically oriented teachers to teach pre-vocational subjects through in-service training programmes, it ended in failure because of the lack of support from the teachers who were subjected to such training. The attitudes of parents and teachers to the compulsory teaching of the practical subjects were not positive. Negative attitudes in very rural areas were partly created by the still prevailing social values created by the caste system in Sri Lanka (De Silva, 1977:102-106) and the attitudes of the parents and teachers were largely based on such caste consciousness.

The implementation of the reform that all junior secondary and senior secondary students should study science and maths was hindered by the lack of qualified teachers and facilities in the rural schools to teach the subjects at

these levels. The situation was more adverse for the teaching of science and maths at grades 9 and 10 and the Curriculum Development Centre of the Ministry of Education took steps to expand the In-Service training programs for teachers who taught these subjects (Ministry of Plan Implementation, 1981:57-58; Sanyal et al, 1983:93-111).

A pass in the GCE (OL) examination with appropriate credits is necessary to enter the Senior Secondary Level of Education. The students are broadly grouped into Arts Science and Commerce groups (Ministry of Education and Higher Education, 1986:1-37) and the students have to select four of the subjects offered in these grades. Generally the subjects taught in Grades 11 and 12 are to cater for subjects taught at the Universities (University Grants Commission, 1984) in the following streams of study; Arts, Commerce and Management Studies, Law, Education, Science Medicine, Veterinary Science, Agriculture, Engineering and Architecture.

5.7.4 TECHNICAL AND VOCATIONAL EDUCATION

The Technical Education System in Sri Lanka as it was in 1979, has been described as widely dispersed, non-coordinated, ill equipped and staffed and inequitably distributed in the sub-national regions (Gnanalingam Report 1979). Technical education became a part of the education system as early as 1894 under the colonial education system with the establishment of the Ceylon Technical School in Maradana[17]. Tables 5.16 and 5.17 indicate the numerical

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17. In 1978, the Gnanalingam Committee was appointed to examine and review and recommend reforms and changes necessary for co-ordinating a national scheme of technical education' most of the Gnanalingam Committee reports have been implemented during the periods 1983 to 1988 and 1988

increase of Technical Colleges and the percentage distribution and growth of intake to technical colleges since this time. The low intake of persons to the technical

Table 5.16
Government Technical Colleges, Numbers, Intake and Staff

Cumulative Increase of Technical Institutions 1950-1990

Period	Total Number	Technical Polytechnic Collages	Junior Technical	Affiliated Technical
1950/59	5	4	1	-
1960/69	10	7	3	-
1970/79	18	8	10	-
1980/90	30	13	11	6

Intake to Government Technical Institutions (Numbers)

	1979	1983	1986	1990
Professional & Diploma courses	2255	4843	4385	3547
National Certificate courses	5375	9412	10152	8606
Trade Courses	2138	6890	1847	1726
Other	1365	575	5178	2147
Intake full & part time	11133	15724	15001	10624

Permanent Staff Resources in Technical Collages

	1979	1983	1986	1990
Polytechnic Institutes	516	755	755	755
Junior Technical Institutes	243	540	545	550
Affiliated Technical Institutes		36	36	36
Total	759	1331	1336	1341

Sources: Ministry of Higher Education, 1979: Table 1 and questionnaire schedules sent to the Committee on Technical Education
Ministry of Planning and Plan Implementation, 1990: mimeo
University Grants Commission, 1984:160-161 Table 9.3, 9.4
Ministry of Higher Education Science and Technology, 1990:2-4
Central Bank of Sri Lanka, 1992:96 Table 10.3
Staff Resources for years 1986 and 1990 are unpublished data from Ministry of Policy Planning and Implementation, 1990

education institutions and the slow increase in institutions which imparted such education during the period prior to 1974 indicates the emphasis of the national education objectives on academic instead of technical subjects. The

to 1993; later the Asian Development Bank and several other donors funded the Technical Education Project

intake capacity of the technical institutions was low even though the number of institutions imparting general education had seen a tremendous increase. It probably is also a reflection on the nature of the low demand for

Table 5.17

Students in Technical Institutions, By Course of Study
Percentage Distribution and Growth rates
(Selected Years)

Years	1975	1976	1981	1983	1986	1990
Course of Study						
Higher National Diploma & Professional	12.5	15.4	10.3	18.0	15.5	17.0
Diploma Course	11.1	12.0	11.8	4.0	5.6	6.0
National Certificate	50.6	56.7	52.0	43.0	47.1	53.7
National Craft Training Certificate	24.4	10.6	12.0	32.0	8.6	10.8
Short Courses Self Employment	1.3	5.4	13.7	3.0	24.0	13.4
Total	100	100	100	100	100	100
No Students '00	107	100	184	217	216	160
Total Intake '00	63	53	121	157	150	106

	Years		
Growth Rate %	1975/82	1983/86	1987/90
Intake	10.0	-1.6	-8.6

Sources: computed using data from the following sources:
Employment and Manpower Planning Division, 1982:89-98 Tables 12-16; Ministry of Higher Education, 1979:100-107 Table 3; University Grants Commission, 1984:157-161 Tables 9.3-9.4; Central Bank of Ceylon, 1982:86 Table10.3.
Central Bank of Sri Lanka, 1992:96 Table 10.3

qualified technicians from the economy. Another consideration for the state was the higher costs involved in expanding the technical education. Already the economy was over burdened with providing "universal free education" up to the university level. Thus there was a disparity between the social demand for academically oriented education and the technical and vocational oriented education. In the context of slow growth in the manufacturing industries and the state-dominated service industries, the need to substantially expand technical and vocational education was not an important consideration. The structural composition and the nature of growth of such industries will be discussed in Chapter 6.

By the mid 1970's the demand for technical education grew for various reasons originating both from within the country and from abroad. The local interest in technical education has increased since the 1970's when the numbers of males and females who entered the labour force found it difficult to find employment (Employment and Manpower Planning Division, 1982:31; Gnanalingam Committee Report, 1979). One objective of the technical education was to impart an employable skill to persons who had an academically oriented education (Gnanalingam Committee Report, 1979), and a further objective developed at a later stage was to give a technical training which would lead to self employment (Employment and Manpower Planning Division, 1985:41; Gnanalingam Committee Report). From 1977 there was an increased local demand for middle level engineering, supervisory and craft level skills, from the several development projects that had been started.

A moderate expansion in technical education was observed after the 1950's. Table 5.18 shows the intake to technical Colleges as a ratio of the total number of persons with appropriate qualifications[18] to enter the respective

Table 5.18
Intake to Courses of Study in Technical Colleges as a Ratio of Population Qualified to Enter (Per 100 persons), 1974-1991

	1974	1981	1984	1991
Higher National Diploma	2.8	2.1	1.4	1.4
National Diploma	2.5	2.4	0.8	0.8
National Certificate	1.4	2.4	2.2	2.2
National Craft Certificate	0.1	0.1	0.1	0.1
Total Intake	0.5	0.8	0.8	0.8

Sources: Employment and Manpower Planning Division, 1982:89-98 Tables 12-16;
Ministry of Higher Education, 1979:100-107 Table 3;
University Grants Commission, 1984:157-161 Tables 9.3-9.4;
Central Bank of Ceylon, 1982:86 Table10.3;
Central Bank of Sri Lanka, 1992:96 Table 10.3;
Internal documentation in files, Ministry of Planning and Plan Implementation.

courses. The external demand for technically qualified persons came from the Middle East during the development boom in those countries, commencing from the "OPEC" oil monopoly. Thus at a certain stage, in the early 1980's Sri Lanka faced the unique situation when the free outflow of manpower had been expanded since 1977 and at a more accelerated scale from 1979, to cater for not only the local demand but also to meet the demand from outside (Employment

18. The entry qualifications for different courses are as follows; (1) For Higher National Diploma- GCE (OL), (2) For National Diploma - GCE (AL), For National Certificate GCE (OL), and (4) For National Craft Certificate - Grade 8-10

and Manpower Planning Division, 1982:41-43). Since the collapse of the Middle Eastern development boom and political turmoil caused by the Iraq- Quwait war current supply of skilled manpower in Sri Lanka has increased because most of these migrants returned.

In 1979 the Gnanalingam Committee recommended that 14 new technical colleges be started in various districts where technical education was not available. Until recent times technical education was more associated with males and females participated more in the secretarial type of courses however since 1979 the intake of females to various technical course has increased. (Ministry of Plan Implementation, 1981:95).

5.8 CONCLUSIONS

The growth patterns and levels of working age population during the period under consideration have been determined by the demographic, education and mobility transitions. Reduction of infant mortality, particularly and a general reduction of mortality of all ages has taken place during this period. Rapid declines in mortality initiated the onset of fertility decline and influenced the labour supply of females in younger working age groups. The increased incidence of never married women and the increased adoption of contraception by the younger female age groups were important causes of fertility decline among less than 34 years age group. Fertility decline among the younger female age group have thus resulted in a substantial time saving of the potential work time of females, that would normally be allocated for reproductive activity, and familial roles.

The growth patterns of the potential labour force were also affected by the international migration of (1) the permanent migrants to more affluent countries and (2) The contract migrants. Such migration patterns had a two pronged effect on the potential labour force. During the short periods of contract migration there was a reduction in the available labour supply while the available stock of potential labour was incremented by the returned migrants. Most of these migrants were young and had a middle to low level of skills or had no skills. Recent contract migration trends show that females have out-numbered males and that most of these females had occupations as unskilled persons abroad.

Important changes occurred in the educational level potential labour due to the expansion of the modern school system and increased participation of younger persons in education. The system of education had performed a duel role in supplying qualitative human resources; and being an important changing agent in the process towards modernization of skills and westernization of attitudes and expectations of the population. Indirectly, the process of educational transition that had taken place, had resulted in accelerating the processors of demographic transition (Caldwell, 1982:). Thus it can be concluded that the supply of potential labour was greatly influenced by the Demographic, Educational and Mobility transitions that occurred in the country. Next three Chapters examine how and in what ways the potential labour supply was underutilized. Chapter six examines labour underutilization that occurred due to unemployment.

CHAPTER SIX

LABOUR UNDERUTILIZATION THROUGH UNEMPLOYMENT IN SRI LANKA

6.1 INTRODUCTION

In assessing the underutilization of labour it is necessary to take account of both unemployment and underemployment. In this chapter the focus is upon unemployment which generally is low in Less Developed Countries (LDC's) (Getubig and Oshima, 1991:80). This is because of the lack of social security for unemployed persons in LDC's (ILO, 1993c:53-56) which means that poor people cannot afford to be unemployed and have to take any available work, regardless whether it meets their expectations in terms of the skills, the status or the remuneration associated with such work. The changing demographic situation coupled with the low level of economic development in currently transitional societies have contributed to the increased labour supply and subsequent labour underutilization. This chapter investigates the causes and implications of unemployment in Sri Lanka. The nature of the relationship between demographic, cultural, 'family related' and economic characteristics of an individual to that person's unemployment situation is examined in order to understand the interrelated socio-demographic and economic causes of unemployment. The focus of the chapter is specially upon young adult females. The proposition that demographic, family related, and cultural characteristics largly explain a person's unemployment situation is investigated. SES1969/70, SE&LFS1985/86, LFS1990/91 are the main sources of data analysed. The low numbers of LFS1990/91 in some categories when the

characteristics are analysed in detail are attributed to the smaller sample size of LFS1990/91 when compared to the other two surveys.

6.2 THEORETICAL CONSIDERATIONS

The repercussions of the rapid population growth in the early transition period (McNicoll,1984:8; McGreevey, 1985:49) and the continued momentum of that growth during the latter stages of the demographic transition (Rowland, 1992:1-14) are reflected in the growth patterns and the structure of the labour force (Jones, 1990b). The experience of Sri Lanka fits into this description (Jones and Selvaratnam, 1971: Karunatilake, 1987:167-189). In the case of Sri Lanka, the growth of the 15-19 year age group and their influx into the labour force since the late 1950's, is a result of the momentum of growth of the early phases of the demographic transition occurring in the country (Karunatilake, 1987; Balakrishnan and Gunasekara, 1977:109-143).

When the demographic transition is parallelled by an educational transition, the problem of high labour force growth is more acute because the new entrants to the labour force are more educated and have job aspirations which the economy cannot meet immediately. The lagged effects of the education transition are experienced by the economy when new cohorts with more education and specific job aspirations enter the labour force. The problem of educated unemployed arises when the economy does not respond effectively to these demands. In Sri Lanka (and in many other Asian countries) the educational transition has increased the human capital endowments (Jones, 1990b:

1992:1-45; Colombage and Karunaratne, 1986:180, 200-206) which in turn have created adverse implications for the economics of labour utilization (Wilson, 1975:137-138; Sanyal et al., 1983:178-195; Masinghe, 1991; Jayaweera, 1993:).

Caldwell (1982:210-211) asserts that during the course of the demographic transition, the familial production will be gradually replaced by capitalist modes of production which mostly has been imported to the developing countries from the west. When the growth process of the transitional economy (Oshima, 1987:341, Jones, 1990b; 1992) is inadequate to provide employment to the influx of new entrants to the labour force[1], a backlog of unemployment would start to pile up. The Sri Lankan Economy has undergone substantial changes during the last five decades (Ponnambalam, 1980:171-79; Karunatilake, 1987:27-47; Dunham and Abeysekera 1987). The problem of absorbing additional labour without affecting the productivity of the already employed arises due to the lack of significant transformations of the economy during the period of demographic transition (Oshima, 1987:339-342). This is the result of welfare oriented investment as opposed to more productive investment (Oshima, 1987:237) and inadequate capital for increased investment and employment creation (McNicoll and Nag, 1982:127-128).

6.3 DEMOGRAPHIC CHARACTERISTICS OF THE UNEMPLOYED POPULATION

6.3.1 AGE CHARACTERISTICS

Table 6.1 shows the percentage distribution of the activity status of the 15 years and above age population for

1 The influx of new entrants to the labour force occurs as a result of the lagged effect of high population growth on the labour force (Bloom and Freeman, 1986)

Table 6.1
Activity Status of Working Age Population - Sri Lanka
SES1969/70, LF&SES 1985/1986 and LFS 1990/1991
(Percentage Distributions)

		Employed	Unemployed	Own Housework	Students	Others	Total number
		Percentage distribution					
SES1969/70							
15-19	male	29.8	21.9	1.9	44.1	2.4	3262
	female	17.9	10.1	36.8	34.0	1.3	3472
20-24	male	64.3	25.4	0.8	8.8	0.7	6087
	female	29.0	15.3	49.4	5.8	0.6	3014
25-29	male	88.8	8.4	**	1.5	0.9	1938
	female	32.0	7.2	59.6	0.6	0.6	2102
30-34	male	95.5	3.2	**	**	0.9	1540
	female	30.6	2.2	66.5	**	**	1502
35+	male	83.0	1.0	0.4	**	15.5	8112
	female	25.7	0.6	58.6	**	15.0	1757
SES & LF 1985/86							
15-19	male	28.2	12.6	1.3	49.8	8.1	6753
	female	11.7	9.1	23.7	52.0	3.4	6583
20-24	male	66.1	21.4	0.4	7.2	4.8	5637
	female	24.7	22.0	42.6	7.2	3.4	5995
25-29	male	85.2	11.0	0.3	0.6	2.9	4496
	female	31.6	13.8	51.9	0.8	1.9	5145
30-34	male	92.4	5.4	**	**	1.9	4012
	female	34.9	7.3	56.8	**	1.0	4436
35+	male	79.2	2.5	1.6	**	16.7	17717
	female	29.1	2.0	57.3	0.1	11.5	18196
LFS 1990/1991							
15-19	male	20.8	10.1	**	66.2	2.1	515
	female	14.6	2.4	17.0	62.5	3.6	618
20-24	male	58.5	23.8	2.0	11.3	4.4	504
	female	28.6	28.8	18.0	18.5	6.2	406
25-29	male	61.2	20.3	**	12.7	**	237
	female	34.9	24.8	22.5	10.6	7.3	218
30-34	male	70.8	6.0	6.0	**	13.7	168
	female	36.3	14.2	20.6	22.1	6.9	204
35+	male	51.1	3.4	3.1	9.7	32.7	413
	female	16.1	2.1	25.4	4.7	51.8	682

Sources: SE&LFS 1985/1986 Data Tape
SES 1969/1970 Data Tape
Sri Lanka Labour Force Survey 1990/91 Data Tape
Notes: ** The number of observations in the cell are less than 10
Percentages in rows add up to 100

the survey years 1969/70, 1985/1986 and 1990/1991 by age group. Female participation in economic activity has been very much less than that of male, nevertheless during the course of two decades, participation of females in economic activity has increased. Table 6.1 shows that these increases were mainly in unemployment. Labour underutilization due to unemployment has been very much a problem of the younger age groups in both genders, particularly among males less than 29 years of age and females less than 34 years (Jayaweera, 1979; Masinghe and Gunasekara, 1991; Ranasinghe, 1992).

One important reason for the high incidence of unemployment for the younger age groups is a lagged effect of the rapid population growth of the early phase of the demographic transition[2] when the natural increase was high due to a reduction in mortality, while fertility levels remained high. In societies undergoing this phase of the demographic transition the working age population had increased at a faster rate than in the pre-transitional period, leading to a substantial increase in the number of persons entering the labour force, particularly in the last two decades (Jones, 1990b). Fertility decline due to delayed age at marriage, as well as marital fertility decline (Mason, 1987) has increased female participation in economic activity during the last three decades. A larger proportion of these prime age group females, participating in economic activity, were seeking work. Table 6.1 shows that unemployment is common for the 25-29 and 30-34 age groups also.

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2 Chapter Five established that the high growth phase of population lasted till the 1970's when mortality had declined substantially while fertility remained high.

The effects of several other transitions occurring parallel to the demographic transition in Sri Lanka are also reflected in the characteristics of women who have begun to participate increasingly in economic activity. During the period 1952 to 1991, the Total Fertility Rate decreased by approximately 5 children per woman to 2.5 children, registering a decline of 50 percent (table 5.3 in Chapter Five). The value of children to the parents has changed (Caldwell,1982:324-330) during the course of the education transition that has taken place. A social revolution for women, has commenced with more females achieving higher levels of education (table 5.12 Chapter Five; Jayaweera, 1993). For example during the period 1963-1991, females aged 15-19 years who had GCE(OL) education increased from 10 per cent to 27 per cent (table 5.12 in Chapter Five). Similar dramatic changes are observed in the other older age groups. Higher levels of education achieved by women increased their potential to earn a higher income (Samarasinghe 1989:72-73). The narrowness of the environment for women expanded beyond the confines of the household to horizons outside home and even beyond the defines of the country (Hugo, 1990:2), because her capacity and confidence to work outside her home increased dramatically. In the 1980's more women than men migrated for contract employment in the Gulf countries (Editorial, Asian Migrant, 1994). The nucleation of the family and declining fertility levels made less demands on the reproductive life cycle of the prime age females and their conjugal responsibilities. Modernisation paved the way for the use of labour saving and time saving devices such as rice and flour milling (Jayatilaka, 1989; Ahmed, 1974) and

improved transport services (National Planning Division, 1992) which enabled women, even from distant rural areas, to save on labour time spent on household chores and travelling. Forthcoming sections will look in greater detail how these changes affected different characteristics of these participating women.

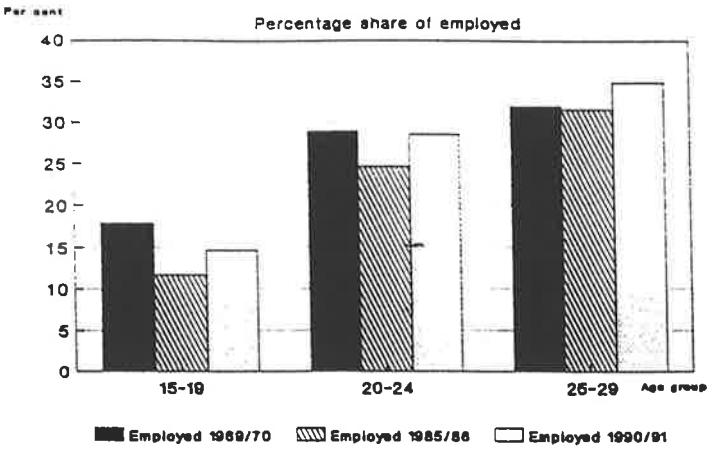
The economy has not responded effectively to the demands of the work age population to participate in the production of economic goods and services. Unemployment has increased with each new batch entering the labour force (Jones and Selvaratnam, 1971:72-125; Balakrishnan and Gunasekara, 1977:120; Ponnambalam, 1980:61; Karunatilake, 1987:178; Indraratna, 1990:1-13). Unemployment for females has increased particularly, because the economy was least prepared for absorbing females (Samarasinghe, 1989). The expenditure patterns in the country show that the national expenditure on consumption constituted 65-71 per cent of the total expenditure (table 4.3 in Chapter Four) during the 1967-1990 period which indicates that there was a substantial demand for goods and services. However Oshima, (1987:248) observes that the rationale of the public expenditure in Sri Lanka since the country received independence, was based on providing social welfare facilities to the population rather than gearing the economy towards productive employment to absorb the piling backlog of employment seekers. The small proportion of capital investment that the Government could allocate for development was mainly directed towards the development of agriculture. Such investments have resulted in the modernisation of traditional agriculture, but that was not

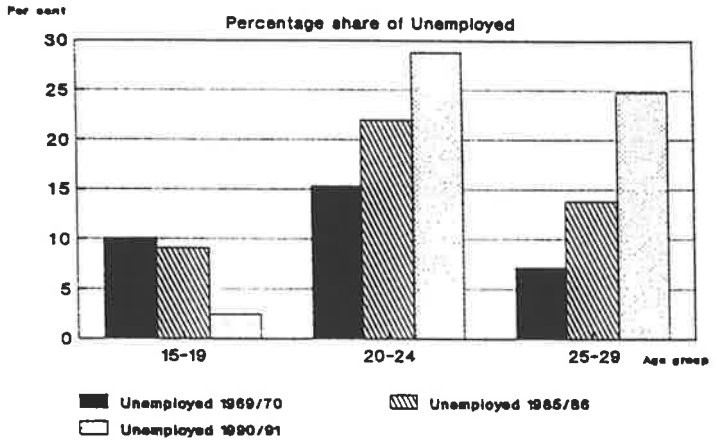
sufficient to create adequate productive employment for all employment seekers (Masinghe and Gunasekara 1990:355-359).

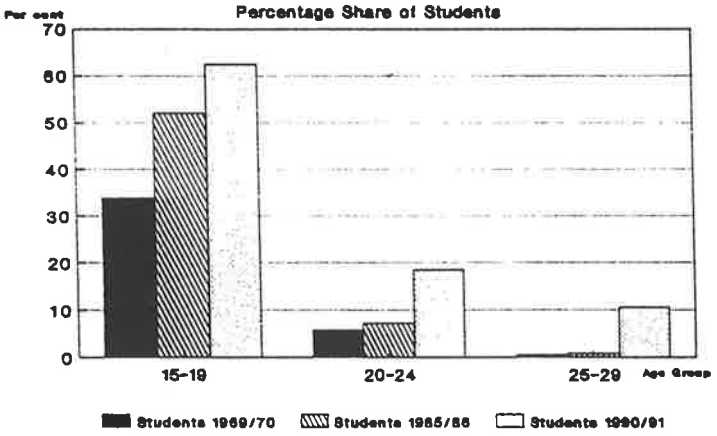
The increased participation of the 15-19 age group in education resulted in a decline in the participation of that group in economic activity (table 6.1). This trend reflects the changing pattern of social behaviour due to the education transition that has taken place. Even though the direct effect of such a change would have been to relieve the immediate tension of added backlog of unemployed in this age group, there would have been a lagged effect of more educated youth in more mature age groups seeking employment. Figure 6.1 clearly indicates that the students category of this age group increased during the period. The economically active population of the 15-19 age group declined because a larger proportion had been retained in the education system. The increase in employment opportunities for younger females led to a slight decline in the student category in 1990. The proportion of females aged 20-24 engaged in 'own house work' has declined throughout the period, whilst student categories in these older ages increased. Changes in activity status also reflect the attitudinal changes occurring in women towards the traditional roles they were expected to perform (Skjonsberg, 1989:24-30; Tinker, 1989:31-48; Perera, 1989:49-65). The proportion of females aged 35 years and above engaged in 'own house work' (approximately 59 per cent) in the first two surveys is almost equal, with only 0.1 percentage points difference. The 1990 survey shows that this proportion had declined.

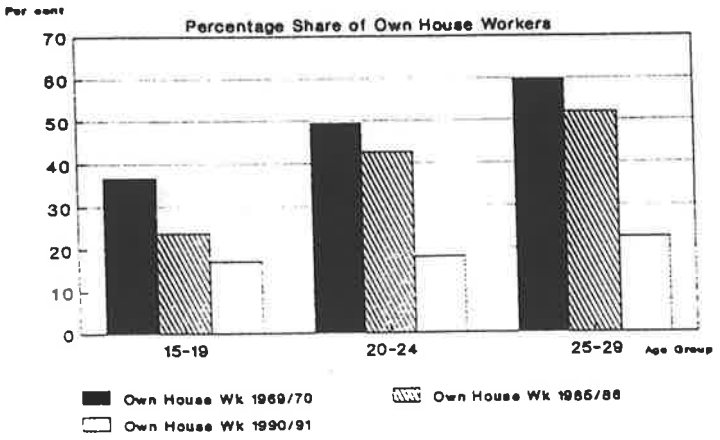
Inspite of the dominance of the males in the patriarchal society (Caldwell, 1982; Mahadevan, 1989), as

Figure 6.1 ACTIVITY STATUS OF 15-29 AGE GROUP FEMALES









Source: Table 6.1

the bread winner in the family (ILO, 1993d), the proportions of males who are 'ownhouse keepers' increased (table 6.1). During the period under consideration the proportion of male 'ownhouse workers', even though only a small proportion of the total age group, had more than trebled. Such a trend suggests that the attitudinal changes are occurring in the society regarding the stereotyped work roles for men and women. Traditionally, 'own housework' was regarded as predominantly female domain (ILO, 1993), however the 1990 Survey show that the proportion of males doing own house work increased slightly.

6.4 MARITAL STATUS AND UNEMPLOYMENT

6.4.1 UNEMPLOYMENT AMONG NEVER-MARRIED PERSONS

Increased participation of never-married females in economic activity throughout the period under consideration can be attributed to the immediate effects of the early phase of the demographic transition (table 6.2). During the last four decades the average age at marriage for females has increased by at least four years (Department of Census and Statistics, 1986b:100). Increasing age at marriage is associated with the commencement of the initial stage of the fertility transition (Coale, 1973). With increasing age at marriage, participation of females in the 20-34 age group had increased and table 6.2 shows that a large proportion of them were in unemployment. The highest participation in economic activity is also in this age group. Throughout the period, never-married females participated more than the ever married. Increased participation in economic activity among the 20-34 age group and never-married females has also been the experience of other developing countries

Table 6.2
Proportions Per Cent of Employed and Unemployed in the Working Age Population by Marital Status, Age Group and Gender; SES1969/70, SE&LFS1985/86 AND LFS 1990/1991.

	Ever Married			Never Married		
	Total Population (Number)	Employed (percent)	Unemployed	Total Population (Number)	Employed (percent)	Unemployed
Males						
SES1969/70						
15-19	18	38.9	22.2	3244	29.7	21.9
20-34	2469	94.2	5.2	3834	71.3	20.9
35+	7651	80.3	3.1	461	70.2	7.4
Total	10138	86.8	1.2	3909	51.8	21.3
SE&LFS1985/86						
15-19	27	51.9	11.1	6726	28.1	12.6
20-34	5686	94.9	4.1	8459	69.3	20.0
35+	16694	79.9	2.2	1023	68.3	6.7
Total	22407	83.7	2.7	16208	52.2	16.1
LFS 1990/1991						
15-19	**	**	***	508	19.1	9.4
20-34	173	75.1	4.0	736	57.1	22.7
35+	265	37.0	4.2	148	64.9	2.0
Total	445	51.2	4.9	1392	44.0	15.7
Females						
SES1969/70						
15-19	293	15.7	3.8	3179	18.1	10.6
20-34	4246	28.5	2.2	2372	31.0	23.3
35+	7292	25.2	0.4	302	38.1	3.6
Total	11831	26.2	1.1	5853	24.3	15.4
SE&LFS1985/86						
15-19	425	18.1	7.3	6158	11.3	9.3
20-34	9468	29.2	6.0	6108	31.0	29.3
35+	17310	28.7	3.2	886	37.2	8.6
Total	27203	28.7	3.2	13152	22.2	18.5
LFS 1990/1991						
15-19	42	**	***	576	13.7	2.6
20-34	285	24.9	13.0	543	32.2	30.0
35+	563	13.7	0.4	119	26.1	10.1
Total	890	17.3	4.4	1238	23.0	15.3

Sources: Computed using
Socio-Economic Survey 1969/1970 Data Tape;
Socio-Economic and Labour Force Survey 1985/86 Data Tape;
Labour Force Survey 1990 Data Tape.
** less than 10 responses;
*** no responses.

experiencing the initial stages of the demographic transition. For example Yue(1987:259) notes a similar

pattern in Singapore, Cho(1987:231) observes higher participation of the 20-34 group in Hong Kong and Hugo(1993:84) notes that the highest unemployment is among the 15-24 age group in Indonesia. Over the period, increasing age at marriage had resulted in a large proportion of the 15-19 age group remaining never-married, while participation of this group in education increased resulting in low participation rates in economic activity (Department of Census and Statistics, 1986c:100-105).

Increase in employment during the late 1980s to early 1990s, in the textile industry and light engineering electronics (see Chapter Four) was largely beneficial in terms of employment for never-married, young females. Such employment opportunities were created mainly in the Free Trade Zones (Watawala, 1992; Daily News Editorial, 1992; Daily News, 1993; Central Bank of Ceylon, 1993:54-63; ILO, 1993:32-33) in semi skilled or unskilled jobs with little opportunities of upward mobility (UNICEF 1987:76). However, such employment situations had not been sufficient to absorb the large increase of females in this age group who were seeking employment (Indraratne, 1990:1-13). The high rate of unemployment among females aged 35 years or more is a result of cumulation of the rates.

Jones(1990a:507-533) highlights that the labour force participation of Malay women, especially young women in Singapore rose very sharply throughout the fertility transition and during the subsequent periods of below replacement level of fertility. Even though there is no conclusive evidence regarding the nature of the relationship between fertility decline and female labour force

participation (Standing and Sheehan, 1978:97; Jones, 1984), married women in Less Developed Countries where the fertility transition is taking place seem to have gained more time from their reproductive roles, which they have opted to use for the production of goods and services.

In the case of Sri Lankan women, an irreversible decline of marital fertility had commenced from the 1960's and substantial declines in marital fertility were experienced in the 1980's (table 5.3 of Chapter Five; ESCAP, 1976). The effect of such a decline was an increase in the proportion of married females who were seeking work. According to table 6.2, among married women the 20-34 age group had the highest participation, however this increase was concentrated in the unemployed. The increase in employment was only by one percentage point. The married women, though of younger ages would have been less preferable than the never-married women to potential employers in the light electronics and garment manufacturing industries (ILO, 1993d).

According to the SE&LFS1985/86 at least 25 per cent of ever married, currently single women of all age groups who were in the labour force were unemployed. A relatively high proportion of younger women in the labour force were widowed, divorced or currently single. Most of these young widows would have been victims of current ethnic and other disturbances in the country. According to the SE&LFS1985/86, five per cent of the ever married women aged 20-34 years were currently single. This is a substantial increase from the SES1969/70 which showed that only one per cent of ever married women were currently single. Both surveys show that

approximately 6 per cent ever married women of 35 years and above, who were in the labour force were either widowed, divorced or legally separated. Widarti(1991:186) observed that the highest labour force participation rates were among divorced women in DJakarta while Jones(1984) also observed a relatively high level of participation among divorced women in Indonesia. Widarti(1991) attributes such a pattern to high male mortality and divorce rates in Djakarta.

6.5 PARTICIPATION IN UNEMPLOYMENT BY SIZE OF HOUSEHOLDS

Table 6.3 indicates the labour force participation in employment and unemployment of males and females by size of household. One consequence of the fertility transition is the decline in average family size and nucleation of families. In all three surveys analysed in this study, a larger proportion of the labour force come from smaller families (table 6.3). The smaller family size was more advantageous for the labour force participation of females[3] and this finding is confirmed by earlier empirical evidence on Sri Lanka (Standing and Sheehan 1978:238-239).

Proportions of employed and unemployed men and women aged less than 34 years, and who are from less than five person households in the SES1969/70 and the SE&LFS1985/86 are substantially higher than those in the more than five person households. The disparity of participation in the two household sizes had been reduced in the 1990/1991 survey. This is largely due to the reduction in the proportion employed (see table 6.3) which is largely for males in all

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3 Empirical evidence does not establish a clear relationship. For example Peek (1978) found that in the traditional sector the child care burden did not diminish the likelihood of mother being employed in Chile (Standing and Sheehan ed., 1978:73-74)

Table 6.3
Proportions of Employed and Unemployed in the Working Age Population by Household Size (SES1969/70, LF&SES1985/86, LFS1990/91)

	Household Size					
	Less than 5 Person			More than/equal 5 Person		
	Employed	Unemployed	Total	Employed	Unemployed	Total
SES1969/70						
15-19 years						
males	43.1	15.6	(339)	28.2	22.6	(2923)
females	26.1	7.9	(456)	16.6	10.4	(3016)
20-34 years						
males	90.1	7.1	(1590)	75.9	17.3	(4713)
females	37.9	5.1	(1642)	27.8	11.3	(4976)
35+ years						
males	79.2	0.7	(1972)	84.3	1.1	(70)
females	31.5	**	(1949)	23.8	0.6	(115)
total						
males	80.5	4.6	(3196)	69.5	11.2	(595)
females	33.5	3.2	(3473)	23.7	6.7	(628)
SE&LFS 1985/1986						
15-19 years						
males	31.1	12.8	(3972)	24.1	12.3	(2781)
females	12.6	9.8	(3800)	10.6	8.3	(2783)
20-34 years						
males	82.7	11.7	(11740)	64.7	22.7	(2405)
females	30.7	13.4	(13096)	25.5	24.2	(2480)
35+ years						
males	80.3	2.5	(16997)	53.6	3.2	(720)
females	29.8	2.0	(17117)	17.9	1.3	(1079)
total						
males	75.2	7.0	(32709)	44.2	15.4	(5906)
females	28.2	7.3	(34013)	17.7	13.3	(6342)
LFS 1990/1991						
15-19 years						
males	19.0	10.7	(401)	18.4	**	(114)
females	13.3	2.5	(472)	15.1	**	(146)
20-34 years						
males	61.0	19.0	(728)	58.6	19.9	(181)
females	30.1	25.3	(665)	28.2	19.6	(163)
35+ years						
males	46.4	3.6	(308)	48.6	**	(105)
females	18.2	2.3	(533)	7.4	**	(149)
total						
males	46.1	13.4	(1437)	44.5	12.0	(400)
females	21.6	11.5	(1670)	17.2	8.1	(458)

Sources: SES 1969/1970 Data Tape
SE&LFS 1985/1986 Data Tape
LFS 1990/1991 Data Tape

** denotes less than 10 cases *** no cases
(...) Number in the category

age groups and for females in older age groups. Seemingly, a substantial proportion of working age population have not been counted either as employed or unemployed and therefore they are out of the counted labour force[4]. One explanation is that this may be a result of the current civil strife that had engulfed the country. A larger proportion of males may be out of the civilian labour force, either fighting for or against the government. A second reason may be that a large number of more mature age men and women are taking advantage of facilities to retire early from the labour force[5]. A third possibility is that a substantial proportion is out of the labour force because they are discouraged and therefore do not report themselves as employed or seeking work. According to table 6.4 between the two survey

Table 6.4
Discouragement Ratios (Per 100 Persons Unemployed)

	Discouragement Ratio	Unemployed No
SE&LFS1985/86		
male	1.0	3214
female	2.0	3304
LFS1990/91		
male	6.0	240
female	12.0	225

Source: SE&LFS1985/86
LFS1990/91

periods SE&LFS1985/86 and LFS1990/91 the discouragement unemployment ratio had increased by 6 times.

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4 Even though these persons had not reported themselves as being employed or unemployed, cross tabulations of working age population with occupations show that a large proportion of the working age population of both genders were engaged in some kind of occupation.
5 In the early 1990's the Government of Sri Lanka enacted legislation to enable Government employees who have put in at least 10 years experience to retire prematurely (Government of Sri Lanka, Ordinance)

A link between younger age groups, smaller family size and unemployment status is evident over the period (table 6.3). Declines in the family size had paved the way for larger numbers of females to enter the labour force, but mostly they have ended up in unemployment. Standing and Sheehan (1978) observed that there was a positive relationship between small household size and increased female labour force participation. They used household size as a proxy for family size. During the first two survey years the unemployed proportion of the 20-34 age work force from less than five person households, had nearly trebled and between the 1985/1986 and 1990/1991 survey years this proportion had nearly doubled. A result of declining fertility among women was that the number of smaller families increased. Thus more women in smaller households tended to enter the work force, but there were not adequate employment opportunities for these females.

According to the SES1969/70 and SE&LFS 1985-86 as shown in table 6.3, the participation of females aged 20-34 in more than five member households had increased substantially due to an increase in unemployment. In the survey year 1990/1991, even though employment had increased marginally for this age group, the proportion unemployed had declined. Probably a substantial number of females in this group are out of the labour force due to discouragement (table 6.4). Persistence of unemployment for long periods leads to discouragement among potential workers (Flaim, 1973; Standing 1978; Finegan, 1981).

Over the period, proportions of employed and unemployed in the 15-19 age group had declined for both types of households. The decline is substantial between the first two survey years and although during the 1985/86 and 1990/1991 survey years there is a marginal increase in employment, unemployment declined substantially for this age group. A large proportion of this decline may be attributed to increased participation in education. A strong negative relationship has been established between labour force participation and education of this age group (Standing and Sheehan 1978:244). Prevailing high levels of unemployment would have encouraged many parents to increase the number of years of schooling that they were prepared to provide for their teenage sons and daughters. This is supported by the fact that the percentage of females in this age group with junior and senior secondary education increased (Chapter Five, table 5.12). There is considerable variability in such economic motivations and some parents may want immediate economic returns for their educated children. However many more would stress delayed returns and provision of security (Caldwell, Reddy and Caldwell, 1988:29-51) persuaded by the belief that a higher level of education would help them to get into a better-paying occupation, because 'technological progress eventually reduces the demand for uneducated labour' (Oshima, 1987:68). The increase in the proportion employed shown in table 6.3 is due to increases in the employment for younger females as a result of increases in direct foreign investment in manufacturing sector jobs (Chandradasa and Schokman, 1994:24-27; Schokman and Alwis, 1994:28-32).

An interesting feature is the substantial increase in single member households during the period under consideration. These men and women were in the more mature age groups. The SE&LFS1985/86 recorded that at least 11 per cent of all the females surveyed were from single person households. According to the SE&LFS1985/86 at least 37 per cent of the females in the less than five member housing units came from single person units. Of single person units, at least 12 per cent of females were in the labour force, and 91 per cent of them employed. At least 86 per cent of females in single person households were aged more than thirty five years old.

6.6 UNEMPLOYMENT AND EDUCATION

Table 6.5 indicates the proportions of employed and unemployed in the working age population by age group and the level of education. At all levels of education and for all age groups, male participation in employment was much higher than female participation. The education expansion and development (Wignaraja, 1990:68-74) has resulted in a large number of females entering the labour force (Jones, 1992:35-42; Samarsinghe, 1989; Richards and Gunaratne, 1980:61-66; Jayaweera, 1979). The more educated women have a greater potential to earn a livelihood; they are more exposed to westernization through their education and less receptive to traditional values and attitudes which restrict women working away from home (Samarasinghe, 1989:66-74). There is increased societal and familial support for these women to enter the labour force (Mahadevan and Sumangala, 1987).

6.6.1 UNEMPLOYMENT AMONG JUNIOR SECONDARY AND HIGHER QUALIFIED PERSONS

A lagged effect of the increased participation of the 15-19 year age group in more years of schooling in Sri Lanka, has increased the participation of young adults with relatively higher levels of education (table 6.5). There is an increase in participation for those mostly with junior or senior secondary or higher levels of education. Unemployment has increased with education which is typical in less developed countries (Jones and Manning, 1992; Hugo, 1993; Jones, 1992).

In most circumstances the parents expect a return for the money that they invested in their children. In a transitional economy, more educated children were a source of additional income to the family. Thus there was support from the immediate family for educated females to enter the labour force. Caldwell, Reddy and Caldwell(1988:29-51) found that among South Indian villages, providing children with an education for an additional number of years was a means to secure adequate literacy and to get a non-farming occupation. Oshima (1987:342) argues that concerns for the future welfare of children in the context of the technological change that was taking place in Asian countries, would have promoted parents to invest in their children. According to Jones(1990a:487-533), among Malay populations in South East Asia the rapid expansion of education in the 1990's altered the value of children and perceptions, including those about women's roles. This strengthened the trend towards later age at marriage, and reduced the immediate economic contribution that the parents can expect from children.

Table 6.5
Proportions of Employed & Unemployed By the Level of Education, SES1969/70, SE&LFS1985/86, LFS 1990

		15-19 male	15-19 female	20-34 male	20-34 female	35+ male	35+ female
SES1969/70							
		Proportions per cent in Working Age					
No Schooling	employed	53.7	47.7	85.3	63.4	68.0	34.7
	unemployed	26.5	9.1	8.5	1.8	**	0.6
No. in Age Group		(177)	(375)	(340)	(1115)	(1190)	(3211)
Primary	employed	55.2	33.1	90.7	36.6	85.1	20.3
Primary	unemployed	27.2	8.0	7.7	2.9	1.0	**
No. in Age group		(943)	(977)	(2207)	(2012)	(3692)	(2414)
Junior Secondary	employed	17.8	5.9	75.1	11.5	86.8	10.8
	unemployed	18.6	8.8	19.8	11.0	1.2	0.7
No. in Age group		(1873)	(1784)	(2444)	(2268)	(3305)	(1532)
Senior Secondary	employed	7.8	3.6	66.9	23.1	84.3	40.2
	unemployed	22.8	23.6	18.9	25.6	**	**
No. in Age group		(268)	(335)	(1259)	(1175)	(831)	(420)
Degree & Above	employed	***	***	73.6	60.4	87.2	88.3
	unemployed	***	***	**	31.2	**	***
No. in Age gp		(**)	(**)	(53)	(48)	(94)	(17)
SE&LFS 1985/1986							
No Schooling	employed	55.4	39.3	82.8	45.0	65.4	28.9
	unemployed	12.9	11.1	5.5	4.3	2.1	1.6
No. in Age group		(334)	(440)	(641)	(1203)	(1613)	(4713)
Primary	employed	59.4	27.7	89.6	36.1	78.1	27.9
	unemployed	17.0	8.7	6.8	4.7	1.6	1.3
No. in Age group		(1093)	(864)	(2844)	(2968)	(5892)	(5181)
Junior secondary	employed	22.5	7.5	81.1	24.1	1.0	23.1
	unemployed	11.7	8.0	14.7	11.9	2.9	2.1
No. in Age group		(4327)	(4104)	(6792)	(6818)	(6917)	(5824)
Senior Secondary	employed	9.8	4.6	69.1	30.6	84.2	46.0
	unemployed	11.7	12.7	17.9	29.5	3.3	3.6
No. in Age group		(999)	(1175)	(3868)	(4587)	(3295)	(2478)
Degree & Above	employed	***	***	78.9	70.6	91.9	100.0
	unemployed	***	***	**	23.5	**	***
No. in Age group		(***)	(***)	(19)	(17)	(37)	(16)
LFS 1990/91							
No Schooling	employed	**	45.5	52.3	42.9	34.2	14.0
	unemployed	***	***	***	**	***	***
No. in Age group		(**)	(33)	(44)	(42)	(38)	(264)
Primary	employed	41.3	41.7	86.4	29.2	51.4	10.1
	unemployed	**	***	**	15.3	**	***
No. in Age group		(46)	(60)	(57)	(72)	(107)	(179)
Junior Secondary	employed	16.2	8.6	60.1	28.4	46.6	20.8
	unemployed	9.1	2.6	21.4	26.0	4.2	5.4
No. in Age group		(438)	(501)	(714)	(612)	(236)	(221)
Senior Secondary	employed	39.3	9.7	42.9	25.3	46.2	**
	unemployed	**	**	20.9	32.2	**	**
No. in Age group		(28)	(113)	(91)	(87)	(26)	(17)

Source: LFS1990/91, SE&LFS1985/86 & SES1969/70 Data Tapes;
Notes: Numbers in parentheses are work age population;
** cell size less than 10; *** no cases
There were only 7 cases with degree qualification in the working age population of LFS 1990 and 6 were employed

Since Independence in 1948 there has been a substantial growth in the Sri Lankan economy (Snodgrass, 1966:179; Karunatilake, 1987). Similar growth in the manufacturing industries and occupations associated with such industries have been seen since the 1970's (Karunatilake, 1987:124-136). Nevertheless, the level and pattern of that growth has not been adequate to absorb the output from the education system (Gunatilleke, 1991:1-26; Jayaweera, 1973:147-151). The economy needs to expand much more, creating more middle level occupations in areas where persons with a junior secondary level of education can be absorbed effectively.

Tables 6.6 and 6.7 indicate the proportions of unemployed persons with junior and senior secondary education. Over the period between 1969/70 and 1985/86 the participation of never-married women aged 20-34 years in more than five person households, with a junior secondary education had increased to at least 95 per cent of the age group and at least 45 per cent were unemployed. Never-married females coming from more than five person households had higher participation rates than those coming from leass than five person households. Evidently females from large families found it necessary to participate in economic activity because there was a need to contribute to the family income (Lim, 1971; 1993). Oshima(1987:317) contends that with more years of schooling, young people postpone marriage in order to work long enough to help with the family finances.

The reverse of the pattern observed for never-married females was seen for ever married females from smaller sized

Table 6.6
Proportions (Per Cent) of Employed and Unemployed in Working Age Population with Junior Secondary Level of Education by Household Size SES1969/70, SE&LFS1985/86, LFS1990/91

		Never-married		Ever Married	
		Less 5 person	More/Equal 5 person	Less 5 person	More/Equal 5 person
		SES1969/70			
15-19 years	Male employed	29.3	16.7	***	***
	unemployed	14.4	19.0	***	**
		(174)	(1692)	(**)	(**)
	Female employed	8.3	6.0	**	**
	unemployed	9.7	9.5	***	**
		(144)	(1548)	(33)	(59)
20-34 years	Male employed	73.0	63.1	99.6	92.7
	unemployed	20.2	29.3	***	6.4
		(248)	(1353)	(277)	(566)
	Female employed	24.8	17.4	7.0	7.7
	unemployed	16.0	27.1	**	2.8
		(125)	(734)	(325)	(1024)
		SE&LFS1985/1986			
15-19 years	Male employed	16.3	18.8	***	***
	unemployed	9.3	**	***	***
		(258)	(69)	(***)	(***)
	Female employed	10.9	**	***	**
	unemployed	1.4	***	***	**
		(294)	(85)	(27)	(**)
20-34 years	Male employed	65.1	62.5	80.0	70.5
	unemployed	25.9	26.6	**	**
		(255)	(64)	(80)	(44)
	Female employed	24.1	**	25.5	**
	unemployed	36.8	35.5	**	**
		(174)	(31)	(102)	(40)
		LFS1990/1991			
15-19 years	Male employed	16.3	18.8	***	***
	unemployed	9.3	**	***	***
		(258)	(69)	(***)	(***)
	Female employed	10.9	**	***	***
	unemployed	**	**	***	***
		(294)	(85)	(27)	(**)
20-34 years	Male employed	65.1	62.5	80.0	70.5
	unemployed	25.9	26.6	**	**
		(255)	(64)	(80)	(44)
	Female employed	24.1	**	25.5	**
	unemployed	36.8	35.5	**	**
		(174)	(31)	(102)	(40)

Sources: SES1969/70, SE&LFS1985/86, LFS1990/91
*** No cases ** Less than 10 cases
Numbers in parentheses are those in working age, of relative age, sex, marital status and household size groups.

families. Participation in employment or unemployment was higher for married women who came from less than five person households (Table 6.7). Among married women, increased education, as well as smaller family size induced higher participation (Yue, 1987:254-255). Nevertheless, unemployment was relatively higher for married women when compared to married males with the same level of education. This indicates the difficulty for a married women to enter into employment situations when competing with the males. Given the same level of education, a male would have been preferable to a female (ILO, 1993d:61).

Ever-married males from less than five person households and with junior secondary education had the highest participation rates and throughout the period their unemployment rates were very much lower than those of never-married males who had the same level of education. Unemployment for never-married males, irrespective of their household size, had in fact increased over the last 15 years though the rates were less when compared with the rates of never-married females. This again suggests that the output from educational institutions generally for both genders and for females particularly, was much more than the absorptive capacity of the transitional economy. The situation also reflects the inadequacy of employment avenues for females who entered the labour force with higher educational qualifications. This is a common pattern in less developed countries. Jones(1992:41) observes that a major issue faced in Asian countries is the 'expansion in number of workers with high levels of education, an expansion

Table 6.7
Proportions of Employed and Unemployed Young Adults in the Working Age Population with Senior Secondary Level of Education (Per Cent)

	Never Married		Ever Married	
	Household size		Household size	
	less than 5 persons	more/equal 5 persons	less than 5 persons	more/equal 5 persons
SES 1969/1970				
15-19				
male employed	**	7.8	*	**
unemployed	**	24.8	*	**
	(24)	(242)	(*)	(*)
female employed	**	2.4	*	*
unemployed	37.0	15.8	*	*
	(27)	(423)	(**)	(**)
20-34				
male employed	65.9	54.8	97.9	95.7
unemployed	19.0	25.7	**	**
	(126)	(801)	(97)	(235)
female employed	28.4	25.0	21.0	19.9
unemployed	32.3	38.0	7.0	6.3
	(102)	(608)	(143)	(331)
SE&LFS1985/86				
15-19				
male employed	8.6	11.6	*	*
unemployed	10.6	13.1	*	*
	(605)	(389)	(**)	(**)
female employed	4.1	5.3	**	*
unemployed	13.1	11.4	**	**
	(655)	(493)	(19)	(**)
20-34				
male employed	61.7	53.3	94.2	83.7
unemployed	22.9	22.8	5.0	12.2
	(2010)	(750)	(1010)	(98)
female employed	31.5	23.4	33.5	25.9
unemployed	41.3	42.9	11.0	15.4
	(1976)	(758)	(1652)	(201)

Source: SE&LFS 1985/1986 Data Tape
SES 1969/1970 Data Tape

Notes:
** Less than 10 cases in the cell group, * No cases
The numbers in brackets indicate the numbers in the age group and in the household category.
Sample sizes of the two surveys were different

likely to outstrip the growth in employment opportunities in the occupations into which such workers traditionally moved'.

In situations where the economy is not adequately developed to absorb the educational output, an obvious outcome of such an educational expansion is the increasing unemployment of more educated persons. Rising unemployment rates among senior secondary school levers in Asian countries have been focussed upon by several researchers (Mazumdar, 1981:265; Berry, 1980:177; Manning, 1989; Moore, 1981:97-105). The system of education in developing countries promoted the uncontrolled expansion of secondary and higher education (Blaug, 1974:14-26) and was more academic rather than technically oriented. Hence, such education was suited mostly to non-agricultural type of occupations[6]. Table 6.6 shows that irrespective of their marital status, there were more persons with a senior secondary level of education in less than five person households. The participation of never-married persons of both genders in the 15-19 age group was relatively lower than in other age groups, and the smaller proportion who participated were mostly unemployed.

According to the SE&LFS1985/86 the participation of never married females in the 20-34 age group with a senior secondary level of education, irrespective of the household size was concentrated more in unemployment than in employment. According to table 6.6, of the 72 per cent women

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6 During the last two decades the system of education had expanded in favour of technical and vocational education; accordingly there had been increased investment for technical and vocational education (National Planning Department, Public Investment Programme Series 1985-1994)

who participated from less than 5 person households, at least 40 per cent were unemployed. The situation was even worse for never-married women from more than five person households where of the 64 per cent who participated at least 47 per cent were unemployed.

According to table 6.6, participation of females with a degree and above level was highest among all educational levels for both points in time considered. Previous research confirms the high economic participation of graduate women (Wilson, 1975; Masinghe, 1991; Masinghe and Gunasekera, 1991). At least 85 per cent of those who participated with this level of education, were from less than five person households and a larger proportion of them were currently married women. In 1969/1970 only a quarter of the persons participating at this level came from less than five person households. During the period under consideration, unemployment had declined substantially for persons who entered the labour force with a university education.

According to the LFS 1990/1991, unemployment for those with a senior secondary or degree level of education as a proportion of the working age population with that qualification, had declined to insignificant levels. The additional employment created in the manufacturing sector, (See also Chapter 7) would have been adequate to absorb the backlog of unemployed with a senior secondary level of education. A large proportion of such employment was created in the garment manufacturing business mostly as sewing machine operators, where a high level of education was not needed to operate the machines. This evidence supports the contention that in a situation of educational transition

when a large number of educated persons are seeking jobs, there is a tendency for job screening to increase, where employers tend to absorb those who are have higher levels of education to jobs that need only a lesser level of education. In such a situation schooling acts as a screening device which helps employers to choose between people. As high productivity jobs become scarce, competition to get to the head of the labour queue intensifies and the amount of education needed increases (Psacharopoulos, 1987:143).

6.6.2 UNEMPLOYMENT AMONG PERSONS WITH NO SCHOOLING

A larger proportion of the working age population with no schooling were in the older age groups (table 6.4). This is attributed to the push down effect of the education expansion where the younger cohorts of the working age population reach higher educational levels (Jayaweera, 1979:71-73). This is a result of the nature of the educational expansion in Asian countries (Jones, 1992:1-48). The participation rates of females with no schooling were relatively higher than those for other educational levels except the degree level. Among the younger age groups, in the working age population and in labour force the numbers were lower for those with no schooling than for other levels of education. This is an indication of the increased level of literacy after the commencement of the education transition. During both survey years, participation of those with no schooling was highest for males and females in the 20-34 age group with a small proportion unemployed. The possibility is that they are from low income segments, who either have not gone to school at all or have dropped out in the first year of

schooling. Their employment aspirations are low and therefore they accept available jobs which would be mostly casual labour in labour intensive industries including agriculture. Participation of ever married women who had no schooling, and who came from more than five member households declined during the period.

According to SES69/70 never-married females and males with a primary level of education in the 20-34 age group and from less than five person households had a higher participation rate relative to the other age groups. However the numbers unemployed at this level of education were insignificant, as the cell size of women unemployed in the 15-19 and 20-34 age groups was less than ten. The SE&LFS1985/86 show that the participation rates for females with primary education had declined for all age groups. The decline is more noticeable for those from more than five person households and for the 15-19 age group. This again is an indication of younger persons opting to remain in school for further education.

The analysis of participation in unemployment by the level of education indicates a 'u' shaped pattern. Such a pattern suggests lower unemployment rates at the lower levels of education, ie. at the no schooling and primary levels, higher unemployment rates at the junior secondary and senior secondary levels and lower unemployment rates at the graduate levels of education. However this pattern was

not established in the LFS1990/1991. Berry(1980:177) commenting on the 'U' shaped relation between the unemployment rate and the educational level said that this pattern is seen because of the different age composition of these groups. According to him a person with no schooling starts seeking work much earlier than a person who attained a secondary level of education. The average unemployment rate that he calculated showed that the unemployment rate a person would suffer over a normal working career[7] was virtually the same for secondary graduates as for primary graduates.

6.7 ETHNIC CHARACTERISTICS OF UNEMPLOYED PERSONS

Table 6.8 indicates labour force participation rates by ethnicity. In 1985/86 the highest participation of approximately 50, is recorded for females in the 20-34 age group of the Sinhala community. High rates of participation associated with the Sinhala Community are not merely because of their numerical advantage. Locationally and historically they had the advantage to assimilate to several transitional changes that occurred in the country (De Silva, 1977:98-99). Increased exposure to 'westernization' tends towards a relaxation of traditional occupational values in favour of modern sector values. However, at least one fifth of Sinhala women were unemployed. Differences in participation between Sinhala and Tamil communities is also due to paucity of data caused by the inability to conduct the SE&LFS1985/86 (Department of Census and Statistics, 1987a, 29) in Vavuniya and Killinochchi Districts and LFS1990/1991 in

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7 Berry 1980:177 defines a normal working career as from labour force entry to age 65.

Table 6.8
Proportions Employed and Unemployed in Ethnic Communities (Per cent)

	Sinhalese			Tamil			Moor		
	employed	unemployed		employed	unemployed		employed	unemployed	
Age Groups									
SES1969/70									
15-19 male	25.4	21.1	(2038)	38.9	**	(919)	31.1	21.0	(305)
female	10.4	11.8	(2127)	38.7	**	(980)	15.3	**	(365)
20-34 male	75.6	17.7	(3683)	57.7	6.8	(3008)	82.8	12.0	(592)
female	18.5	13.8	(3972)	56.4	3.2	(2103)	10.6	**	(538)
35+ male	83.3	1.0	(5008)	82.4	**	(2408)	90.9	**	(636)
female	20.0	0.6	(4829)	43.3	**	(2095)	11.9	**	(670)
total male	69.6	10.6	(10729)	64.4	4.6	(6335)	75.9	9.4	(1533)
female	17.9	7.6	(10928)	47.7	2.8	(5178)	12.3	3.6	(1573)
SE&LFS 1985/1986									
15-19 male	25.6	13.6	(4769)	36.4	11.0	(935)	32.1	11.5	(764)
female	10.9	10.0	(4526)	12.2	5.4	(974)	6.3	5.8	(778)
20-34 male	78.8	14.8	(10191)	83.4	10.5	(1781)	77.9	13.0	(1503)
female	31.2	18.5	(11103)	25.9	6.6	(2139)	11.6	6.3	(1607)
35+ male	80.1	3.0	(12725)	76.9	2.3	(2518)	75.5	4.1	(1622)
female	31.1	2.1	(13154)	24.5	1.4	(2642)	10.9	2.0	(1604)
total male	70.2	8.9	(27685)	71.9	5.0	(5234)	67.9	9.0	(3889)
female	28.0	9.6	(28783)	23.0	4.0	(5755)	10.3	4.5	(3989)
LFS 1990/1991									
15-19 male	16.3	12.9	(404)	**	***	(78)	69.7	***	(33)
female	13.3	3.1	(490)	16.7	***	(72)	**	***	(56)
20-34 male	63.6	23.7	(624)	26.6	**	(109)	51.7	10.8	(176)
female	29.9	29.1	(625)	13.9	**	(137)	22.7	18.2	(66)
35+ male	47.7	3.6	(281)	18.6	***	(70)	27.4	**	(62)
female	17.5	2.9	(486)	14.8	***	(115)	13.6	***	(81)
total male	45.6	16.0	(1309)	7.8	**	(257)	7.0	55.4	(271)
female	21.0	13.2	(1601)	7.0	***	(115)	5.9	22.7	(203)

Sources:SES1969/70, SE&LFS1985/86, LFS1990/91 Data Tapes: Notes: Figures in parentheses are total numbers of working age population in the respective community and age group

the Northern and Eastern provinces (Department of Census and Statistics, 1991c:1). When the Tamil ethnic group is further differentiated by Sri Lankan Tamil and Indian Tamil, the participation of Sri Lankan Tamils shows an increase, for all age groups except for males aged 35 years and above, whose participation had declined slightly, and males aged 15-19. While unemployment for this age group had declined

over the period under consideration, employment had increased.

Among ethnic communities, high participation in economic activity and higher employment rates have been observed to exist among Indian Tamil women (Wilson, 1975:68; 1981). The SES1969/70 confirms the previous finding of high levels of participation of Indian Tamil women and shows that 98 per cent of women aged 20-34 years participated in economic activity with approximately 88 per cent in employment. The high rate of employment among this ethnic community is attributed to it being the 'preferred ethnic community' over all the others for work in tea estates[8] (Richards and Gunaratne, 1980; Kurian, 1985; Hollup, 1993:71). During the British colonial rule and even after Independence, large numbers of Indian Tamils were brought down to work in tea plantations (Snodgrass, 1966:6-7; Gooneratne and Wesumperuma, 1984:87-97; Kurien, 1985; Hollup, 1993:71). However, the participation rates of Indian Tamil women in employment had declined substantially according to the SE&LFS1985/86 (See Annex 6.A). In recent years, large numbers of Indian Tamils were sent back to India under repatriation programmes (Department of Census and Statistics, 1983a:42; Gooneratne and Wesumaperuma, 1984:135-155). Even though there is no specific evidence emerging from the SE&LFS1985/86 to suggest that repatriation programmes would have affected the participation of Indian Tamil females, one can surmise that it may be the key issue.

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8 High participation of this group of women is also attributed to their cultural background coming from low caste, low income South Indian villages; they were less demanding in terms of employment facilities and willing to work under any working conditions (Richards and Gunaratne 1980: Kurian, 1985:).

An interesting development shown in SE&LFS1985/86 data is that at least 40 per cent of Indian Tamil women aged 20-34 years were found outside the estate sector. More than a quarter of the 15-19 age group, and at least twenty per cent of the 35 and above age group were also found in urban and rural areas. Labour force participation of the Indian Tamil females who migrated to urban and rural areas was relatively low[9].

Participation rates in employment and unemployment were relatively low for females of the 'Moor and Others' ethnic community[10]. Moor males aged 20-34 years participated more in employment than any other ethnic group of the same age. This may be because most of the Muslims in the private sector are engaged in occupations associated with the sales sector or mining. A contrast is observed with regard to females of the same age group whose participation was lower when compared to participation of other ethnic groups. The traditional attitudes towards Muslim female labour force participation such as their working away from their houses, are not as relaxed as in other communities. Ismail(1989:30-42) attributes such traditionalism to powerful and influential Islamic fundamentalist groups. Muslim women were much less exposed to education than women from other ethnic communities, in spite of the availability of free education

9 Such a process occurred due to several reasons. The Indian Tamil women are benefiting from the free education system and therefore they are capable of integrating more into the community as their occupational values have changed. The second reason may be that they are integrated more into the local community because they now have citizenship rights. Therefore a substantial proportion of them are migrating to urban areas and marrying persons who are not employed in the plantations.

10 Ismail (1989:30-42) alleges that in rural areas Muslim peasant women work 16 to 18 hours a day and that in urban areas they are under privileged.

facilities. Therefore, they are the least affected by the unemployment problem.

6.8 UNEMPLOYMENT AND HOUSEHOLD STATUS OF THE INDIVIDUAL

Table 6.9 indicates labour force participation by family status of the individual in the household. The rates are differentiated by employment and unemployment. The household status is examined in terms of the head of the household and the relationship of the other members of the household to the head of the household. The members of the family considered here other than the head of the household are, spouse, children, parents and others. The 'others' category comprises, other relatives, domestic servants, boarders, lodgers and others.

Irrespective of status in the household, male participation was found to be higher than female participation. This is in accordance with male participation patterns in patriarchal societies and a large proportion of activities performed by women particularly in developing countries not being counted as economic activity in labour force analysis (Wilson 1975:55; Boserup, 1977; Ware, 1981:212). Participation of males in unemployment was quite low for the 20-34 age group and the numbers were insignificant when they were classified as spouses. However participation in unemployment was substantially higher for males aged 20-34 years who participated as children and one out of every five in this age group was unemployed. This is a lagged effect of the sustained high fertility regime in the first phase of demographic transition resulting in high population growth (Wilson, 1975:201; see also Chapter Four).

Table 6.9
Labour Force Participation by Household Status
Socio Economic and Labour Force Survey (SE&LFS) 1985/86

Age Group	Head	Spouse	children	others
15-19 male employed	**	*	27.1	36.1
unemployed	**	*	12.6	12.8
	(**)	(*)	(5938)	(807)
female employed	**	**	10.1	20.0
unemployed	**	*	9.4	8.1
	(**)	(161)	(5564)	(853)
20-34 male employed	97.3	96.7	72.6	83.1
unemployed	2.1	**	20.2	13.2
	(353)	(120)	(8332)	(1788)
female employed	44.3	30.2	28.3	30.3
unemployed	5.8	4.2	26.8	13.3
	(539)	(6225)	(6635)	(2177)
35+ male employed	81.6	68.6	81.1	58.7
unemployed	2.0	2.5	8.4	3.5
	(14810)	(395)	(919)	(1593)
female employed	31.8	30.2	38.6	16.5
unemployed	1.9	1.5	8.7	1.4
	(4190)	(10569)	(907)	(2530)
Total male employed	84.9	68.7	56.5	62.3
unemployed	2.0	**	16.6	10.7
	(18723)	(515)	(15189)	(4188)
female employed	33.2	30.1	21.3	22.4
unemployed	2.3	2.5	18.2	7.1
	(4734)	(16955)	(13106)	(5560)
LFS1990/91				
15-19 male employed	*	**	15.1	28.5
unemployed	*	*	11.7	5.4
	(*)	(**)	(383)	(130)
female employed	*	*	8.1	34.0
unemployed	*	*	3.3	*
	(**)	(14)	(459)	(141)
20-34 male employed	**	**	56.0	68.3
unemployed	**	**	21.9	14.6
	(**)	(15)	(529)	(357)
female employed	**	27.1	28.2	60.5
unemployed	**	**	26.4	25.2
	(14)	(85)	(432)	(309)
35+ male employed	45.7	**	91.3	6.8
unemployed	**	*	*	3.2
	(35)	(39)	(23)	(316)
female employed	**	28.0	58.0	47.0
unemployed	**	**	**	**
	(41)	(100)	(50)	(491)
Total male employed	48.8	28.6	40.1	53.4
unemployed	**	**	17.2	8.6
	(43)	(56)	(935)	(803)
female employed	**	25.6	20.0	16.3
unemployed	*	5.0	14.4	8.8
	(59)	(199)	(941)	(941)

Sources: SE&LFS 1985/1986, LFS 1990/1991 Data Tapes

Notes: ** less than 10 cases, * No cases

() total numbers in the age group in the category

Participation of females, as children of the head of household was higher than if they were heads of households or spouses. The status in the family of a large majority of persons in the 15-19 and 20-34 age groups was as the children of the head of the household. They were largely never-married and participated in unemployment. Females had a total participation of 47 per cent when they were heads of households and 37 per cent in employment as spouses, while they had a participation rate of 53 per cent with half of them participating in unemployment when they were children of the head of household. Even for the 35 plus age group, participation of females as head of households was less than when they participated as children of the head of the household. The total numbers, as well as participation rates of those whose family status was parents were comparatively low. Almost all of them were more than 35 years of age.

6.9 SOURCES OF SUPPORT DURING UNEMPLOYMENT

Table 6.11 indicates the sources of support for persons who were unemployed. Sources of support during the period of unemployment are a crucial factor for the unemployed to stay alive and perhaps maintain a family during the period of unemployment. In most developed countries such support for the unemployed is available from the social welfare mechanisms prevailing in the country. In the case of Sri Lanka, such welfare mechanisms are not available[11], thus

11 Since 1990 the government had started a poverty alleviation programme where the Government offered a grant of Rs 25,000 to a proportion of the poorest families in the country. It was expected that this money should be used for starting of a self employment project while part of it was used as a living allowance for the poor. Even though this would have helped the unemployed in the lowest income categories this was not a unemployment benefit scheme.

the main source of support must come from the family. Table 6.10 shows that a large proportion of the unemployed received

Table 6.11

Sources of Support for Members of the Family During Unemployment, SE&LFS1985/86, LFS1990/91

	Family related sources		**Other sources**	
	Recipient child in family	Recipient all members in family	all members in family	Number in age group unemployed
	(percentage of total unemployed			
	SE&LFS1985/86			
15-19				
male	73.3	83.8	3.4	853
female	70.5	80.5	**	601
20-34				
male	71.8	83.7	7.9	1920
female	67.1	86.2	1.8	2356
35+				
male	11.8	43.9	23.8	442
female	19.8	51.5	6.5	355
total				
male	64.4	78.3	8.9	3215
female	62.6	81.5	2.2	3312
	LFS 1990/1991			
15-19				
male	78.8	92.3	**	52
female	100.0	100.0	***	15
20-34				
male	64.4	94.9	**	174
female	49.0	89.4	11.0	200
35+				
male	***	100.0	***	14
female	**	100.0	***	14
Total	63.8	94.6	**	240
	52.4	90.4	9.6	229

Sources: SE&LFS1985/86 Data Tape
LFS 1990/1991 Data Tape

Notes: All members include all other members in the family
** number of cases less than 10 in the cell
*** No cases

support from the family during the period of their unemployment. According to the SE&LFS1985/86 approximately 78 per cent of male children aged 15-19 years who were unemployed had support during unemployment and at least 72

per cent of such support came from the family. There were several reasons why such support came from the family.

The family status of a large proportion of the unemployed, being the children in the household was one of the main reasons why they received support from the family. It can be argued that in spite of the nucleation of the family through declining family size, traditional values of the family were still upheld. The family was willing to support the unemployed children until they found suitable means of livelihood. A second reason for supporting unemployed children is the parental aspirations towards employment of their children. Most of them had either a junior secondary or above level of education. The parents would want to support the children until they were able to enter into desirable employment or realise their job aspirations.

The argument that there is a persistence of cultural values of the family in transitional societies (Kannappan, 1983), is supported by the fact that family support had been extended to members of the household who are not directly in 'the family'. Support has been extended to the 'others' category who were unemployed. Irrespective of their age, the 'others' category which included other relatives, boarders, lodgers and servants received support from their family. They were the second main category who received support from the family during their unemployment however female children seem to have got slightly more support than males in this category. This again shows the persistence of traditional cultural values, while also adopting modern economic concepts. Support and protection of females in the family is

a traditional value while allowing or expecting them to make a livelihood is a modern economic concept. In case of females, 83 per cent had received support and all of it came from the family. Unemployed women who were spouses also received support from their family. Nearly three fourths of married women of this category received support from their family and parents during unemployment.

6.10 OCCUPATIONAL PREFERENCES OF THE UNEMPLOYED

Table 6.11 indicates occupational preferences of the employed and unemployed population and table 6.12 indicates the occupational preferences of unemployed persons by duration of unemployment and their level of education. Occupational preferences indicate the effect of economic modernisation on the job aspirations of the potential workers. Occupational preferences of males and females in the younger age group 15-19 years seem similar in their desire for production and related occupations. Approximately two fifths of males and females in this age group preferred this type of occupation. However in the 20-34 age group, the proportion of males preferring production and related occupations was more than for females.

Older age groups, particularly females opted for white collar work. This is a lagged effect of education on labour force entry. These persons have been retained for a long duration in education and are older when they enter the labour force. The arts based education available in most schools increases aspirations for white collar work (see section 5.7.3). The proportions of more educated females opting for white collar jobs was distinctly higher than for males. This is a result of increased participation of

Table 6.11
Occupations of Employed and Occupational Preferences of Unemployed as Proportions of Working Age Population: SE&LFS 1985/1986 and LFS 1990/1991

		White collar	Services	Agriculture	Production	Total	Population aged 15+ years
SE&LFS1985/86							
15-19							
males	employed	3.1	1.2	5.3	17.5	27.1	6753
	preferred	0.2	**	0.5	1.5	2.3	
females	employed	0.5	1.7	1.5	7.7	11.3	6583
	preferred	**	**	0.2	0.8	1.1	
20-34							
males	employed	16.6	3.2	11.7	44.2	75.8	14145
	preferred	0.3	**	0.5	1.2	2.0	
females	employed	7.3	1.5	3.6	16.3	28.7	15576
	preferred	0.2	**	0.4	0.7	1.3	
35+							
males	employed	18.5	3.6	14.3	38.7	75.0	17717
	preferred	0.1	**	0.2	0.4	0.7	
females	employed	7.2	1.6	3.9	15.3	28.1	18196
	preferred	**	**	0.2	0.4	0.6	
LFS 1990/1991							
15-19							
males	employed	***	5.2	2.7	10.9	18.8	515
	preferred	6.4	**	***	2.9	10.1	
females	employed	**	***	1.6	11.3	13.8	618
	preferred	1.7	***	***	***	2.4	
20-34							
males	employed	6.7	16.0	6.6	31.2	60.5	909
	preferred	10.7	2.5	***	5.9	19.1	
females	employed	10.7	1.7	**	16.3	29.7	828
	preferred	15.8	**	***	7.4	24.2	
35+							
males	employed	5.5	6.8	7.3	27.4	47.0	413
	preferred	**	**	***	**	3.4	
females	employed	2.5	2.1	2.1	9.2	15.8	
	preferred	**	***	***	**	2.1	

Sources SE&LF 1985/1986 Data Tape
LFS 1990/1991 Data Tape

Notes: White collar occupations comprise 0-4 main occupational categories of ISCO: ie. Professional, Administrative, Clerical and Related and Sales Workers.

Service occupations comprise ISCO main category 5

Agriculture comprise category number 6 of ISCO includes agriculture, animal husbandry, hunting and fishing

Production comprise categories 7,8,9 of ISCO

Preferred category contains occupational preferences of the unemployed persons
The proportions are expressed as percentages of 15+ working age population

females in further education. In the 20-34 age group where participation in unemployment was high, at least a quarter of males and closer to half of females who were unemployed opted for white collar employment[12].

With the expansion of technical education[13] in Sri Lanka, more men and women with technical and vocational skills entered the labour force, increasing the demand for technically oriented production sector jobs. A larger proportion of men and women with lower educational qualifications as well as a substantial proportion of those with higher educational qualifications, had opted for production and related occupations (table 6.12). The LFS1990/91 shows that all men and women with a junior secondary or lower level of education preferred production and related jobs. The SE&LFS1985/86 shows that most of the men opted for mechanical jobs, precision or light electrical jobs. The changing occupational preferences in favour of non-agricultural occupations reflects changing occupational structure in employment. As discussed earlier, a large majority of the unemployed who were new entrants with junior and senior secondary qualifications aspired for non-traditional occupations. This is a departure from traditional employment avenues in the agricultural sector which provided employment for most of the new entrants to the labour market in the traditional society. The SE&LFS1985/86 shows relatively low preference for

12 This comment is based on results of further analysis of occupational preferences by age groups (SE&LFS1985/86).
13 From the early 1980's investment on technical education had increased (NPD, 1982-1993). From that period it was the policy of the government to increase the intake to the technical colleges in order to export skilled workers mainly to Middle Eastern Countries in order to increase employment and obtain foreign exchange for the country.

Table 6.12

Job Preferences of the Unemployed by Educational Attainment and Duration of Unemployment (15-34 age group)
SE&LFS 1985/1986, LFS 1990 (a percentage distribution)

	White Collar	Agriculture	Production	ID	Total %	Number
SE&LFS1985/86						
6 months and less						
Junior secondary & less						
males	21.5	7.7	68.7	2.1	97.9	(1529)
females	27.4	9.5	61.3	1.9	98.1	(968)
Senior secondary & more						
males	53.7	0.9	41.7	3.7	96.3	(700)
females	76.6	0.7	20.9	1.8	98.2	(1259)
Total duration						
Junior secondary & less						
males	21.4	8.3	68.1	2.2	97.8	(1753)
females	26.2	9.6	62.5	1.7	98.3	(1183)
senior secondary & more						
males	53.3	0.9	42.1	3.6	96.4	(750)
females	75.7	0.7	21.8	1.8	98.2	(1382)
LFS 1990/1991						
6 months & less						
Junior secondary & less						
males	**	***	84.6	***	100.0	(70)
females	***	***	100.0	***	100.0	(10)
Senior secondary & more						
males	**	***	***	***	100.0	(4)
females	100.0	***	***	***	100.0	(10)
Total duration						
Junior secondary & less						
males	58.3	***	41.7	***	100.0	(96)
females	37.3	***	62.7	***	100.0	(75)
Senior secondary & more						
males	89.9	***	**	***	100.0	(89)
females	100.0	***	***	***	100.0	(85)

Source: SE&LFS 1985/1986 Data Tape
LFS1990/91 Data Tape

Notes: The white collar occupations include service category occupations
Row percentages add up to 100
In SE&LFS1985/86 the total unemployed includes those who had not responded to the preference question; therefore the cell percentages do not add up to 100.
** - cell number is less than 10; *** - cell number is zero.

ID - indicates inadequately described

agricultural occupations. For example the preferences for agricultural jobs according to the SE&LFS1985/86 was insignificant, except in the case of females aged 20-34

years where there were 12 cases who opted for tea plucking (5 cases), agricultural labour (5 cases) and paddy cultivators (two cases). According to table 6.11 the LFS1990/91 shows no preferences at all for agricultural occupations.

Prolonged waiting periods for employment of the more educated persons are often associated with preferences for white collar jobs. This is a result of the slow demand for white collar jobs from the economy in relation to the numbers who aspire for white collar occupations (Jayaweera, 1979). The white collar occupations are associated with professional and technical occupations (mostly teaching jobs), clerical, sales, and service related occupations. In the case of Sri Lanka, the two surveys show that while the job preferences of the more educated are similar in their opting for white collar work, the duration of unemployment is different. The former survey (SE&LFS1985/86) shows that a larger proportion of the more educated who opted for white collar jobs had been waiting for less than six months. The latter survey shows that the more educated opted mostly for white collar occupations and all of them were waiting for more than six months. According to the LFS1990/91, approximately 90 per cent of males and all the unemployed females with a senior secondary or higher education level opted for white collar occupations. These aspirations were not met because the economic growth trends since the late 1980s were more in the manufacturing sector than in service sector (see Chapter Four).

6.11 A MULTIPLE REGRESSION ANALYSIS APPROACH: UNEMPLOYMENT AND ITS RELATIONSHIP TO THE CHARACTERISTICS OF THE INDIVIDUAL

Table 6.13 provides a summary of the characteristics investigated and the variables used for the regression

Table 6.13
Variables Used For the Regression Analysis

Dependent variable:-	Unemployed (currently not working and seeking work)
Characteristic Investigated	Independent Variables
Demographic	age, sex, marital status
Cultural	ethnicity, religion, sector
Family Related Background	household size, support during unemployment, household status
Economic	Education level, occupational preference, Duration of search for employment

Source: SE&LFS1985/86 Data Tape

analysis and table 6.14 indicates the results of the regression analysis. A multiple regression analysis using the logit method was undertaken to understand the nature of the relationships of the independent variable to the dependent variables. The analysis seeks to identify the subset of independent variables that have a strong relationship to a person's unemployment. The proposition examined is that the unemployment situation of a person could largely be explained by that person's demographic, cultural and family related characteristics. The selection criteria for the variables in this study and the reasons for using the multiple regression logit probate method were

discussed in Chapter Two. Chapter Two also examines the dichotomous attributes of the dependent and independent variables where it is applicable.

6.11.1 DEMOGRAPHIC CHARACTERISTICS

6.11.1.1 AGE, SEX AND MARITAL STATUS VARIABLES

For all combinations of variables there was a strong likelihood of unemployment for the 15-19 and 20-24 age groups and the result was significant at 95 per cent confidence level. There was a likelihood of unemployment for the 25-29 age group but the result was not significant. Unemployment was less likely among the 30-34 age group and the result was significant. This means that there was a strong likelihood of young adults being unemployed. Persons below the age of 25 years in the labour force enumerated in the SE&LFS1985/86 are from birth cohorts of the early transition period commencing from the late 1950s, when mortality declined greatly and fertility levels remained high and constant. The lagged effect of such population growth patterns of the early transition period in Sri Lanka, on the labour force is seen with an increase in the labour force participation and the strong likelihood of unemployment for the young age groups show that such participation is in unemployment. The result supports the theoretical stance taken in this study, that due to the lagged effects of the high and persistent fertility regime of the early demographic transition and also to the declining fertility regime of the first phase of fertility transition, the incidence of young persons entering the labour force has been high and because the economy has not been developed enough to receive this increase in labour

Table 6.14
Likelihood of Unemployment in Sri Lanka
(Results of Regression analysis)

Variable Name	Females B Coeff	T Val	Sig	Both genders B Coeff	T Val	Sig
Intercept	3.920	29.071	***	4.216	64.612	***
AGE 15-19	.066	1.974	**	.235	11.633	***
20-24	.107	1.883	**	.133	1.648	**
25-29	.014	.311	ns	- .061	-1.758	**
30-34	.163	-3.092	***	.094	.957	**
(SEX) females				.375	5.498	***
(MST) Marital status status						
Never married	.097	1.278	*	.111	.569	***
widowed/divorced/sep	-.058	-.744	ns	.375	5.117	***
Currently married	-.305	-5.710	***	-.336	-4.318	***
(HSIZE) Household size						
Less than or equal 5	-.223	-3.298	***	.106	3.058	***
More than 5	.264	3.675	***	.123	3.544	***
(HEH) Household status						
head of house	-.169	-2.119	***	-.209	-3.875	***
Spouse	-.133	-1.935	**	.169	2.403	***
child	.100	1.361	*	.063	1.553	*
(FAS) Support in unemployment						
from family	2.038	28.671	***	1.811	52.914	***
(RCE) Race						
Sinhala	.012	.159	ns	.238	3.518	***
Tamil	-.240	-2.559	***	-.286	-2.450	***
Indian Tamil	-.283	-4.845	***	-.196	-4.830	***
Muslim	.468	1.200	ns	-.364	-1.841	**
(REL) Religion						
Buddhist	-.246	-2.668	***	.117	2.964	***
Hindu	-.101	-.978	ns	-.188	-2.823	***
Islam	-.368	-1.006	ns	.347	1.782	*
Christian	.144	1.355	*	.247	2.286	**
(SECT) Sector						
rural	-.282	-4.799	***	-.336	-10.820	***
urban	.213	3.777	***	-.147	-2.077	**
estate	-.127	-2.214	***	-.191	-1.748	**
(EDUC) Education						
no schooling	.314	1.991	**	-.106	-1.223	ns
primary	-.264	-2.978	***	-.350	-16.120	***
junior secondary	-.074	-1.463	*	-.074	-2.618	***
senior secondary	.184	3.111	***	.061	.797	ns
degree and above	.330	1.239	*	.047	.615	ns
Duration of Unemployment						
6 months or less	-.106	-2.496	***	.104	2.434	***
more than 6 months	-.084	-1.095	ns			
(V51R) Occupational Preference						
professional & Related	.166	1.340	*	.274	2.599	***
clerical	.175	2.384	***	.974	33.240	***
Sales	.153	-.978	ns	.044	.686	ns
production	-.127	-2.214	***	-.126	-4.181	***

Source: SE&LFS 1985/1986 Data Tape
Notes: significant at following confidence levels
* -at 90 per cent; ** -at 95 per cent; *** -at 99 per cent
ns - Not Significant
B coeff - Beta coifficient
T Val - T value; Sig L - Significance Level

supply, large numbers have ended in unemployment. Therefore in this situation, the age of the unemployed person is an important characteristic. The likelihood of unemployment was positive, but not significant for the 25-29 age group but negative and significant for the 30-34 age group. This result further confirms that involuntary unemployment is primarily a problem for the younger age groups in Sri Lanka.

The likelihood of women being unemployed was highly significant at 99 per cent for all combinations of variables. This finding is also in accordance with the hypothesis tested that the demographic characteristic of gender, ie. in this instance the fact of being a female, is important to explain a person's unemployment situation in the transitional society.

When tested for marital status, the likelihood of never-married females in the 20-34 age group being unemployed was positive and strongly significant. The result was equally strong when tested for never-married females (significant at 90 per cent confidence level) and for all combinations of variables. The magnitude of the regression coefficient for currently single women declined slightly when the level of education changed. It was shown in the previous chapter that an important characteristic of fertility decline in Sri Lanka was the delayed age at marriage. The potential for labour force participation of never-married young female increased due to the immediate effects of the early fertility transition on labour force participation of young adult women. As there were not enough employment avenues to absorb these additional entrants to

the labour force, such increases in participation had resulted mostly in unemployment. These findings support the proposition examined in this chapter that the demographic characteristics, ie. age, sex and marital status of an individual are important to explain the current unemployment situation of the individual.

6.11.2 CULTURAL CHARACTERISTICS

6.11.2.1 ETHNICITY

One of the variables tested to examine the relationship between unemployment and the cultural characteristics of a person was ethnic background. It was assumed that each ethnic community in Sri Lanka has its own cultural identity and value systems which could affect labour force participation, particularly that of young adult women. Due to exposure to 'westernization'(Caldwell, 1982) brought in by modern education and modern communication systems, the values and attitudes of younger generations have changed (Wickramaratne, 1977:165-186; Jayaweera, 1979:131-154; 1993; Samarasinghe, 1989). For the three major ethnic communities the effects of ethnicity on the likelihood of being unemployed were different. The likelihood of a Sinhala never-married females in the 15-34 age group being in unemployment was positive, but not significant. When tested separately for the 15-19, 20-24, 25-29 and 30-34 age groups of the same ethnic community, the likelihood coefficient was still positive and significant at 95 per cent confidence for all age groups. This result is compatible with the analysis in Section 6.7 of this chapter. The probability of Tamil women being unemployed was negative and significant. This is partly because of the small

proportion of Tamil women in the sample and the higher proportion of Tamil women employed in the estate sector. This result is in accordance with the results indicated in cross tabulations which point out that participation in employment was higher for Tamil women than for Sinhala women. When checked for Sri Lankan Tamils in the 15-34 age group, the coefficient was still negative and strongly significant. For Muslim women the likelihood of unemployment was positive but not significant and this is an indication of the increased participation of Muslim women in economic activity. Nevertheless, cross tabulation analysis showed that their participation was comparatively lower when compared to other ethnic communities. This is consistent with the analysis presented in Section 6.7 of this chapter. The findings from the regression analysis provide an insight into understanding differences in unemployment among ethnic communities.

6.11.3 FAMILY RELATED CHARACTERISTICS

The availability of support from the family for survival during the period of unemployment (FAS) was the first variable tested in this regard. FAS was strongly and positively related to an individual's unemployment situation and significant at 99 per cent confidence level. Family support came from the parents, relations and other members in the family. Such family support was very significant for unemployed women of junior secondary, senior secondary and higher levels of education. This finding confirms the theoretical stance that during the course of the educational transition parents will be persuaded to educate their children more, and that along with higher levels of

education the expectation of parents for their siblings increases. Thus the family support is available, particularly for the more educated children.

A second family related variable tested was the relationship of a person's household size (HHS) with his/her unemployment situation. The likelihood of women from households with less than five members being unemployed was less and significant at 99 per cent confidence level, while there was a strong likelihood of women from more than five person households being unemployed. However, household size may not have been an efficient measure of nucleation of family or fertility decline among women and the consequent increase in labour force participation of women.

A third family related variable to be tested was the status of the unemployed person in the family, ie. the likelihood of being unemployed for different members of the family. The coefficient was negative and significant at 95 per cent confidence level for 'head of the household' or 'spouse', but positive and significant for 'children'. When the status of the unemployed individual was 'a child' of the head of the household, the educational level was junior secondary or senior secondary and the preferred type of employment was production, professional or technical type of work, the likelihood ratio was positive and was significant. This result is in accordance with the previous finding that the likelihood of unemployment is higher for younger age groups and is due to the higher participation of females in the younger age group who were unable to find employment. Jayaweera, (1979:151-152) argued that the strong link established between educational achievement and

employment had been a barrier to flexibility in occupational choice. Since the 1970's when Jayaweera made this comment, the flexibility in occupational choice has expanded due to various technical and vocational education programs, as well as evaluation techniques introduced into the education system. Nevertheless, 'the education has outpaced economic development and has become dysfunctional in a lagging economy' which is experiencing the lagged effects of previous high rates of population growth and there is still a critical unemployment problem for educated young persons.

6.11.4 ECONOMIC CHARACTERISTICS

The level of education of the person was one of the economic variables chosen to test the hypothesis that 'demographic, cultural and familial characteristics are more important to explain a person's unemployment situation'. The level of education of a person denotes the potential wage income (ie. the income that the person is capable of earning, if that person enters wage employment) (Hinchiliffe, 1987:141-146). An educated person aspiring to enter employment is largely influenced by the occupations of those who have the same level of education and their income. The analysis in this study shows that the likelihood of being unemployed for persons with a junior and senior secondary level of education was positive and significant. The result was also positive and significant when tested for preference for white collar jobs among the age groups 25-29 and 30-34 years and the familial support for the unemployed. These two age groups comprise the smaller proportion of the 'hard core unemployed' who prefer to wait for a longer period than others until they are able to get their

preferred occupation [14]. The results shown for the younger age groups who comprise a larger proportion of the unemployed, support the proposition that demographic characteristics are important to understand the unemployment situation of a person. For these age groups more important than a potential income, the supply of labour without a parallel demand for such labour is an effect of a lagged effect of high population growth period. Such high growth had been determined by demographic factors associated with the several stages of the demographic transition which has taken place in Sri Lanka.

Another economic variable that was used was the job preferences of the unemployed females. The likelihood of unemployment for women aged 15-34 years who preferred occupations in professional, clerical and production related work was positive and significant for all combinations of variables. The likelihood of unemployment was positive and highly significant at 99 per cent confidence level for females who preferred professional, technical and related occupations. In addition, the result was the same for production and related occupations. These results suggest that while demographic, cultural and familial characteristics of a person are more important to explain a person's unemployment situation, economic characteristics also are equally important to explain the current unemployment situation of a person.

These results support the theoretical stance taken in this study that the transitional nature of the society is an

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14 This comment is based on detailed analysis of job preferences, educational level and duration of unemployment. Data illustrated in table 6.12 also support this contention.

important consideration to understand the problem of labour underutilization due to unemployment. The supply of labour to the economy has been irrespective of the demand for such labour from the economy. Such a supply is due more to a lagged effect of the early phase of the demographic transition which is associated with high population growth, and the early phase of the fertility decline which is related to increasing age at marriage. These demographic characteristics are more important in explaining the current employment and unemployment situations of young adults. In transitional societies where the economy has expanded adequately to meet the demands of the growing labour force, labour underutilization due to unemployment is lower (Oshima, 1987; 1991). However with an unmet demand for employment, a substantial proportion of the potential labour force will end up in unemployment.

6.12 CONCLUSIONS

This chapter has shown that the unemployed population of Sri Lanka have unique identifiable characteristics that can be related to a transitional society caused by demographic, and education transitions that had taken place in the country. The unemployed were largely young, never married, educated females who came from less than five person households and who had strong family support. A large number of young people has entered the labour force as a result of the lagged effect of population growth caused by initial stages of demographic transition on labour force participation of females. However in a situation where economic development had not occurred parallel to socio-demographic changes, unemployment rather than employment has

increased. The analysis focussed the necessity of understanding the effects of socio-demographic changes on the investigated population in order to comprehend clearly the supply side of the labour underutilization problem in Sri Lanka if acceptable solutions are to be proposed. Further investigation of labour underutilization is carried out in the forth coming chapters. Chapter Seven investigates labour underutilization due to underemployment in Sri Lanka.

CHAPTER SEVEN

UNDEREMPLOYMENT IN SRI LANKA

7.1 INTRODUCTION

This chapter addresses a further aspect of labour underutilization, that caused by underemployment. Underemployment has been identified as a major problem in the Asian economies which are currently in transition (Oshima, 1987; 1991; Hugo, 1993). However in most of the available analysis the involuntary nature of underemployment had not been established (Oshima, 1991; Hugo 1993). This chapter proposes to establish clearly that there is involuntary underemployment in Sri Lanka. In Chapter Three (section 3.5.6) of this study, the operational definition of an underemployed person used in this study was established; ie. as a person working less than 35 hours per week and seeking additional or alternative employment. Causes for female underemployment are investigated in this chapter along with their employment characteristics and occupational structure. The relative importance of demographic, cultural, family related and economic characteristics of underemployed females will be examined in a single model in which the more important characteristics of the underemployed females will be identified.

7.2 THEORETICAL CONSIDERATIONS

Critiques of the classical model of the demographic transition theory assert that socio-economic change in the society had been considered as a prerequisite for demographic change (Hugo, 1981:1-4; Blanchet, 1991:105-113). Caldwell(1982:118-122) and Jones(1990a:507-537) point out

that the Asian experience is an example which shows that demographic transition can occur without massive economic growth and structural change. Caldwell (1982), examining the demographic transition in the Afro-Asian region, contended that such transitions had taken place when dramatic social changes occurred due to 'westernization', even though substantial economic development had not taken place. As has been pointed out several times in this study, an important aspect of the Asian demographic experience is the effect of rapid population growth in the early phase of the transition on labour supply. The lagged effects of rapid population growth without comparable economic development have caused labour underutilization problems such as unemployment and underemployment in transitional societies (Godfrey, 1986). A large body of evidence has been documented regarding the lagged effects of accelerated population growth, and the momentum of such population growth on labour supply (Jones, 1990b:219-236; 1992:23-49; Ogawa, Jones and Williamson, 1993:1-17; Bauer, 1990:615-645; Bloom and Freeman, 1986).

However the effects of fertility decline are especially important for the female labour supply and an appreciation of this is important to the understanding of current levels of underemployment. Increasing levels of female labour force growth are due not just to previously high levels of fertility and low mortality, but also to increased participation. The latter is due to the favourable effects of the demographic transition on the status of women in transitional societies (Hugo 1993:47-57; Jones and Manning, 1992:363-410; Jones, 1990b:223; Mahadevan, 1989;

Mahadevan and Sumangala, 1987; Lim, 1984:617-636). Hugo (1993) identifies demographic transition impacts as being most important in shaping the current labour supply in Indonesia. Jones(1990b) predicted that labour underutilization would occur in transitional ASEAN societies, if not enough employment is generated to absorb the increases in the potential labour force that results from demographic change. In this scenario the worst affected are the females, because a disproportionate share of the increase in labour supply comes from them.

The capacity of a country to absorb a constantly increasing supply of labour in productive employment depends upon the level and pattern of the growth in the economy (Farooq and Mackellar, 1990:301-305). Oshima(1987,315-342) emphasises the importance of recognising the interrelated nature of agro-industrial and demographic transition in Asian societies in order to understand the labour absorption patterns in these countries. Oshima(1987) observes that in societies undergoing the demographic transition, structural changes in the economy are taking place along with simultaneous economic growth. He describes the initial changes in the economy as the agro-industrial transition, that is when the proportion of the labour force employed in the agricultural sector declines and that of the manufacturing sector increases.

An important manifestation of the agro-industrial phase of the economic transition in the slower growing economies, is the growth of an informal sector with a high proportion of the underemployed (Oshima, 1987). Thus, labour underutilization due to underemployment may be an inherent

aspect of the economic transition in 'transitional societies'. Jones(1990a:507) agrees with Oshima that some of the Asian countries experiencing rapid declines in fertility were simultaneously undergoing economic growth. Labour absorption in productive employment becomes a problem in countries where population growth has occurred without the accompanying economic growth to sustain additions to the potential labour force. Such countries have experienced high levels of labour underutlization (Oshima, 1991). The International Labour Office(1971a:90), Oshima(1987; 1991) assert that even though considerable progress has been made with regard to social welfare in Sri Lanka, the economy has lagged behind. The sluggish nature of the Sri Lankan economy became obvious in the 1970's (ILO, 1971) when it had to cope with an increased labour supply due to an increase in the population, resulting from the demographic and education transitions that were occurring in the country (Caldwell, 1982; Jones, 1992, Selvaratnam, 1988:165-242). It is argued in this chapter that explanations for the current patterns of underemployment observed in Sri Lanka and other such transitional societies are found in the augmented labour supply, due to a lagged effect of the demographic transition together with the labour absorption patterns inherent in these transitional societies.

7.3 UNDEREMPLOYMENT MEASURED IN TERMS OF HOURS OF WORK

Visible underemployment of a person can be measured in terms of hours of work (ILO, 1971:53-54) coupled with the desire indicated by that person to work more. Such a desire can be demonstrated by looking for additional or alternative work (ILO, 1989). Each country should use its own standard

of 'normal hours of work' that an employed person is normally expected to perform. Such work can also vary by occupation or industry. Each country should try to answer the question 'Below what number of hours of work should the government be concerned and feel an obligation to generate more work in its program for economic development and increasing levels of living?.' The answer to this question constitutes a good cutting off point for hours of work for national policy purposes (Hauser, 1977:10). Accepting the Sri Lankan country norms that have been set in this study (see Chapter three, section 3.5.8), a person who performs less than 35 hours of work and seeks additional or alternative employment is considered to be an underemployed person. Nevertheless, there may be persons who work more than 35 hours but seek additional or alternative work. Such work patterns will also be examined. Even though the level of underemployment, is as extensive as the problem of unemployment, focus on underemployment in Sri Lanka is recent and published information on this issue is limited (Department of Census and Statistics, 1983a:298).

7.4 DEMOGRAPHIC CHARACTERISTICS

7.4.1 AGE AND SEX

Table 7.1 indicates the percentage share of employment[1] for broad age groups of males and females in 1971, 1986 and 1991 Figure 7.1 indicates the proportion of employed males and females in the potential work force in 1986 who were working less than 35 hours and seeking additional or alternative work. Table 7.1 shows that the percentage share

1 It is to be noted that comparison is only with regard to trends. A comparison of numerical increase is not attempted here because Census data are enumerated total numbers and 1985/1986 data are sample numbers.

Table 7.1
Percentage Distribution of Employed Population

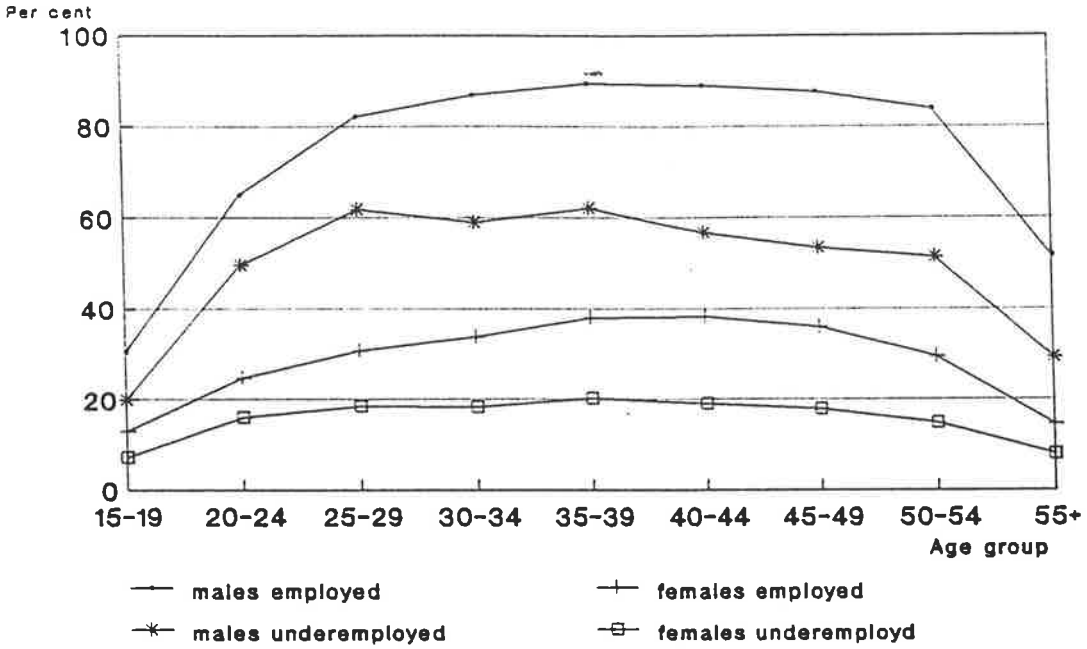
Age groups years	1971 Census male	female	1985/86 SE&LFS male	female	1990/91 LFS male	female
15-19 17.0	7.7	13.0	7.9	fs 8.1	11.4	
20-24	13.9	18.5	14.0	14.0	32.0	22.7
25-29	13.5	15.8	14.1	14.9	15.7	15.3
30-34	11.9	13.4	14.0	14.1	14.3	15.6
35-39	12.1	12.8	12.5	14.5	9.2	3.4
40-44	10.3	9.2	9.5	10.6	3.2	6.1
45-49	9.6	8.5	8.5	8.8	6.1	9.5
50-54	7.3	5.1	7.0	6.3	2.6	3.3
55+	13.2	5.1	13.3	8.7	5.6	7.2
total*	2132.6	686.1	26083	10611	1056	642

Source: SE&LFS 1985/1986 Data Tape
LFS1990/91 Data Tape
Total* Numbers for 1971 are in thousands, for SE&LFS 85/86 and LFS1990/91 the figures are sample numbers.

of employed women in all the age groups had increased over the period while figure 7.1 shows that in 1986 underemployment was largely prevalent among the 20-44 age group. Most of the underemployed were concentrated around a 20-34 hour working week, while at least 14 percent women and 7 percent men were employed for less than 19 hours per week (figure 7.2). The high incidence of underemployment among a wider range of the prime working age population suggests that high underemployment should be attributed to the rapid demographic and slow agro-industrial transition that occurred in the country.

Table 7.2 shows underemployment rates by hours of work. Underemployment is high among both genders, but female rates are lower than male rates for all age groups and for all categories of 'hours of work'. The gender distribution of underemployment shows that the slow process of economic growth and labour absorption has affected both genders. The

Figure 7.1 PROPORTIONS OF EMPLOYED AND UNDEREMPLOYED IN THE WORKING AGE POPULATION SE&LFS1985/86



Source: SE&LFS1985/86
Note: Under employed are those working less than 35 hours and seeking further employment

Figure 7.2 DISTRIBUTION OF THE EMPLOYED BY HOURS WORKED, SE&LFS1985/86

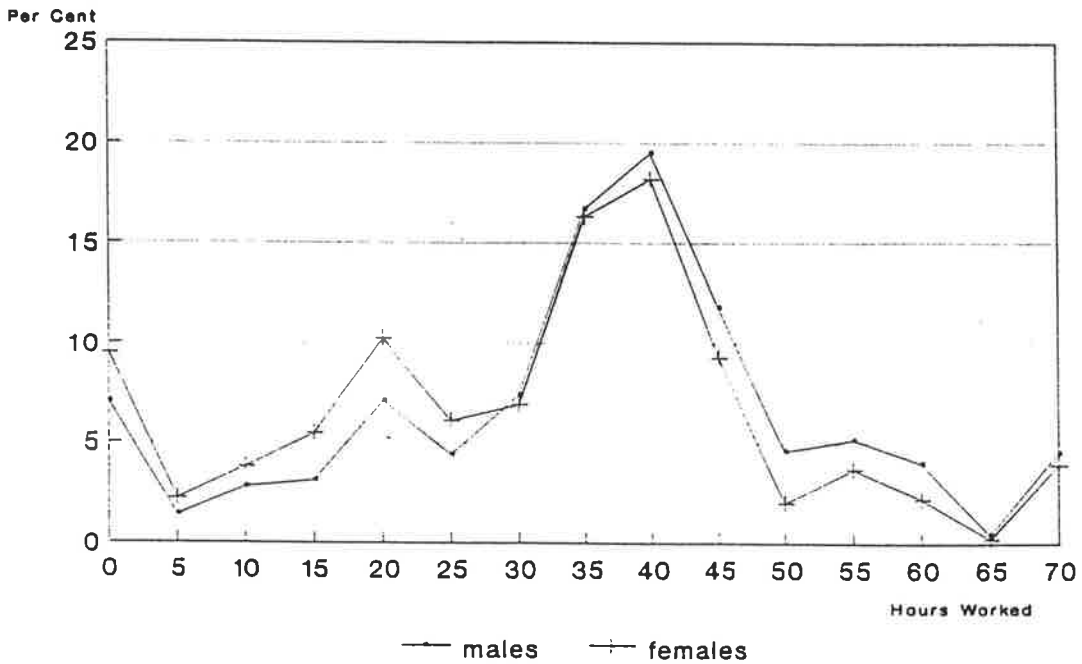


Table 7.2
Underemployment Rates by Hours Worked and Age group 1985/1986

Age Group	hours worked 0-19	20-34	0-34	35+	All hours
15-19	underemployment rates per cent				
male	63.7	65.8	65.1	52.9	57.5
	(262)	(506)	(768)	(1292)	(2060)
female	47.9	61.5	56.0	48.7	51.8
	(146)	(218)	(364)	(241)	(859)
20-29					
male	78.5	75.2	76.0	55.7	61.2
	(479)	(1531)	(2010)	(5337)	(7347)
female	66.9	59.5	62.0	53.4	56.5
	(384)	(738)	(1122)	(1946)	(3068)
30-39					
male	70.5	68.0	68.6	52.3	56.3
	(397)	(1231)	(1628)	(5124)	(6752)
female	52.7	54.3	53.8	47.7	50.3
	(421)	(884)	(1305)	(1738)	(3043)
40-49					
male	63.0	62.2	62.4	49.9	52.9
	(270)	(875)	(1145)	(3556)	(4701)
female	49.8	51.3	50.8	45.5	47.9
	(291)	(630)	(921)	(1133)	(2054)
50+					
male	59.3	57.4	58.0	46.2	50.1
	(548)	(1174)	(1722)	(3501)	(5223)
female	48.1	50.8	49.9	45.5	47.8
	(289)	(533)	(822)	(765)	(1587)
total					
male	67.4	66.6	66.8	51.7	55.9
	(1956)	(5317)	(7273)	(18810)	(26083)
female	54.4	54.8	54.7	48.9	51.4
	(1531)	(3003)	(4534)	(6077)	(10611)
total*					
male	67.8	66.3	66.7	51.6	
female	54.5	55.8	55.2	48.7	

Source: SE&LFS 1985/1986 Data Tape
Notes: The rates indicate proportions of underemployed expressed as a percentage, of the total employed for the respective age sex and hours worked groups.
* - indicates no cases
total* - indicates age standardized rates: the standard used was total population aged 15+ years 1985/86

highest rate of female underemployment was in the 20-29 age group, who worked less than 19 hours per week. Delayed marriage or low marital fertility have enabled these women to enter employment. The high underemployment rate indicates that a large proportion of females who worked less than

normal hours desired to use and receive optimum returns for their work time. The unmet demand for full-time employment seen in terms of high levels of underemployment for all age groups and for both genders is a result of the incompatibility between the labour force growth during the last three decades and the slow pace of job creation in the economy. The high proportion of young persons working 0-34 hours (table 7.3) suggests that the situation has further deteriorated in the 1990's.

Table 7.3
Percentage Distribution of Employed Population by Hours Worked, LFS1990/91.

Age Group	Hours Worked male 0-34	male 35+	male Total	Female 0-34	Female 35+	Female Total
15-19	13.6	10.7	11.4	12.2	18.5	17.0
20-24	24.1	34.2	32.0	22.4	22.8	22.7
25-29	26.3	12.8	15.7	16.7	14.8	15.3
30-34	8.8	15.8	14.3	9.0	17.7	15.7
35-39	7.0	9.8	9.2	6.4	2.5	3.4
40-44	2.6	3.4	3.2	7.1	5.8	6.1
45-49	5.7	6.2	6.1	7.1	10.3	9.5
50-54	2.2	2.7	2.6	7.7	1.9	3.3
55+	9.6	4.5	5.6	11.5	5.8	7.2
Total	100.0 (228)	100.0 (828)	100.0 (1056)	100.0 (156)	100.0 (486)	100.0 (642)

Source: LFS1990/91 Data Tape

The data available from LFS1990/91 does not give us a clue to the proportion of currently employed persons who were seeking additional or alternative employment. Nevertheless, it does provide information about the currently employed persons who are in secondary employment (table 7.4). The low proportion of currently employed who are working 0-34 hours, in secondary employment[2], suggests

2 The definition of a secondary occupation was discussed in chapter three (section 3.6.13). If a person is working less than 35 hours in the principal occupation, and is also working in a secondary occupation that is evidence to show

that even secondary employment is not easy to come by. Thus a high incidence of persons seeking additional or alternative work, irrespective of their number of hours of work, is observed right across the spectrum of all age groups and for both genders.

Table 7.4
Proportions of Currently Employed Persons In Secondary Employment by Hours of Work LFS1990/91

Age group	Hours of Work Male 0-34	Male 35+	Female 0-34	Female 35+
	Proportions per cent			
15-19	*	6.1	11.5	4.5
	(31)	(89)	(19)	(90)
20-29	15.6	4.1	**	5.8
	(115)	(392)	(40)	(183)
30+	19.8	4.0	9.0	3.3
	(82)	(350)	(76)	(213)
Total	11.4	4.6	8.8	4.1
	(228)	(828)	(156)	(486)

Source: LFS1990/91 Data Tape.

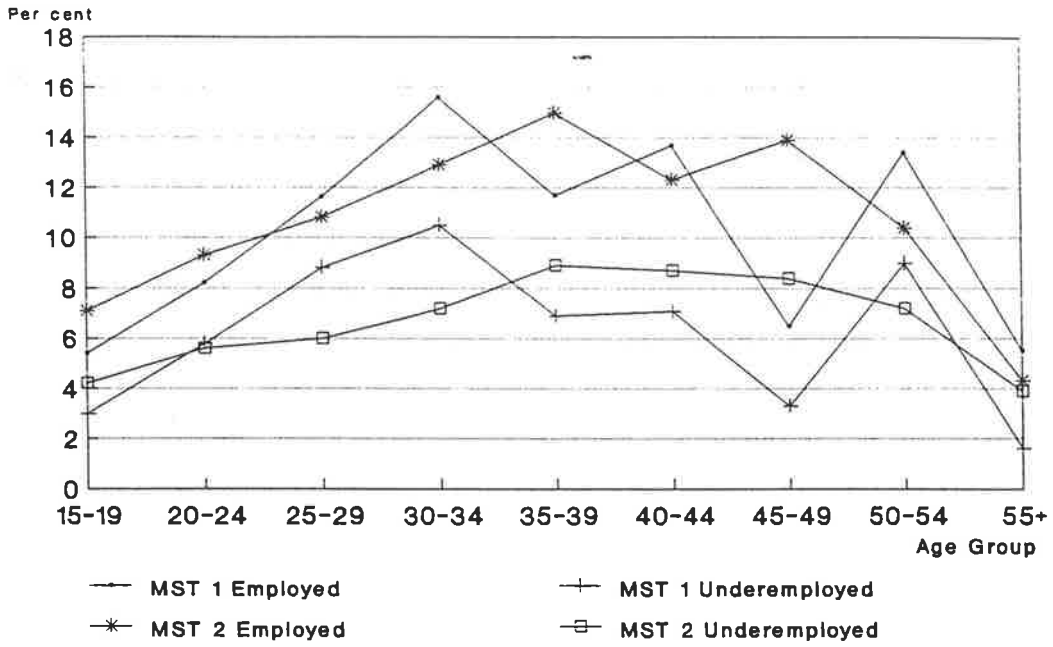
Notes: * - No cases;
** - less than 10 cases;
Numbers in parenthesis indicate the numbers employed in respective groups.

In situations where there is not enough employment generated in the economy to absorb the large number of persons seeking employment, the traditional agricultural economy absorbs such excess labour supply by sharing available work. Mazumdar(1989:8-9) argues that 'the social mores of rural families ensure that all family members get a share of what the family produces and that they enjoy an income (or consumption level) approximating the average production of the farm'. Traditional values and attitudes

that such a person has taken a step to rectify an underemployment situation.

of sharing income and work among rural families, ensures that all family members get a share of what the family produces so that they enjoy an income and nobody is openly unemployed. Kannappan(1983:191-197) argued that in developing economies 'ethnic ties', family ties, kinship, and neighbourhood relationships cause the absorption of labour in unproductive employment in urban labour markets. Thus even in the urban informal sector, a large number of people work much less than the normal number of hours. According to figure 7.2, a large proportion of men and women in Sri Lanka were working less than 20 hours per week, most of them working between 5 and 19 hours. The incidence is higher for males than for females and a similar pattern of underemployment was observed in the Philippines (Standing and Szal, 1979:132-133) where underemployment seemed to be more acute for males. The underemployment of females in comparison to males is higher in Indonesa (Hugo, 1993:91-94). Hugo(1993) comments that there is a substantial gender difference in underemployment in Indonesia with more than a half employed females (52.8 per cent) compared to less than a third of employed males (30.7 per cent) being underemployed. The wide expansion of informal activities in the transitional economy of Indonesia has created employment avenues for women. Jones(1977: 71-93) examining the regional patterns of female participation in Indonesia, commented that age standardized, high participation rates in certain regions is due to females engaged in market trading activities. Widarti(1992) agrees with Jones that there is increased participation of women in non-traditional work in Djakarta.

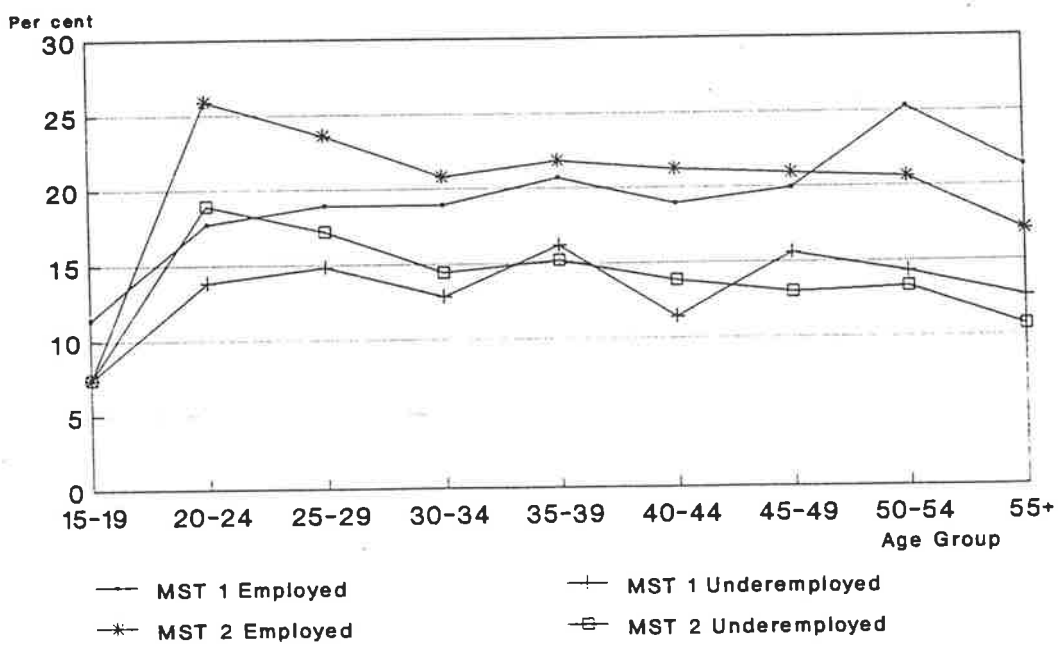
Figure 7.3 PROPORTIONS OF NEVER AND EVER MARRIED FEMALES WHO ARE EMPLOYED AND UNDEREMPLOYED, SE&LFS1985/86 .



Source: SE&LFS 1985/86

Notes: MST 1 = Never Married
MST 2 = Ever Married

Figure 7.4 PROPORTIONS OF NEVER AND EVER MARRIED MALES WHO ARE EMPLOYED AND UNDEREMPLOYED, SE&LFS1985/86



Source: SE&LFS1985/86
Notes: MST 1 = Never Married
MST 2 = Ever Married

Underemployment is closely related to the prevailing underdeveloped economic conditions and poverty (Gorden, 1972; Oshima, 1990). The generally low wage and salary structure that operates in Sri Lanka and in many developing countries is another reason why some people are looking for additional or alternative work to augment their income, in spite of the fact they are working more than 35 hours. When wages or salaries for the number of hours that a person had performed is not adequate, additional work is sought in spite of the fact that already the person is supposed to be working full-time. However, the proportion of full-time workers who looked for additional or alternative employment was less than those who were underemployed. Szal and Standing(1979:132-133) analysing the Philippines data found that visible underemployment for males working more than 40 hours or more was as acute a problem as underemployment of males working less than 40 hours.

Even though underemployment is rampant among both sexes another explanation for high levels of underemployment, particularly among women in developing countries, is the various forms of discrimination and sex segregation patterns in labour absorption. Lim(1984:618) notes that 'women's actual and potential contributions to economic development have generally not been accorded their due recognition'. In employment their role and status are not equal to those of men (Prasith-Rathsint, 1989:70). Even the introduction of 'new technology such as multinational electronic factories that favour women are based on their docility and willingness to subject themselves to rigid

discipline and tedious monotony of assembly line' (Lim, 1984:619)

7.4.2 UNDEREMPLOYMENT AND MARITAL STATUS

Societal values and traditions, as well as norms of behaviour affect married men and women differently, particularly in the traditional societies (Mahadevan, 1989; Mahadevan and Sumangala, 1987; Lim, 1984; Jones, 1984). In transitional societies the traditional values tend to change or become relaxed due to 'westernization'. In most Asian societies where patriarchal society dominates, a male is considered as the head of the household and the 'bread winner' of the family (Standing, 1978; Mahadevan, 1989; Shah, 1989:153). This responsibility is shared among all the adult males in the family, therefore participation is higher for the adult male age groups and usually full participation is observed.

In an analysis of underemployment, marital status becomes an important variable to understand how women participate in employment (Grossbard-Shechtman and Neuman, 1988; Oppenheimer, 1994:293-312). At the married stage of the life cycle of a woman, with the commencement of effective fertility, how she uses her time for productive and reproductive purposes becomes important. Standing(1978:67) asserts that the sexual division of labour is affected by the child care constraints placed on the female labour force and that the dictates of comparative advantage encourage men to take wage employment and women to concentrate on domestic duties. Sri Lankan data on the activity status of the population analysed in this study (presented in chapter six, table 6.1) show the same trend.

Table 7.5 indicates the percentage distribution of the employed population and those who seek additional or alternative employment by their marital status and the hours

Table 7.5
Percentage Distribution of Underemployed Persons by Hours Worked and Marital Status, 1985/1986

	Hours Worked 0-19	20-34	0-34	35+	total
Marital Status of Employed					
Never Married					
male	35.2	34.5	34.7	31.6	33.0
female	24.8	26.0	25.6	31.3	27.1
Currently Married					
male	62.5	61.9	62.1	65.7	64.2
female	65.7	66.0	65.9	56.5	56.4
Widowed/Divorced/Separated					
male	2.3	3.6	3.2	2.7	2.8
female	9.5	8.0	8.5	12.2	16.5
Total					
males Percent	100.0	100.0	100.0	100.0	100.0
Number	1956	5317	7273	18810	26083
female Percent	100.0	100.0	100.0	100.0	100.0
Number	1531	3003	4534	6077	10611
Marital Status of Employed Seeking Work					
Never Married					
males	38.2	37.4	37.6	34.1	35.3
females	27.2	28.2	27.1	35.8	31.9
Currently Married					
males	59.5	59.3	59.4	63.5	62.1
females	61.4	64.4	64.4	52.4	57.7
Widowed/Divorced/Separated					
males	2.3	3.3	3.0	2.4	2.6
females	11.3	7.4	8.5	11.8	10.4
Total					
males Percent	100.0	100.0	100.0	100.0	100.0
Number	(1318)	(3539)	(4857)	(9679)	(14536)
female Percent	100.0	100.0	100.0	100.0	100.0
Number	(833)	(1647)	(2480)	(2974)	(5454)

Sources: SE&LFS 1985/1986 Data Tape

worked per week, and Table 7.6 shows the percentage distribution of the employed population by marital status in 1990. In the previous chapter it was seen that during the last quarter of a century the participation of never married women in employment outside the home had increased. Table 7.5 shows that the share of underemployment in comparison to the share of employment was higher for never married women. According to the 1990/91 survey (table 7.6) approximately

Table 7.6
Percentage Distribution of Employed Persons by Marital Status and Hours Worked, LFS 1990/1991.

	Hours Worked 0-19	20-34	0-34	35+	Total Hrs
Never Married					
Males	50.0	83.9	70.8	79.0	77.1
Female	63.3	66.4	65.4	76.7	75.5
Ever Married					
Males	50.0	16.1	28.2	21.0	22.9
Females	36.7	33.6	34.6	23.2	17.3
Widowed, Divorced & Legally Separated					
Males	**	**	17.0	1.9	3.0
Females	**	**	7.7	7.0	7.2
Total Males					
Percent	100.0	100.0	100.0	100.0	100.0
Number	(94)	(149)	(243)	(828)	(1071)
Females					
Percent	100.0	100.0	100.0	100.0	100.0
Number	(49)	(107)	(156)	(486)	(642)

Source: LFS1990/91 Data Tape
Notes: ** - Numbers less than 10

two thirds of never married women worked less than 35 hours[3]. This is due to the larger number of never married women entering the labour force and accepting whatever job that is available.

3 In LFS 1990/1991 54 percent of the employed population was aged less than 35 years (LFS, 1990/91 Data Tape).

Similarly the share of underemployment of widowed, divorced and legally separated women was higher than their share of employment. The never married women and currently single women have the potential to participate more for different reasons. While the former group entered employment to use lifecycle reproductive time in the production of economic goods and services because of delayed marriage, the latter group participated for employment income because being divorced, widowed or legally separated they would not have the income support of a spouse. Thus it is a matter of concern that a large proportion of widowed, divorced or legally separated women are underemployed.

Figure 7.3 shows that according to SE&LFS1985/86 the largest proportions of employed and underemployed population were among ever married women. The status of being currently married having an adverse affect for women to be underemployed may not be an explanation in the case of Sri Lankan because a large proportion of married males were also underemployed. When shares of employed in relation to underemployed are compared, the share of employed married women was higher than the share of underemployed married women. One explanation is that the married women who are working less than normal hours are not keen to seek additional or alternative employment. Voluntary part-time work will be examined in greater detail in the forthcoming chapter.

A popular argument is that women engage in part-time employment voluntarily due to child care and family care constraints. Hugo(1993) notes that it is a typical pattern among many nations for females to have a greater degree of

underemployment, because many opted for part-time employment in order to fit into other family based responsibilities. In the case of Sri Lanka this chapter shows that involuntary underemployment is prevalent among married women, as is voluntary part-time employment which will be presented in chapter eight.

The age sex patterns of never married and ever married persons participating in employment and underemployment (figures 7.3 and 7.4) show that among women, employment as well as underemployment is substantially higher for never married young adult women. Chapter six established that there was an increase of never married females into the labour market either as employed or unemployed. Table 7.7 shows that among the never married females who are employed, at least two thirds are working less than 35 hours and seek employment and that at least 7 per cent of total employed women are working less than 20 hours. The age standardized underemployment rate is less than the calculated rate, which supports the hypothesis that underemployment is concentrated more among prime age persons. This pattern of participation further supports the theoretical stance adopted in this chapter that increased female participation due to the lagged effects of population growth and the immediate effects of fertility decline are manifested either as unemployed or partly as underemployed.

Fluctuating patterns of female participation in employment and underemployment as shown in figure 7.3 reflect the life cycle changes with changing marital status. However such changes have not particularly affected female participation in employment as the declines in participation

Table 7.7
Total and Age Standardized Under Employment Rates (Per cent) by Marital Status and Hours Worked; SE&LFS1985/86.

	Hours Worked				
	0-19	20-34	0-34	35+	Total
Marital Status	Underemployment Rates Per cent (Total and Age Standardized)				
Never Married					
Male Total Rate	73.1	72.1	72.4	55.5	60.5
Number Employed	(688)	(1834)	(2522)	(5949)	(8471)
Standardized Rate	72.9	66.3	68.4	52.3	60.5
Female Total Rate	65.2	65.1	65.2	53.5	57.5
Number Employed	(348)	(685)	(1033)	(1993)	(3026)
Standardized Rate	62.2	59.7	60.1	48.1	57.5
Ever Married					
Male Total Rate	64.3	63.6	63.8	49.5	53.3
Number Employed	(1268)	(3483)	(4751)	(12901)	(17652)
Standardized Rate	55.1	53.8	54.1	41.4	53.3
Female Total Rate	51.2	51.8	51.6	46.7	49.0
Number Employed	(1183)	(2318)	(3501)	(4084)	(7585)
Standardized Rate	53.3	51.6	52.1	47.2	49.0
Widowed /Divorced/Separated					
Male Total Rate	58.8	54.7	55.6	45.5	48.8
Number Employed	(68)	(137)	(205)	(395)	(600)
Female Total Rate	59.5	55.6	57.0	51.6	54.0
	(222)	(390)	(612)	(765)	(1377)
Total					
Male Total Rate	67.4	66.6	66.8	51.3	55.6
Number Employed	(1956)	(5317)	(7273)	(18810)	(26083)
Standardized Rate	67.8	66.3	66.7	51.6	55.6
Female Total Rate	54.4	54.8	54.7	48.9	51.4
Number Employed	(1531)	(3003)	(4534)	(6077)	(10611)
Standardized Rate	54.5	55.8	55.2	48.7	51.4

Source: SE&LFS 1985/1986 Data Tape
Notes: Rates indicate employed persons seeking additional or alternative employment by the number of hours they worked, expressed as a proportion of total employed persons in each marital status category and by the number of hours worked.
* - indicates no cases
** - indicates less than 10 cases
The standard used was population aged 15+ of SE&LFS1985/86

of never married women from the age groups 30-34 years onwards are counterbalanced by increases in the participation of married women. This is because a larger proportion of women are married by this age (Department of Census and Statistics, 1986b). However the increase is somewhat at a reduced level (see figure 7.3) because married women have other time consuming work but not recognized as economic activity or child bearing and other conjugal responsibilities (Mahadevan and Sumangala, 1987; Lim, 1984:627). Numerically, ever-married females in employment comprised the largest category in SE&LFS1985/86 but the proportions seeking additional or alternative employment were less than for never married women. Figure 7.3 shows that the change in marital status from never married to ever married has brought down the underemployment rates of married women of younger ages. The number of married women who sought additional employment decrease, because of their added familial responsibilities (Hugo, 1993).

The income status of married women may improve through their husband's income. Therefore females who have married high income earning husbands may choose part-time jobs or tend to fall out of the labour force. According to Standing(1978) labour force participation of educated women may depend on the income of their educated husbands. Standing (1978) argues that highly educated men usually end up in good salaried positions and that usually educated women marry educated men. This proposition may not be relevant to Sri Lankan educated women whose educated spouses earn low income because of the prevailing low salary structure. In such a situation educated women have a

potential to be employed and earn an added income to the family. Analysis of salaries and wages in Sri Lanka show that a large proportion of wage and salary earners received an income closer to or below the poverty level (section 7.6).

When underemployment rates (proportions of employed persons working less than 35 hours and seeking additional work) for females of different marital statuses are analysed by age and the size of household as shown in table 7.8, the

Table 7.8
Underemployment Rates by Household Size, Marital Status and Gender, SE&LFS1985/86.

	Never Married		Ever Married	
	Household Size			
Age group	Size1	Size2	Size1	Size2
	(Rates per cent)			
15-19 Males	56.1	60.1	**	**
	(1316)	(731)	(**)	(**)
Females	52.9	50.3	44.4	**
	(490)	(302)	(54)	(10)
20-29 Males	62.0	63.2	59.3	57.0
	(3936)	(1053)	(2123)	(235)
Females	64.2	55.6	51.1	48.2
	(1165)	(430)	(1361)	(112)
30-39 Males	60.2	59.2	55.8	50.7
	(907)	(142)	(5492)	(211)
Females	58.6	44.2	49.1	52.9
	(408)	(77)	(2488)	(70)
40+ Males	53.8	58.1	51.4	45.7
	(312)	(74)	(9363)	(175)
Females	44.0	44.7	48.2	40.4
	(116)	(38)	(3398)	(89)
total Males	60.2	61.6	53.8	51.7
	(6471)	(2000)	(16987)	(625)
Females	59.5	52.2	49.0	48.2
	(2179)	(847)	(7301)	(284)

Source: SE&LFS 1985/1986Data Tape
Notes: * No cases ** Less than 10 cases
Size 1 households with persons less than or equal to 4
Size 2 households with persons more than 4

rates are higher for the 20-29 age group of females who come from less than 5 person households. The smaller family size enabled more women to participate even if they are in the potential reproductive age groups and a large proportion of these women are participating in involuntary underemployment because jobs with adequate remuneration were not available. A larger number of employed females in SE&LFS1985/86 were in less than five person households. Standing and Sheehan(1978:235-246) analysing Labour Force Participation Survey 1973 data of Sri Lanka, and Lim(1984) referring to Asian countries state that the participation of females from small families was high. Another explanation is that generally employment in developing countries is low wage which compels women who are already employed to look for further work. As shown in previous sections this is a third dimension of the problem. Previously it was seen that the people who worked more than 35 hours sought alternative or additional employment (table 7.6). One obvious explanation is that a large proportion of these females are poor. Lim(1984:635) notes that relative to men women in developing countries are poorer. Underemployment in developing countries has been recognized by most researchers as a poverty problem (Lockwood, 1971:6-23; Standing and Szal, 1979; Oshima 1990:44-70) and the inadequacy of wage income is associated with the general poverty prevailing in most developing countries.

7.5 UNDEREMPLOYMENT AMONG DIFFERENT ETHNIC GROUPS

Table 7.9 indicates the total and age standardized underemployment rates by ethnic groups. Underemployment is equally high for females of the majority community who are

Table 7.9
Total and Age Standardized Underemployment Rates by Ethnic Groups

	Total Rate NHW 1		NHW 2		Age Standardized Rate NHW 1	NHW 2
Sinhalese						
Male	70.1	(5490)	15.7	(13105)	70.9	15.8
Female	58.7	(3508)	54.6	(4500)	59.1	54.9
Sri Lankan Tamils						
Male	46.7	(910)	25.3	(2738)	46.8	25.5
Female	30.3	(574)	31.9	(722)	31.9	32.2
Indian Tamils						
Male	**	(286)	16.9	(187)	65.4	17.0
Female	**	(238)	31.4	(140)	54.1	29.5
Moors						
Males	67.5	(550)	45.7	(371)	67.5	45.3
Females	50.8	(197)	38.4	(100)	49.6	38.9
Others						
Males	**	(37)	**	(25)	69.9	45.2
Females	**	(17)	43.2	(37)	**	42.0

Source: SE&LFS1985/86 Data Tape
Notes: NHW1 Number of Hours Worked 0-34
NHW2 Number of Hours Worked 35+
The Standard used was 15+ age distribution of total employed male and female population (SE&LFS1985/86)
Numbers in parenthesis are total employed in respective age sex groups
** Standardization was not attempted because numbers in most age groups were less than 10.

Sinhalese as well as for Moor women who are a minority community. The result supports the proposition that exposure to 'westernization' has resulted in the increased participation women in economic activity, most of females irrespective of their ethnicity were in underemployment. While the high participation of Indian Tamil women has been observed in previous studies (Wilson, 1981; Kurian, 1985; UNICEF, 1985), the trend for Moor women shows that women of this community are increasingly an active segment in the

transitional society. The result for Sri Lankan Tamil women is questionable, because SE&LFS1985/86 had not been conducted in some Northern and Eastern districts.

7.6 UNDEREMPLOYMENT BY LEVEL OF EDUCATION

In chapter six it was established that there was an increase in persons entering into employment with increased educational qualifications during the last quarter of a century. Table 7.10 shows the underemployment rates by the level of education and indicates that in the absence of a specific demand for educated manpower, a large proportion of such persons with different educational qualifications were actually in underemployment.

Oshima(1987:237-239) and the United Nations(1986:69) attribute the increase in the underemployment of educated persons in Sri Lanka to it's welfare policies, particularly its free education policy which has necessitated current expenditure and investment in favour of education services. Oshima(1987:256) notes that 'higher and secondary education need not be free if a system of scholarships to deserving students from low income families is established'. Instead of non-selective secondary educational expansion, such investment could have been used for infrastructure development (Oshima, 1991:82-84) which would lead to direct job creation. Oshima says that the Sri Lankan experience points to the need for a balance in the allocation of resources for human and material investment which must change with the stages of development, as much of the investment in developing human resources must be put to work to earn food, housing and transport (Oshima, 1987; 1991). Educational investment in Sri Lanka in the last decade had

Table 7.10
Underemployment Rates By the Level of Education
SE&LFS1985/1986

Age group	Level of Education: Level 1		Level 2		Level 3		Level 4	
	Hours Worked: 0-34	35+	0-34	35+	0-34	35+	0-34	35+
	(Rates Percent)							
15-19								
male	85	49	71	52	58	53	60	61
	(74)	(114)	(234)	(423)	(417)	(681)	(43)	(74)
female	35	43	65	43	49	53	54	69
	(47)	(129)	(96)	(152)	(184)	(182)	(37)	(32)
20-29								
male	74	52	74	51	76	55	79	62
	(120)	(249)	(572)	(1082)	(1010)	(2656)	(308)	(1350)
female	59	46	60	45	59	54	69	61
	(126)	(227)	(290)	(411)	(416)	(675)	(290)	(633)
30-39								
male	62	45	68	48	72	54	63	54
	(102)	(219)	(491)	(1015)	(738)	(2359)	(297)	(1531)
female	60	46	56	42	52	48	52	53
	(176)	(261)	(321)	(418)	(479)	(507)	(329)	(552)
40-49								
male	70	49	62	48	64	51	56	50
	(92)	(183)	(417)	(978)	(415)	(1484)	(221)	(911)
female	51	42	53	44	51	48	47	49
	(233)	(262)	(234)	(303)	(251)	(302)	(203)	(266)
50+								
male	59	46	59	45	59	47	50	48
	(209)	(320)	(764)	(1309)	(570)	(1390)	(179)	(482)
female	54	46	47	43	52	44	41	52
	(315)	(287)	(259)	(223)	(151)	(171)	(97)	(84)
total								
male	67	48	66	48	68	52	64	55
	(597)	(1085)	(2478)	(4807)	(3150)	(8570)	(1048)	(4348)
female	56	45	55	43	53	50	55	56
	(897)	(1166)	(1200)	(1507)	(1481)	(1837)	(956)	(1567)

Source: SE&LFS 1985/86 Data Tape
Notes: Numbers in parentheses are total employed in respective age-sex groups
Level 1 No Schooling
Level 2 Primary Level, Includes grades 1-4
Level 3 Junior secondary level, includes grades 5 to 9
Level 4 Senior secondary level, includes grades 10 and above.

been in favour of expanding technical and vocational education (National Planning Division/Department, 1983-1993: Series), an area which had been hitherto neglected.

High underemployment rates irrespective of education levels (indicated previously in table 7.10) are shown in the public[4], as well as in the private sector employment. Table 7.11 shows the percentage distribution of the employed population by hours of work in 1990 and indicates that even

Table 7.11
Percentage Distribution of Employed Population by Hours of Work and Educational Level, LFS1990/91.

Level of Education	Hours Worked male 0-34	male 35+	female 0-34	female 35+	male All Hours	female All Hours
No Schooling						
15-39 years	1.0	5.7	5.0	7.3	4.7	6.8
40+ years	1.0	3.0	14.3	6.8	2.6	8.5
Primary						
15-39 years	13.6	8.6	1.7	12.0	9.6	9.7
40+ years	17.3	8.0	15.1	16.5	9.9	16.2
Junior Secondary						
15-39 years	37.7	44.3	19.3	27.1	42.9	25.3
40+ years	6.8	3.9	9.2	3.5	4.5	4.8
Senior Secondary						
15-39 years	22.0	23.5	31.9	24.8	23.2	26.4
40+ years	0.5	3.0	3.4	2.0	2.5	2.3
All Educational Levels						
15-39 years	74.3	82.1	58.0	71.2	80.5	68.1
40+ years	25.7	17.9	42.0	28.8	19.5	31.9
Total Per cent	100.0	100.0	100.0	100.0	100.0	100.0
Total Level	(191)	(730)	(119)	(399)	(921)	(518)
Unspecified	(52)	(98)	(37)	(87)	(150)	(124)
Grand Total	(243)	(828)	(156)	(486)	(1071)	(642)

Source: LFS1990/91 Data Tape
Notes: Numbers in parentheses are total numbers without those persons whose educational level is unspecified.
The percentage distribution excludes unspecified

by the 1990's the underemployment situation had not improved. Job competition and screening (Hinchiliffe, 1987:141-146, Blaug 1974), which may be alternative explanations for the absence of a normally functioning labour market for educated labour,

4 The government is an important employer in Sri Lanka for educated persons who aspire to enter professional technical employment in selective services such as education, health, and administration

suggest that as high productivity jobs become scarce, competition to get to the head of the labour queue intensifies and the amount of education required increases (Hinchiliffe, 1985: 142-143). A leap-frogging process develops, whereby the demand for education by individuals increases and it becomes more difficult for each educated job seeker to find a suitable job. What results is that education qualifications for jobs lower in the hierarchy rise and the more highly educated are then recruited to jobs that would have been filled in the past by the less educated. Table 7.11 show that the most educated categories constitute approximately a quarter of, those working less than normal hours. Underemployment is observed for all age groups, and both genders, particularly for the 20-29 age group. At each level of education and in most age groups more males than females worked 0-34 hours and were seeking additional or alternative work.

As pointed out earlier, table 7.12 reflects the dominant poverty that cuts across the whole wage earning population. A monthly income of Rupees 700 or less is considered to be below the poverty line in Sri Lanka (National Planning Division, 1989). In spite of the educational and training programmes, a large proportion of persons could not find jobs that could provide them with an adequate income. Other sources substantiate the low level of income from wages and salaries and persistent inequality of income (Central Bank Series, 1983:97-120; 1984:199-217) in the current level of economic development in the country. Providing education and training has not been adequate to overcome the poverty in the society.

Table 7.12

Percentage Distribution of Wages and Salaries Received by the Level of Education SE&LFS1985/86

Wages levels Rupees		Educational Levels 1	2	3	4	Number	Percent
1-300	male	61.4	37.7	5.9	100	153	28.9
	female	56.4	28.2	15.4	100	78	29.1
301-500	male	61.6	32.2	6.2	100	146	27.6
	female	50.9	35.5	14.0	100	57	29.1
501-700	male	37.7	53.5	8.8	100	114	21.5
	female	64.4	31.1	4.4	100	45	22.9
701-999	male	40.5	44.0	15.5	100	116	21.9
	female	56.2	12.5	31.2	100	16	8.2
Total	male	51.8	39.5	8.7	100	529	100.0
	female	56.6	29.6	13.8	100	196	100.0
Salaries	Rupees						
500	male	25.0	59.3	15.6	100	64	15.3
	female	55.5	30.1	14.3	100	63	21.9
501-700	male	45.1	40.2	14.6	100	82	19.7
	female	59.8	29.3	11.0	100	82	28.7
701-999	male	10.5	44.7	44.7	100	76	18.2
	female	31.9	19.1	48.9	100	47	16.4
1000-1500	male	7.3	26.5	66.2	100	136	32.6
	female	13.8	7.7	78.5	100	65	22.6
1500+	male	1.7	25.4	72.9	100	59	14.1
	female	13.3	10.0	76.7	100	30	10.4
Total	male	17.3	37.4	45.3	100	417	100.0
	female	39.0	20.9	40.1	100	287	100.0

Sources: SE&LFS 1986 Data Tape Part 2 (Income data)
Notes: Educational Levels
1 - Level less than Primary 2 - Level Junior Secondary
3 - Level Senior Secondary, 4- All Educational Levels
Total - Total row percent,
Percent - percent in the wage bracket out of the total.

An inevitable result of a surplus of educated labour competing for employment below their level of education is a devaluation of the wage structure for that level of education. The surplus of a particular educated labour group would result in the average wage for that education group to being lowered. The multiplier effect of such an averaging process would extend right down to the lowest levels.

According to table 7.12, within the salary structure a very large proportion of higher salary recipients were the more educated groups. Nevertheless, high underemployment rates for those with higher educational qualifications, suggests that even those with higher qualifications failed to obtain high income jobs. This is a result of 'bumping'[5] which is more visible in service originated jobs, because such jobs require a higher level of education of which an ever increasing supply has been available in Sri Lanka. Such bumping could be effectively done by the government when it holds a monopoly of service for education and health and certainly the private sector would follow suit.

Table 7.13 shows underemployment rates by the level of education and broad occupational groups. The transition from a predominantly agricultural employment structure to an industrial structure occurred by several stages of economic development (Oshima, 1987:56-71). Such a change may come as a result of the infusion of technology in the production procedures and a better qualified work-force (Oshima, 1981:23-25; Jones, 1992:41-43). Table 7.13 shows that a large proportion of the employed population with higher educational qualifications were in non-agricultural employment. The fact that a large proportion among them were in underemployment suggests that a bias towards non-

5 The term 'bumping' is used for 'the leap frogging process' whereby when the demand for education by individuals increases the more difficult it becomes for each education group to secure jobs. The effect of educational expansion is neither a fall in occupational wages nor an increase in jobs. The educational qualifications for jobs lower in the hierarchy rise and the more highly educated are then recruited to jobs that would have been filled in the past by the less educated. While the surplus of a particular educated labour group does not affect occupational wage levels it does result in lower average wage levels (Hinchcliffe, 1987:143).

Table 7.13
Underemployment Rates by Occupation and Educational Level' SE&LFS1985/86.

Educational level	White Collar	Services	Agriculture	Production	Total
	(Underemployment rates Per cent)				
No Schooling					
male	65.2	90.9	66.6	68.9	67.6
	(23)	(11)	(410)	(151)	(595)
female	51.5	77.4	56.5	51.7	56.1
	(33)	(31)	(653)	(176)	(893)
Primary					
male	61.8	60.0	62.9	73.5	65.9
	(110)	(30)	(1597)	(717)	(2454)
female	30.9	51.9	55.5	59.5	55.1
	(55)	(27)	(854)	(252)	(1188)
Junior Secondary					
male	63.8	74.4	62.5	78.9	68.2
	(318)	(43)	(1718)	(1025)	(3104)
female	43.8	54.1	50.1	64.2	53.2
	(128)	(37)	(937)	(369)	(1471)
Senior Secondary					
male	55.5	75.0	69.2	75.8	64.6
	(378)	(20)	(351)	(153)	(902)
female	48.0	**	62.1	75.4	56.4
	(456)	(12)	(243)	(114)	(825)
Degree and Above					
male	59.1	**	**	**	58.2
	(93)	(**)	(**)	(**)	(98)
female	49.2	**	**	**	48.8
	(118)	(**)	(**)	(**)	(123)
All Educational Levels					
male	59.7	72.4	63.6	76.0	66.8
	(922)	(105)	(4079)	(2047)	(7153)
female	46.5	63.0	54.4	61.9	54.7
	(790)	(108)	(2691)	(911)	(4500)

Source: SE&LFS1985/86 Data Tape
Notes: ** less than 10 cases in the cell

agricultural employment had occurred in the informal activities. Such a change can occur due to the acceptance of western concepts in the employment aspirations (Jayaweera, 1979:150-151) without infusion of technological change into production systems. Underemployment among production related occupations, and the high level of underemployment for all levels of education, confirms this fact.

While measurement of the number of hours worked is a measure of underutilization by underemployment and the remuneration in terms of wages or salaries is a measurement of productivity, utilization of labour can also be measured by matching one's level of education and occupation. For measurement of such underutilization, a minimum requirement of the educational level needed for each occupation should be established (Hauser, 1977:10-25). In a labour surplus economy such as Sri Lanka, with highly qualified labour where the employers adopt job screening[6] in hiring labour, such a measurement may be fruitless except perhaps for the highest educational levels. Hauser(1974: and 1977) suggested that underutilization can be caused by a mismatch between a person's educational level and his/her occupation. Such situations create psychological dissatisfaction and lead people to seek further employment (Standing 1978). Even though the psychological aspect of the problem has not been investigated in the surveys used in this analysis, table 7.13 shows that a large proportion of persons in current employment who had high educational qualifications even if they were working normal hours, were seeking alternative or additional employment. Evidence for such underemployment will be revealed further in the forthcoming sections.

7.7 UNDEREMPLOYMENT IN OCCUPATIONS

Table 7.14 indicates the percentage distribution of employed persons by broad occupation group and gender and

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6 The screening device is used by employers to choose between people. Schooling merely acts as a screening device which helps employers to choose (Hinchcliffe, 1987:143).

table 7.15 shows the percentage distribution of employed persons in 1991 by broad occupational group, gender and

Table 7.14
Percentage distribution of Employed Persons by Occupations and Gender.

Workers by Occupation	1946 male	1946 female	1971 male	1971 female	1985/1986 male	1985/1986 female
White Collar	23.7	9.3	15.0	13.6	22.8	22.7
Services	4.0	11.0	5.4	5.6	4.7	6.2
Agriculture	50.6	61.3	45.3	61.4	43.6	50.6
Production	10.2	10.6	27.8	16.6	28.9	20.4
NEC by Occupations	11.5	7.8	2.5	2.8	0.0	0.1
All Occupations	100.0	100.0	100.0	100.0	100.0	100.0
Number (1)	204.1	57.0	283.8	81.0	25178	10473

Sources:
Department of Census and Statistics, 1951:Table 8.2 p88;
Department of Census and Statistics, 1971: Table 6 P57;
1985/1986 Socio Economic and Labour Force Survey Data Tape
Notes:(1) For 1946 and 1971 the numbers are in 10,000
For 1985/1986 the numbers are from the sample
The White Collar Workers contain ISCO (00, 1-4), Professional and Technical Occupations, Administrative and Managerial, Clerical and Related, Sales and
Service Workers ISCO Category 5. Agriculture Workers contain ISCO (6) Agriculture Animal Husbandry Workers and Forestry and Fisherman Production Workers contain ISCO (7-9) categories of Production and Related Workers. Not Classified by Occupation also contain armed forces.

Table 7.15
Percentage Distribution of Employed By Occupation and Hours Worked, LFS1990/91.

	Hours Worked					
	Male			Female		
Occupation	0-34	35+	total	0-34	35+	total
Professional	20.7	2.9	6.7	28.9	6.0	11.3
Clerical	***	3.8	3.0	1.2	4.4	3.6
Sales	3.0	2.7	2.8	***	8.2	6.3
Services	6.3	26.3	22.1	10.2	7.8	8.4
Agriculture	24.5	10.5	13.4	22.9	7.3	10.9
Production	45.6	53.7	52.0	36.7	66.4	59.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
	(237)	(886)	(1123)	(166)	(550)	(716)

Sources: LFS: 1990/1991 Data Tape
Notes: *** No cases

hours worked. The Table 7.14 shows that agricultural occupations predominate in the occupational structure of employment. However, during the last quarter of a century the pattern of occupational distribution has changed and the proportion employed in agriculture has declined. This pattern of structural change from agricultural to non-agricultural occupations has been observed in surveys undertaken in other developing countries (Gregory, 1980:684; Oshima, 1987; 1991; Lim, 1988;1993). The proportion employed in non-agricultural occupations has more than doubled between the years 1946 and 1971. The proportion in the white collar category was high in 1946 because those employed in defence had been categorised as administrative and managerial. The change in proportions employed from agricultural and non-agricultural occupations is more evident for women (Lim, 1993). Oshima(1987:51-56) asserts that with substantial increases in productivity in the agricultural sector, structural changes in the occupational composition of the labour force should occur. As development proceeds the work-force moves from agricultural to non-agricultural occupations, while within each sector productivity is increased by new technologies, greater division of labour and the accumulation of capital and skills. Oshima(1987) asserted that the sectoral transformation of the labour force in Sri Lanka has historically lagged behind, partly because industrial development was capital intensive. Do the changes from agriculture to non-agriculture observed in tables 7.14 and 7.15 reflect the slow pace of change in the employment structure from predominantly agricultural to industrial

occupations? The answer is sought by further investigation of the occupational structure of employment.

Table 7.16 indicates the underemployment rates by occupation, age group and hours worked. An indicator of the agro-industrial transition is the increase of productivity in the agricultural sector, partly due to a shift of employment from agriculture to industry and partly to the adoption of modern practices of agricultural production. With an increase of productivity, the number of underemployed in the sector should decline because full-time employment in the non-agricultural sector would increase.

Data presented in Table 7.16 enables one to raise several pertinent questions useful for this study. According to table 7.16, approximately half of employed males and more than half of employed females in the agricultural sector are underemployed. Numerically agriculture was the single largest sector, providing employment for at least half of females in employment and closer to half of males. Of every ten persons employed only four were women, but one out of every two women in agriculture were in underemployment. Even for the lesser proportion employed in the production sector, high rates of underemployment for males and females occurred (table 7.16). As with agriculture in production related occupations, numerically there were more persons in the younger age group. Table 7.16 shows that close to three quarters of males and nearly two thirds of females in the 15-39 age group, who were employed in production sector occupations, were working less than 35 hours a week. During the last quarter of a century the proportion employed in production occupations had more than doubled due to a

Table 7.16
Underemployment Rates (Percent) by Age Group Occupational Category and Hours Worked, SE&LFS 1985/1986.

ISCO No: & occupation Age group	Hours Worked male 0-34	male 35+	female 0-34	female 35+	both genders 0-34	both genders 35+	total
1 Professional & Related							
15-39	56.9	54.8	50.3	51.7	52.4	53.1	52.8
	(153)	(372)	(328)	(472)	(481)	(844)	(1325)
40+	54.9	41.0	45.5	44.7	50.1	42.4	45.5
	(215)	(402)	(224)	(226)	(439)	(628)	(1067)
2 Administrative							
15-39	*	47.5	*	**	**	44.5	44.2
	(**)	(99)	(*)	(20)	(**)	(119)	(120)
40+	**	46.2	*	**	**	45.8	44.5
	(17)	(143)	(**)	(12)	(18)	(155)	(173)
3 Clerical & Related							
15-39	64.2	55.6	57.1	59.2	62.1	56.8	57.3
	(67)	(631)	(28)	(304)	(95)	(935)	(1030)
40+	42.2	49.0	50.0	50.0	43.1	44.1	48.6
	(45)	(420)	(**)	(54)	(51)	(99)	(525)
4 Sales							
15-39	68.5	50.3	41.2	47.9	61.1	50.0	51.7
	(276)	(1771)	(102)	(280)	(378)	(2051)	(2429)
40+	59.5	45.4	38.6	42.6	51.0	44.9	45.9
	(148)	(985)	(101)	(223)	(249)	(1208)	(1457)
5 Services							
15-39	78.8	56.4	61.1	46.9	69.8	53.0	54.6
	(52)	(651)	(54)	(360)	(106)	(1011)	(1117)
40+	66.0	46.4	64.8	42.6	65.4	45.3	48.3
	(53)	(418)	(54)	(183)	(107)	(601)	(708)
6 Agriculture							
15-39	67.5	50.8	57.2	44.1	63.4	48.9	54.8
	(2465)	(4274)	(1683)	(1754)	(4148)	(6028)	(10176)
40+	57.6	46.4	49.7	45.1	54.6	46.1	49.7
	(1614)	(2634)	(1008)	(856)	(2622)	(3490)	(6112)
7/8/9 Production							
15-39	80.7	59.1	64.3	60.8	75.7	59.4	88.5
	(1321)	(3482)	(575)	(918)	(1896)	(4400)	(6296)
40+	67.5	53.5	57.7	48.9	64.4	52.8	56.8
	(726)	(1743)	(336)	(311)	(1063)	(2054)	(3116)
All Occupations							
15-39	71.3	54.0	57.4	50.2	65.9	53.0	57.1
	(4335)	(11280)	(2770)	(4108)	(7105)	(15388)	(22493)
40+	59.8	47.9	50.5	45.3	56.3	47.4	50.4
	(2818)	(6745)	(1730)	(1865)	(4548)	(8610)	(13158)

Source: SE&LFS 1985/1986 Data Tape
Notes: ** less than ten cases * No cases
ISCO No: International Standard Classification of Occupations (single digit) 1 Professional Technical and Related 2 Administrative & Managerial 3 Clerical and Related 4 Sales 5 Services 6 Agriculture Animal Husbandry Forestry and Fishing 7/8/9 Production and Related

rapidly expanding manufacturing sector (Rodrigo, 1988:18; Jayatilaka, 1989). Has the production sector absorbed a section of the alienated labour from agriculture mainly as underemployment in an expanding informal sector? Table 7.16 also indicates that more than half of those employed in white collar employment are underemployed. Is such underemployment largely due to the nature of work patterns in the professional services such as teaching? Previously it was shown that at least one fifth of all employed were in white collar occupations (section 7.7, table 7.14). Professional, white collar occupations in education and health generally guaranteed regular hours of work, income, occupational rights, and security of employment because such employment is largely created in the government sector (Jayaweera, 1979; Department of Census and Statistics, 1987c). This category of occupations generally attracted more educated labour.

Rodrigo and Atanayake(1988:53) point out that there has been a long term compression of the wage structure in Sri Lanka[7]. Another indication of underemployment that is caused by low wage income is the substantial proportion of employed who are currently working 35 hours or more and who seek additional or alternative employment. What factors determine such work patterns? Generally underemployment rates were higher among younger age groups in all occupational groups. Is this a result of the influx of younger age persons into labour force and sharing available

7 Government had to take steps from time to time to protect it's own employees from effects of inflation by issuing supplementary living allowances from time to time (Rodrigo, 1988:52-57).

employment with already employed during the last quarter of a century?

7.7.1 UNDEREMPLOYMENT IN AGRICULTURE

Seasonality of work in monsoon paddy agriculture in Asia creates underemployment in the slack seasons (Oshima 1981:7-15; 1990:44). Underemployment in paddy cultivation and in tea and rubber plantations is due partly to such seasonal variations. According to the ILO (1971b:86) in the case of Sri Lanka, seasonality is less acute than in most Asian countries, especially in the wet zone where over two-thirds of farmers live, and the average size of land holding is smaller (Department of Census and Statistics, 1983a). However, there is almost always something that a farmer can do in the slack season, but income received from such work is too little to tempt him (ILO, 1971).

Table 7.17 shows that while underemployment was high among all types of workers in the agricultural occupations the bulk of these employment seekers irrespective of the hours they worked, were young adults. High rates of underemployment were observed for estate labourers, other agricultural workers and paddy cultivators. In a situation of rampant unemployment, a large majority of young persons entering the labour force and looking for work had joined the agricultural sector which is already in labour surplus.

Underemployment is created by the scarcity of the most important factor of production for farmers, ie. land. An important implication of such scarcity is the declining extent of marginal sized holdings. The process of fragmentation involves large farms splitting up into middle sized farms and middle sized farms into small farms. Thus,

Table 7.17
Underemployment Rates (Per Cent) in Agriculture, 1985/86

Agricultural Occupations	Age 15-39 years nhw1	15-39 years nhw2	40+ years nhw1	40+ years nhw2
males				
ISCO CODE & Occupation				
611 Paddy cultivators	63.0	54.7	52.5	46.3
	(419)	(374)	(243)	(216)
612 Cultivators of vegetables	69.1	52.1	67.2	36.0
	(139)	(142)	(64)	(86)
613 Cultivators of	67.0	56.5	65.4	45.5
Other food crops	(179)	(299)	(78)	(143)
615- Other cash crop cultivators	63.8	55.0	53.2	54.8
617	(47)	(80)	(111)	(135)
618 Cultivators of mixed crops	78.1	66.4	59.2	49.5
	(138)	(43)	(101)	(42)
620- Poultry & animal	61.7	58.1	15.0	44.1
629 Husbandry farmers	(91)	(34)	(80)	(20)
630- Estate labourers	67.7	41.3	54.9	46.2
632	(414)	(860)	(264)	(347)
636- Other agricultural-	79.4	49.7	78.8	46.5
637 labourers	(206)	(236)	(111)	(117)
641 Fishermen	41.0	42.1	41.2	37.5
	(134)	(397)	(68)	(192)
639- Other agricultural-	62.3	46.9	63.6	59.1
workers	(53)	(90)	(33)	(66)
Total agriculture	67.5	50.8	57.6	46.4
	(2465)	(4274)	(1614)	(2634)
females				
611 Paddy cultivators	50.1	50.0	45.3	41.2
	(516)	(718)	(338)	(465)
612 Cultivators of vegetables	64.7	55.3	50.8	41.4
	(96)	(74)	(43)	(31)
613 Cultivators of other food-	58.9	42.4	60.4	58.7
crops	(120)	(169)	(51)	(65)
615- Cultivators of cash crops	39.1	**	50.0	63.0
617	(30)	(44)	(59)	(74)
618 Cultivators of mixed crops	59.4	65.1	49.5	52.4
	(143)	(142)	(93)	(90)
620 Poultry and animal-	45.1	61.8	**	65.0
629 husbandry workers	(29)	(43)	(**)	(15)
630- Estate labourers	57.2	38.7	54.2	43.8
632	(254)	(276)	(124)	(172)
636- Other agricultural-	73.8	44.5	57.7	41.0
637 labourers	(386)	(464)	(160)	(168)
639 Other Agricultural-	51.4	68.4	59.4	**
workers	(33)	(45)	(21)	(39)
Total agriculture	57.2	44.1	49.7	45.1
	(1665)	(2170)	(930)	(1223)

Source: SE&LFS1985/86 Data Tape

Notes: nhw1 - Number of Hours Worked 0-34
nhw2 - Number of Hours Worked 35+
** - Less than 10 cases

the availability of land as an income earning asset for the poorer segments of the population decreases (Ahluwalia, 1990;117). The percentage of paddy holdings of less than 1 acre in size increased from 43 to 65 between 1962 and 1970 (Lee, 1977a:170-171). According to the 1982 Census of Agriculture (Department of Census and Statistics, 1983c:14), at least 42 percent of operational small agricultural holdings were less than one acre. High underemployment rates for full time workers in agriculture who are largely own-account workers, as shown in table 7.18, suggests that returns to farmers working in small holdings are low and that they have to look for additional means of employment.

Substantial proportions of underemployment among agricultural labourers and other agricultural workers who were mostly casual labourers (table 7.18) are a result of landlessness among persons whose chief occupation is paddy and other food crop cultivation. Due to landlessness they are forced to seek wage employment (Hewavitharana, 1991). Even though increased demand for wage employment is a sign of flexibility in the rural labour force, the rural economy has not diversified adequately to offer alternative full-time wage employment to these landless cultivators (Hewavitharana, 1991). In Sri Lanka, more than 80 per cent of the population (Department of Census and Statistics, 1974:98-100; 1986b:67-68) live in rural areas and are engaged predominantly in agricultural employment, and landlessness is high (Hewavitharana, 1986;1-4; 1991:1-9). The distribution patterns of the population is such that four fifths of the population is concentrated in the south-western quadrant of the island in only one fifth of the land

Table 7.18
Underemployment Rates in Agriculture by Employment Status and Hours of Work, SE&LFS1985/86.

Employment Status	Hours of Work 0-19	20-34	0-34	35+
Regular Employees male	60.0	57.0	57.4	37.5
	(40)	(230)	(270)	(922)
female	46.2	48.2	47.8	35.2
	(65)	(257)	(322)	(863)
Casual employees				
male	77.0	73.0	73.8	50.5
	(235)	(881)	(1116)	(1952)
female	65.4	68.6	67.8	48.4
	(156)	(458)	(614)	(707)
Employers				
male	44.4	37.1	44.2	39.4
	(45)	(97)	(142)	(204)
female	44.4	64.7	52.3	**
	(27)	(17)	(44)	(20)
Own Account Workers				
male	61.3	59.8	60.4	49.7
	(654)	(1084)	(1738)	(2768)
female	51.8	51.9	51.9	58.7
	(276)	(231)	(507)	(213)
Unpaid Family Workers				
male	63.1	63.4	63.3	55.6
	(293)	(514)	(807)	(1062)
female	51.2	56.5	54.4	44.4
	(563)	(641)	(1204)	(807)
Total in Agriculture				
male	64.0	63.6	63.7	49.1
	(1267)	(2806)	(4073)	(6908)
female	51.2	56.5	54.4	44.4
	(1087)	(1604)	(2691)	(2618)

Percentage Distribution of Employed in Agriculture by Employment Status LFS 1990

	Male 0-34	35+	total	Female 0-34	35+	total
Employees	***	11.8	7.3	5.3	***	2.6
Own Account	20.7	25.8	23.8	21.0	22.5	21.8
Unpaid Family Work	75.4	58.1	64.2	73.7	77.5	75.6
Total Percent	100.0	100.0	100.0	100.0	100.0	100.0
Total Number	(58)	(93)	(151)	(38)	(40)	(78)
As a Proportion of All Occupations %	24.7	10.3	13.5	22.9	7.3	10.9
Number	(235)	(882)	(1117)	(166)	(550)	(716)

Sources: SE&LFS1985/86 Data Tape, LFS1990/91 Data Tape
Notes: ** less than 10 cases in the cell. *** - No cases
Numbers in parentheses are numbers of total employed

area, with very little land for cultivation. Therefore in a situation where land is already scarce and demographic pressures are mounting, one would expect to see continuing fragmentation for most categories of landholders with a consequent increase in landlessness.

The problem of landlessness and fragmentation of land has been observed in other Asian countries. Lee(1977b:196) refers to the problem of landlessness and fragmentation due to population growth for the poverty stricken groups in Malaysia even though on the average the rural land holdings are fairly large. Leiserson(1974:333-357) commented that Javanese agriculture has adapted to acute population pressures by employing increasing numbers in the intensive cultivation of irrigated rice lands. According to Manning(1989:1-14) at least 73 per cent of females and 44 per cent of males employed in agriculture in West and Central Java worked less than 35 hours. He contends that this is indirect evidence of the involvement of secondary workers in agriculture and that an excess labour supply has re-emerged as a major problem in Java. Palmer(1977:210) also refers to underemployment originating from landlessness in Indonesia. According to her, in Java the bottom 20 percent of all farming households averaged less than 0.1 hectare, while the bottom 60 percent averaged 0.2 hectares (Palmer, 1977:210). 'Land reform is a potentially powerful direct instrument for improving access to land for the poor and creating a set of favourable initial conditions for growth' (Ahluwalia, 1990:116).

In Sri Lanka and in most other countries in question, laws pertaining to land ownership and land tenure systems

have been reformed, but still the problem persists because such reform has not been effective (Lee, 1977a). In the case of Sri Lanka, the ceiling on the individual ownership of 25 acres of paddy land and 50 acres of land under other crops was too high in relation to the existing size distribution of holdings (Lee, 1977a).

High rates of underemployment among estate labourers originated from the organized estate sector. Employment such as tea plucking and rubber tapping, in tea and rubber estates is highly labour intensive work that involves only a part of the working day. Rubber tapping and tea plucking are affected by the seasonality of work, as well as by routine maintainence of the estates. On wet days rubber trees are not opened up to collect latex. Such involuntary part-time work is mainly associated with females. Some part-time jobs in estates are allocated mainly to males including the pruning of tea crops, weeding and fertilizing tea, rubber and coconut plantations, coconut plucking and toddy tapping. These occupations are mainly seasonal and do not provide continuous work (Gooneratne and Wesumperuma, 1984:87-110). In the estate sector, underemployment is also due to the limited amount of work available in a particular estate, and also to the lack of mobility for daily paid labourers to travel out of the estate to find employment, resulting from the nature of terrain of the estate sector.

Underemployment is high even among cash crop cultivators. Cash crop cultivators among women are only small in number because commercial cropping is still not accepted as a woman's domain in Sri Lanka. Problems of land ownership, effects of seasonality and obtaining credit for

further investment due to the lack of necessary collateral for banks, have adversely affected effective cash crop cultivation among women. High rates of underemployment observed for men and women who engaged in the cultivation of cash crops suggests that their cultivations were not economically viable.

7.7.2 PRODUCTION ASSOCIATED OCCUPATIONS

Table 7.19 and 7.20 reflects the complexity and the heterogeneous nature of the activities and skills that constitute the employed and the underemployed males and females in the production sector. The activities are largely unorganized while the skills, as shown in table 7.19, are largely of a low or middle level. As shown earlier (table 7.17), production sector activities have expanded during the last 25 years, but the nature of expansion shows that such employment was largely in the informal sector and underemployment. Manning(1989) points out that, micro studies have constantly shown that the informal sector in Indonesia is extremely heterogeneous in terms of skill, capital, inputs and earnings. The presence of a large proportion of informal activities in the production sector have also been noted by (Manning 1989:1-14) and Widarti(1991) in Indonesia, where the lagged effects of high population growth on labour supply have also been observed (Jones, 1990b).

Table 7.19 shows that underemployment was prevalent among all types of male skilled workers. While the heterogeneity of skills involved in the production sector shows the expanding economic activity, (Korale and Gunapala, 1981:30-34) contend that most of the underemployed in the

Table 7.19
Underemployment Rates (Percent) among Production and Related Workers (selected occupations) Males, SE&LFS 1985/1986.

Category of Production Sector Occupations		Age Groups 15-39 Years Hours of Work 0-34	35+	40+ Years 0-34	35+
ISCO CODE (3 digit)					
711-719	Miners and Related	79.0 (100)	50.3 (147)	55.2 (29)	50.0 (68)
731-734	Wood Preparation Workers	83.3 (24)	53.2 (47)	67.7 (31)	62.5 (32)
771-779	Food & Beverage Processors	81.3 (32)	60.2 (123)	** (11)	53.0 (66)
781-789	Tobacco Preparers and Related	** (13)	56.3 (32)	** (**)	45.5 (22)
791-799	Tailors & Dress Makers	** (10)	54.3 (92)	83.3 (12)	49.2 (59)
801-819	Leather Goods & Furniture Makers	** (10)	60.7 (56)	84.6 (13)	65.5 (29)
831-839	Blacksmiths & Tool Makers	71.4 (14)	65.0 (117)	** (**)	63.0 (46)
841-849	Machinery Fitters & Related	74.4 (39)	54.3 (280)	77.8 (18)	51.5 (101)
851-859	Electrical Fitters & Related	83.3 (24)	59.3 (140)	** (**)	58.2 (55)
871-883	Jewellery makers & Related	63.6 (22)	51.2 (86)	** (16)	42.9 (35)
891-899	Tile & Brick Makers	92.6 (27)	76.2 (63)	** (**)	96.3 (28)
921-929	Book Binders & Printers	83.3 (12)	81.1 (37)	** (**)	48.0 (25)
941-949	Basketry & Coir Weavers	89.3 (28)	68.9 (45)	51.7 (29)	65.2 (23)
951-959	Construction Workers	80.0 (260)	59.4 (465)	71.6 (155)	48.8 (254)
971-989	Transport & Heavy-duty Workers	79.6 (49)	61.3 (375)	70.5 (61)	55.1 (323)
999	Labourers NEC	82.4	59.1	68.2	52.7
		(652)	(1342)	(308)	(569)
Total Production & Related Workers		80.7 (1321)	59.1 (3482)	71.3 (726)	54.0 (1743)

Sources: SE&LFS1985/86 Data Tape
Notes: ** No of cases less than 10
Numbers in parentheses are total employed in the respective groups.
The total number of occupations given in table do not tally with the addition of individual occupations because those are selected.

Table 7.20
Underemployment Rates (Percent) among Production and Related Workers (selected occupations) Females, SE&LFS1985/86.

Category of Production Sector Occupations	Age Groups 15-39 Years Hours of Work 0-34	35+	40+ Years Hours of Work 0-34	35+
ISCO CODE				
751- Spinners Weavers	62.5	48.9	41.4	**
759 and Dyers	(48)	(90)	(29)	(22)
771- Food & Beverage	54.3	57.6	58.1	45.7
779 Processors	(70)	(59)	(86)	(46)
781- Tobacco Preparers	57.3	70.0	**	**
789 & Related	(82)	(60)	(**)	(14)
791- Tailors and	70.1	67.8	67.6	61.0
799 Dressmakers	(127)	(314)	(37)	(41)
941- Basketry and Coir	68.7	**	**	**
949 Weavers	(16)	(10)	(**)	(**)
999 Labourers NEC	72.9	55.6	75.4	50.7
	(107)	(198)	(61)	(75)
Total Production and Related Workers	64.3 (575)	60.8 (918)	57.7 (336)	48.9 (311)

Sources: SE&LFS 1985/1986 Data Tape
Notes - ** less than ten cases
ISCO (3 digit) - International Standard Classification of Occupations 3 digit classification

skilled and craft levels had entered their occupations as assistants, helpers and apprentices under small contractors and craftsmen and have limited experience in the trade. Such persons do not get full-time work because they are semi-skilled. Some of the activities involved are largely craftsmen level skills and unsophisticated services required at the village or semi-urban level that require a small amount of capital to set-up (Korale, and Gunapala, 1981:30-32).

During the 1980's the country saw the rapid expansion of construction sector activities (Central Bank of Ceylon,

1980-1991:Series; National Planning Division, 1980-1990: Series). In the case of underemployment among construction sector workers, one could comment that other than in the large construction projects organized by the government (National Planning Division, 1985), employment in the construction sector is largely private (Employment and Manpower Planning Division, 1981:1-9), and irregular, depending on the nature of demand for such work (Korale and Gunapala, 1981). Therefore among bricklayers, carpenters and other construction industry workers, the problem of underemployment is created by the unpredictability of work assignments (Korale and Gunapala, 1981) or the inadequate work assignments in the sector.

Over-supply in relation to a limited demand may be another reason for the high level of underemployment among skilled workers. In most of the trades the skills are either traditionally imparted by master craftsman or through the education system with vocational training skills being imparted by junior technical colleges or vocational training institutions (Korale and Gunapala, 1981). In 1986 the intake to the technical colleges was increased by the government (NPD, 1986; Employment and Manpower Planning Division, 1982:31-42) so that skilled workers in construction activities, carpentry and motor mechanism could be exported to other countries that demanded such services. Those who received short term vocational skill training and the dropouts from such courses flooded the domestic market (Korale and Gunapala, 1981) and a large part of such underemployment could be related to such dropouts who had

established their own account work (Korale and Gunapala, 1981) in the sector.

The incidence of those who worked 35 hours or more and sought additional jobs in the production sector as indicated in table 7.19 suggests that the remuneration for this sector employment is low. As was pointed out earlier, the problem of labour underutilization in developing countries is also one of poverty and low income (Lee, 1977a:173-182; Myrdal 1968:1217-1225; Blaug, 1974; Standing, 1978; Oshima 1990). Nevertheless some of the skilled own-account workers with entrepreneurial ability, probably have a better earning capacity many times more than the other unskilled workers in the sector (Manning, 1989:1-14). These people seek more work in order to have a better earning capacity for their skills and they may work more than thirty five hours and still seek work.

Underemployment of females in the production sector was as high as for males, but the skill profile is much more narrow. The employment is mostly in off-farm activities or home-based informal activity. Generally on small farms, all the members of the family who are at work are also engaged in non-farm employment with low productivity/income (Mazumdar, 1981:25). Muqtada(1986:38) notes that in Sri Lanka most of the economic activities in the rural households are undertaken as family concerns. In the south western quadrant of Sri Lanka, there has been a tremendous growth of non-farm employment since 1981 (Hewavitharana, 1991:19-22) caused by an increased labour supply.

Among the women, approximately 77 per cent[8] of those underemployed in tobacco production occupations were working as beedi makers. **Beedi**[9] making among women is a popular part-time employment in rural and urban areas and such work is done mostly on a contract basis and at home. A great deal of education or skills are not needed for this type of work. The work is entirely labour intensive, but the remuneration that these people get for such work is very small (Dharmalingam, 1993).

Similarly basket weaving, coir weaving, brush and broom making and coir rope making are popular home based non-agricultural employment that are highly labour intensive. Ahmed(1987:33) says that coir production is female selective employment and that poorer women are usually engaged in the dirtiest and hardest jobs in the coir making process as they cannot afford even the simplest of manually operated machines to help them in these tasks.

Home based informal workers mostly work on an own-account basis and are unorganized, using traditional methods and do not have capital. Even though a certain amount of skill is involved in these activities they face the problem of marketing their product. They have the additional problem of getting and preparing the necessary raw materials required. Such activities demand intensive manual labour but it is difficult for them to get adequate remuneration for their effort.

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8 There were 82 women less than 40 years of age in the beedi making occupations out of 107 women in the same age group in production occupations.

9 Beedi is a hand manufactured mini cigarette which is popularly known as the poor man's cigarette.

7.7.3 UNDEREMPLOYMENT AMONG WHITE COLLAR OCCUPATIONS

7.7.3.1 PROFESSIONAL TECHNICAL AND RELATED OCCUPATIONS

Tables 7.21 to 7.23 show occupational details and occupational status of underemployed women in professional

Table 7.21
Under Employment Rates in Professional Technical and Related Occupations, SE&LFS1985/86.

Professional and Technical Related Occupations	Age Group 15-39 Years Hours of Work 0-34	35+	40+ Years 0-34	35+
ISCO Code (3 digit)	**Males**			
021- Architects	**	60.0	**	43.5
029 & Engineers	(**)	(30)	(**)	(23)
031- Engineering	**	61.7	**	37.1
039 Technicians	**	(60)	(**)	(35)
061- Doctors, Medical	**	61.5	**	35.0
066 Dental,Veterinary	(**)	(39)	(11)	(60)
067- Other Medical	**	57.7	**	33.3
079 Workers	(**)	(26)	(**)	(48)
113- Accountants	**	52.6	**	**
114	(**)	(19)	(**)	(**)
132 School Teachers	56.0	42.2	57.8	45.5
	(84)	(64)	(102)	(55)
131- University &	**	**	**	23.5
134 Special Teachers	(17)	(22)	(19)	(51)
Total Professional Technical & Related	56.9 (153)	54.8 (372)	54.9 (215)	41.0 (402)
	Females			
067- Other Medical	**	55.1	**	46.6
079 Workers	(**)	(89)	(**)	(58)
132 School Teachers	48.1	47.9	45.7	54.8
	(216)	(144)	(164)	(93)
139 Teachers NEC	63.5	77.8	47.6	**
	(52)	(18)	(21)	(13)
Total Professional Technical & Related	56.9 (328)	54.8 (472)	54.9 (224)	41.0 (226)

Sources: SE&LFS 1985/1986 Data Tape
Notes: * - No cases ** Less Than 10 cases
ISCO (3 digit) - International Standard Classification of Occupations (3 digit classification)

Table 7.22
Underemployment Rates by Employment Status in Professional Technical and Related Occupations

Employment Status	Male Hours of Work 0-34	Male Hours of Work 35+	Female Hours of Work 0-34	Female Hours of Work 35+
	(Rates per cent)			
Regular Employees	52.9 (261)	44.4 (527)	44.0 (430)	46.7 (467)
Casual Employees	72.7 (33)	67.2 (61)	73.2 (41)	71.8 (39)
Employers	** (*)	** (22)	** (**)	** (**)
Own Account Workers	54.0 (63)	50.0 (100)	60.0 (55)	57.9 (19)
Unpaid Family Workers	** (**)	** (**)	** (**)	** (10)
All Statuses Number	55.2 (362)	47.3 (715)	48.1 (534)	49.7 (537)

Source: SE&LFS1985/86 Data Tape
Notes: Numbers in parenthesis are total employment numbers
** - Less than 10 cases

Table 7.23
Underemployment Rates (for those who worked 35 or more hours) in Professional Technical and Related Occupations By The Level of Education

Category of Professional Occupations	Educational Level Junior Secondary	Senior Secondary	Degree
ISCO CODE (three digit)	**Males**		
021- Architects & Engineers	* (*)	60.0 (20)	48.5 (33)
029			
031- Engineering Technicians	** (18)	60.0 (60)	** (17)
039			
061- Doctors, Medical & Related	60.0 (20)	43.2 (44)	41.9 (31)
079			
113- Accountants 114	* (**)	48.6 (35)	50.0 (20)
131- Teachers 139	**	40.4 (141)	45.3 (53)
	Females		
067- Other Medical Workers 079	38.2 (34)	55.4 (121)	** (**)
131- School Teachers 139	** (10)	48.8 (244)	54.5 (55)

Sources: SE&LFS 1985/1986 Data Tape
Notes: * - No cases ** Less Than 10 cases;
Junior Secondary Level - Grades 5-10;
Senor Secondary Level - GCE OL up to Less than Degree
ISCO (3 digit) - International Standard Classification of Occupations (3 digit classification)

and related occupations. In the professional group of occupations those who were underemployed, ie. those who worked less than 35 hours and sought additional or alternative employment were largely insignificant, except for the teaching category (Table 7.21). Professional occupations are generally associated with formal working hours in both government and private sectors. A large proportion of regular and casual employees are concentrated in the government sector and are largely concentrated in teaching and health related occupations. This is a result of the nature of the expansion of the services sector in the country from the time of independence in 1948. Since the 1940's, the service delivery from these two sectors has been almost a total government monopoly.

A large proportion of casual and regular employees were teachers of various categories. High rates of underemployment are evident for all types of teachers when compared to the other professions in table 7.21 and this is due to the service requirements of formal teaching as well as preparation at home, associated with the teaching profession (ILO, 1994). The duration of the school time is usually five and half hours and a teacher is expected to engage in formal teaching during this period of time. Wages and salaries for government sector employees are through the machinery of the government pay commissions periodically appointed for this purpose and by Cabinet decision (Rodrigo, 1988:25) and in the private sector by the regulations of the wages board. Due to the sluggish movement of wages during the last three decades, these employees are vulnerable to

the fluctuations of inflation rates that have been on the rise in the 1980's. Rodrigo(1988:34) noted that the wage performance of the Sri Lankan economy over the quarter of a century since 1960 is not suggestive of a phenomenal growth in the real wage level. A large proportion of teachers are government servants and draw a low salary when compared to other own account professionals whose earning potential is higher. The need for additional income may be an important reason why a large number of teachers are seeking additional employment.

The professionals are the most educated in the labour force and of them, those who are own account workers (table 7.22) have the highest earning potential and hence, a higher economic value for their working time. They tend to use more of their working time to earn more. A high proportion of persons who are seeking additional or alternative employment even if they are working more than 35 hours (table 7.23), actually indicates the potential value of their earning capacity. Therefore in the case of most of the occupations in this group, the proportion of those who are in the own account category, working less than normal hours is relatively lower.

7.7.3.2 UNDEREMPLOYMENT IN CLERICAL AND RELATED OCCUPATIONS

The occupational profile among female clerical workers (table 7.24, table 7.25, and table 7.26) is mainly associated with clerical services demanded by the local and central government agencies and employment in the sector is comparatively small. Since the private sector had played

Table 7.24
Underemployment Rates (per cent) in Clerical and Related Occupations, SE&LFS1985/86.

Clerical and Related Occupations	Age Group 15-39		40+	
	Hours of Work 0-34	35+	0-34	35+
Males				
ISCO CODE				
311-319 Bookkeepers	* (*)	53.8 (39)	** (**)	60.0 (20)
352 Postmasters	* (*)	** (10)	* (*)	48.0 (25)
361-369 Transport Workers	** (**)	59.3 (59)	** (**)	60.0 (45)
371-379 Postal Workers	80.0 (20)	79.2 (72)	** (**)	64.6 (48)
391-399 Clerks	51.4 (26)	55.7 (264)	** (**)	49.3 (47)
Total Clerical Services	64.2 (67)	55.6 (631)	42.2 (45)	49.0 (420)
Females				
321-322 Typists	** (14)	50.0 (132)	** (**)	** (18)
391-399 Clerks	53.8 (26)	60.2 (264)	** (**)	48.9 (47)
Total Clerical Services	57.1 (28)	59.2 (304)	50.0 (**)	50.0 (54)

Sources: SE&LFS1985/86 Data Tape

Table 7.25
Underemployment Rates in Clerical & Related Occupations By Employment Status, SE&LFS1985/86.

Hours of Work	Male 0-34	Male 35+	Female 0-34	Female 35+
Regular Employee	47.8 (92)	51.6 (935)	51.3 (39)	51.9 (445)
Casual Employee	73.1 (26)	63.1 (157)	** (11)	72.9 (70)
Employer	* (**)	* (**)	* (*)	* (*)
Own Account Worker	** (**)	** (**)	** (**)	** (**)
Unpaid Family Worker	* (*)	** (**)	* (**)	** (**
Total Clerical Occupations	54.0 (124)	53.0 (1110)	55.8 (52)	54.9 (519)

Source: SE&LFS1985/86 Data Tape
Notes: * - No Cases
** - Less than 10 cases

Table 7.26
Underemployment Among Clerical Workers by Level of Education, SE&LFS1985/86.

ISCO Code & Hours Worked	Level of Education: Junior Secondary	Senior Secondary	Graduate	All Education Levels
		Males		
ISCO- 300-369				
0-34 hours	**	86.7	*	73.1
	(**)	(15)	(*)	(26)
35+ hours	46.9	59.1	**	56.1
	(81)	(154)	(10)	(260)
ISCO- 371-399				
0-34 hours	57.1	49.1	**	52.2
	(28)	(57)	(**)	(92)
35+ hours	46.7	54.7	57.9	52.0
	(259)	(554)	(19)	(850)
Total **Clerical & Related**				
0-34 hours	55.9	56.9	**	56.8
	(34)	(72)	(**)	(118)
35+ hours	46.8	55.6	65.5	53.0
	(340)	(708)	(29)	(1110)
		Females		
ISCO- 300-369				
0-34 hours	**	**	**	55.0
	(**)	(17)	(**)	(55)
35+ hours	55.0	48.0	**	48.8
	(20)	(179)	(**)	(205)
ISCO- 371-399				
0-34 hours	**	51.8	**	62.1
	(**)	(27)	(**)	(32)
35+ hours	68.4	57.9	61.9	58.9
	(19)	(271)	(21)	(414)
Total Clerical and Related				
0-34 hours	**	52.3	**	56.9
	(**)	(44)	(**)	(51)
35+ hours	61.5	54.0	61.5	54.9
	(39)	(450)	(26)	(519)

Source: SE&LFS1985/86 Data Tape
Notes: Junior Secondary Level indicates education levels

only a minor role in the economic development of Sri Lanka till 1980' (Mel, 1980) the employment creation in clerical services was mainly in public sector (Department of Census and Statistics, 1987c:VII).

The underemployed in this group of occupations were regular employees (table 7.25) who already worked full-time (Department of Census and Statistics,1987c). The low wage income generally associated with the government employees and clerical services in particular, (Department of Census and Statistics, 1987c) has driven more than half of the employed in this sector to seek additional employment. At least 95 percent of clerical workers had senior secondary qualifications or higher level educational qualifications (table 7.26). Government clerical services was a popular avenue of employment for persons with a senior secondary or above qualification to enter public sector employment (ILO, 1971a).

Tables 7.27 and 7.28 show a high incidence of managers and working proprietors in wholesale and particularly in retail trade, working on an own account basis. Such a pattern suggests signs of the development of internal trade in the private sector. The sales occupations are said to serve an absorptive function for excess labour that cannot find employment in a preferred wage category (Gregory 1980:686). Establishing retail enterprises on a self employment basis has been a means for persons without work to enter the informal labour market. A substantial number of the younger age group have turned to their own entrepreneurial ability as an answer to the unemployment problem. At the village level, for a person to become a

working proprietor one needs a relatively low level of investment (Jones, 1984). The variety of goods traded depend on the demand for such goods at that level. For a street hawker to put up a sales point requires even less capital

Table 7.27
Under Employment Rates in Sales Occupations (Selected Occupations) SE&LFS1985/86.

Sales Sector Occupations & ISCO CODE (3 digit)	Age Groups 15-39 Hours Worked 0-34	15-39 Hours Worked 35+	40+ Hours Worked 0-34	40+ Hours Worked 35+
402 Managers	**	38.1	*	35.7
Retail Trade	(**)	(42)	(**)	(28)
411 Working Proprietors	**	59.5	**	**
Wholesale Trade	(**)	(37)	(**)	(20)
412 Working Proprietors	66.5	48.1	59.2	44.8
Retail Trade	(158)	(904)	(98)	(679)
444 Brokers	66.7	61.0	**	41.7
	(24)	(41)	(10)	(24)
451 Salesmen Shop	69.2	54.7	**	46.6
Assistants	(39)	(497)	(14)	(118)
453 Street Vendors &	85.3	49.5	**	55.6
Hawkers	(34)	(103)	(10)	(45)
490 Sales nec	**	46.6	**	37.9
	(**)	(105)	(**)	(29)
Total Sales Workers	68.5	50.3	59.5	45.4
	276	1771	148	985
Females				
412 Working Proprietors	44.1	49.3	37.7	43.3
Retail Trade	(68)	(136)	(69)	(164)
452 Salesmen Shop	45.8	46.1	**	38.7
Assistants	(24)	(89)	(18)	(31)
Total Sales Workers	41.2	47.9	38.6	42.6
	(102)	(280)	(101)	(223)

Source: SE&LFS1985/86 Data Tape
Notes: ** - Less than 10 cases; *** - no cases

investment. These patterns indicate a changing economic structure paving the way for the expansion of informal activity.

While the incidence of commercial activities associated with various sales categories of occupations suggests that the private commercial sector is growing fast[10], the high levels of underemployment among these categories may be due to the inadequacy, of the growth momentum in commerce and

Table 7.28
Underemployment Rates By Employment Status in Sales Occupations, SE&LFS1985/86.

Employment Status	Males 0-34	Males 35+	Females 0-34	Females 35+
Regular Employee	80.0 (10)	40.1 (339)	** **	39.6 53
Casual Employee	67.3 (52)	60.8 (449)	** 10	48.8 41
Employer	50.0 (34)	50.7 (223)	* **	** 15
Own Account Worker	66.4 (268)	46.7 (1472)	41.5 (94)	44.3 (221)
Unpaid Family Worker	65.0 (60)	46.9 (273)	37.9 (95)	48.6 (173)
Total Sales Occupations	50.8 (424)	65.3 (2756)	39.9 (81)	45.5 (229)

Source: SE&LFS1985/86 Data Tape
Notes: * - No cases; ** - Less than 10 cases

trade in the transitional economy. Hence it seems that the situation in 1985/86 when this survey was conducted did not provide an adequate business environment to utilize fully the management and entrepreneurial skills of the work force. For a strong private sector to function it is important that such skills should be utilized fully. This situation

10 Growth of the private sector is new in Sri Lanka. Government intervention in internal trade has taken place using subsidies, price controls etc. Private sector commercial activity came to be emphasized only after 1977 change of Government.

reflects that there is still a lot of scope for the private sector to expand (Fernando, 1993) in the country.

The income received from small retail trading units, hawking or street vending depends on the capacity of the market and the affordability of the consumers, as well as demand for the commodities vended. According to the data presented, while the proportion of persons underemployed is relatively low, high rates of employment seekers are observed among those who worked 35 hours or more. This suggests that the income received from such trade has not been adequate.

The large number of male and female workers employed as shop assistants shows that the development of commerce and trade on a larger scale is also taking place. In the initial stages of development, commerce is concentrated more on street hawkers, market and street venders and small shop owners and with development, the centre of gravity changes to department stores and emporiums (Jones, 1984:48). The fact that wage income received by employees in the sales sector is not adequate to make ends meet has caused high rates of underemployment among sales sector employees.

7.7.4 UNDEREMPLOYMENT AMONG SERVICE OCCUPATIONS

Table 7.29 shows the underemployment rates[11] among service sector occupations. Rates are generally high for workers who performed menial and labour intensive work. These employment categories generally fall to the lower segments of the wage and salary structure and are largely located in the private sector (Department of Census and Statistics, 1986b).

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11 Underemployment rate denotes the percent of employed persons who are seeking additional or alternative employment.

Table 7.29
Underemployment Rates Among Service Occupations
SE&LFS1985/86

	Age Group			
	15-39		40+	
	0-34	35+	0-34	35+
ISCO CODE				
Males				
500- Proprietors	**	28.6	**	41.7
510 Catering & Lodg	(**)	(35)	(**)	(24)
520- Room boys	**	67.1	**	70.6
533	(**)	(79)	(**)	(17)
541- Housekeeping	**	52.7	**	42.1
549 Service Workers	(**)	(91)	(**)	(57)
551- Cleaners	100.0	50.0	100.0	50.0
562	(10)	(38)	(10)	(38)
571- Barbers and	**	52.9	**	**
579 Hair Dressers	(**)	(34)	(**)	(16)
581- Protective	**	57.3	64.7	44.8
589 Service Workers	(**)	(309)	(17)	(223)
599 Service	90.9	65.6	71.4	45.5
Workers nec	(11)	(32)	(14)	(22)
Total				
Service Occupations	78.8	56.4	66.0	46.4
	(41)	(367)	(35)	(194)
Females				
541- Housekeeping	64.7	49.7	73.1	41.8
549 Service Workers	(17)	(302)	(26)	(141)
561- Cleaners	61.1	**	**	**
562	(18)	(**)	(11)	(16)
Total				
Service Occupations	61.1	46.9	64.8	42.6
	(54)	(360)	(54)	(183)

Source: SE&LFS1985/86 Data Tape

Jones(1984:49) points out that the process of development entails changes in the quality of labour that occur with an internal shift towards higher levels in professional and technical related occupations.

Underemployment rates are also observed for women in house keeping services which are mainly in labour intensive

work, such as cooks, **ayahs**[12], maids and domestic servants (table 7.29). Low wages, unsatisfactory work practices in the private sector and the desire for occupational mobility result in a large proportion of the workers in these sectors seeking further employment. The domestic servant service is still considered to be a menial service in Sri Lanka and within the country the very poor, without any resources for existence to enter into such work[13]. Cleaning services associated with dhobies is also considered a menial occupation associated with the **dhoby**[14] caste which is the lowest caste in the hierarchy of castes in Sri Lanka. Dhoby occupation is still handed down from the parents to the children. Even though adoption of western concepts of the rule of law and social integration brought about by the modern education system, have eliminated much of these feudal practices, some of these practices still prevail at the remote village level. Most of the underemployed in these occupations are in the private, household service sector. Wages for these occupations are not regulated and due to the lack of a minimum wage level they are traditionally very low. A high incidence of domestic service worker categories is also an indication of the lack of employment opportunities for women generally and the low wage levels associated with the excess supply in a situation of low demand, especially for less educated women. Jones(1984:48) notes that domestic service as a major avenue

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12 Ayahs are domestic servants whose specific job is to look after the children

13 However among migrants who go as housemaids to foreign countries there are well educated persons (Dias, 1989)

14 Dhoby is a traditional menial caste who washed clothes for the gentry. The occupation is handed down from one generation to the next.

of employment for women declined rapidly when real wages in the ASEAN countries increased.

7.8 A REGRESSION ANALYSIS OF UNDEREMPLOYMENT

Table 7.30 shows the characteristics examined and choice of variables for the regression analysis and table 7.31 indicates a regression analysis of all employed persons and employed females who are seeking additional or alternative work. The proposition examined in this chapter

Table 7.30
Characteristics Examined and Choice of Variables for Regression Analysis

Characteristics Examined	Variables Selected
Demographic	Age, Sex, Marital Status;
Cultural	Race;
Family Related	Household Status, Size of Household;
Economic	Education, Occupational category Occupational Status, Industry;

is that the underemployment situation of a person could largely be explained by that person's demographic, cultural and family related characteristics. Multiple regression analysis is used to see the relationship between the underemployment of a person and his or her characteristics by using a set of identified independent variables to denote these characteristics. The analysis envisages to identify the sub-set of characteristics that have a stronger relationship collectively and individually with a person's underemployment situation.

The dependent variable is 'underemployed persons', measured in terms of those who are seeking additional

employment even if they are employed. The question asked in the SE&LFS1985/86 was 'are you looking for additional employment'. This question was asked of those who were employed and the answers given were either yes or no. Thus, the dependent variable is established as a dichotomous variable. The independent variables used in this analysis are: (1) age (2) sex (3) marital status (4) education (5) ethnicity (6) religion (7) size of the household (8) sector (9) household status (10) occupation and (11) employment status. These independent variables are selected to reflect the different characteristics of an underemployed person. Why these variables are chosen and the choice of methodology was discussed in detail in chapter Two sections 2.4.6 and 2.4.7.

The results in table 7.31 show the likelihood of an employed person seeking additional work in relation to his or her characteristics. The regression results also show the nature of the relationship between the dependent variable ie underemployment and the set of independent variables denoting demographic, cultural, family related and non demographic characteristics.

When all the characteristics were examined in a single model, the likelihood of underemployment for the 20-29 age group females was positive and significant at 95 per cent confidence level, whereas the likelihood of the 15-19 age group female being underemployed was positive, but not significant. This means that there was a strong likelihood of the young adult population being underemployed, even when all the other characteristics are taken into consideration. In addition, young adult females were more affected by

Table 7.31
A Regression of Female Labour Underutilization:
Underemployed Regressed on Selected Variables

Independent Variables	Both Sexes RC	T Value	Sig L	Females RC	T Value	Sig L
Intercept	4.469	51.464	***	4.380	33.430	***
Age						
15-19	-.016	-.239	ns	.075	.614	ns
20-29	.106	2.567	***	.139	2.026	**
30-39	.017	.437	ns	-.072	-1.066	ns
40-49	-.022	-.502	ns	-.146	-1.895	**
Sex						
male	.187	5.149	***			
female	.163	4.571	***			
Marital Status						
Never Married	.037	.684	ns	-.035	-.501	ns
Ever Married	-.049	-.904	ns	.026	.414	ns
Sector						
Urban	-.021	-.527	ns	-.050	-.638	ns
Rural	.036	.987	ns	-.037	-.485	ns
Estate	.066	.944	ns	.324	4.252	***
Race						
Sinhala	.439	11.263	***	.343	4.121	***
Tamil	-.524	-9.877	***	-.473	-4.468	***
Indian Tamil				-.260	-6.476	***
Sri Lankan Tamil				-.471	-14.005	***
Muslim	-.285	-3.856	***	-.042	-.357	ns
Education Level						
Junior Secondary (JS)				-.041	-.617	ns
Senior Secondary (SS)				-.048	-.576	ns
JS & Less	.120	2.898	***	.121	1.430	*
SS & More	.063	1.146	ns	-.058	-.682	ns
Primary and Less				.077	1.145	ns
Occupations						
White Collar	-.177	-4.496	***	-.197	-2.156	**
Agriculture	-.002	-.065	ns	.064	.920	ns
production	.181	4.579	***	.260	2.658	***
Employment Status						
Casual	.107	3.054	***	.152	2.029	**
Own Acc Wker	-.034	-.878	ns	.074	.868	ns
Unpd Fam Wk	-.065	-1.307	*	-.126	-1.722	**
Employers				-.196	.426	ns
Size of House Hold						
Less than 5	-.021	-1.723	**	-.018	-1.202	ns
5 & more	-.015	-1.210	ns	-.011	-.648	ns
Household Status						
Head of HH	-.083	-1.466	*	-.050	-.513	ns
Spouse	.065	1.061	ns	-.017	-.243	ns
Children	.040	.584	ns	.088	1.109	ns

Source: SE&LFS1985/86
RC - Regression Coefficient SigL - Significance Level
* - Significant at 90 % confidence level ** - Significant at 95 % confidence level *** - Significant at 99 % confidence level

labour underutilization. The younger age groups of the population indicated that they are from the birth cohorts of the transition period commencing from the 1960's, when mortality declined quickly and fertility levels remained constant, creating a boom period of population growth (section 5.5). The lagged effects of such growth are seen in the participation of this group in underemployment, because adequate employment opportunities were not available when they joined the labour force. For the 30-39 and 40-49 age group females to be underemployed was less likely and the result for the 30-39 age group was not significant. Employed females of this age group would have familial and conjugal responsibilities, because the majority would be married by the age of 40. When all the age groups were taken together, there was a strong likelihood of both males and females being underemployed and the result was significant at 99 percent confidence level. The likelihood of never married females looking for additional work was less, while there was a likelihood of ever married women being underemployed; however these results were not significant. Being married was not a deterrent for females who wanted to work for additional hours to seek additional or alternative employment. The results for the demographic variables suggest that one should look beyond demographic explanations to identify the causes of underemployment among females.

The cultural variable tested was the ethnicity of the employed person seeking further employment. The three ethnic groups tested were Sinhala, Tamil and Muslim. The likelihood of a Sinhala women being underemployed was strongly significant at 99 percent confidence

level, while the likelihood of a Tamil or a Muslim women to be underemployed was less. For Tamil females the result was significant at 99 percent confidence and for Muslim women the result was not significant. This may be because of the low participation of Muslim women in employment. The findings for cultural characteristics do support the proposition that the cultural characteristics of a person are important to understand underemployment and that there are dictates based on cultural values which define a woman's employment in relation to her other roles performed.

Of the family related variables, a person who had the status of a spouse or child in the family was more likely to be underemployed, but the T values were not significant. This result can be accepted as logical because most of the child status groups were younger. For heads of households the coefficient was negative and significant.

Of the non-demographic variables, the likelihood of production sector workers being underemployed was positive and very significant at 99 percent confidence level. Higher rates of underemployment were observed for this group. The likelihood of workers in white collar occupations to be underemployed was less and significant at 99 percent confidence level. This is because a larger proportion of white collar workers were in public sector professional occupations and were already working full-time and could not work any more hours. The likelihood of underemployment for casual workers was stronger than for other employment statuses. The result for casual workers was positive and significant at 95 per cent confidence level, while for own account workers the likelihood of being underemployed was

positive but not significant. The prospect of underemployment for those who had a junior secondary or lower level of education was positive and at 95 per cent confidence level. For those who had a senior secondary level or higher education, the result was still positive but not significant. It was less likely for unpaid family workers to be underemployed, and the likelihood of being underemployed was negative and significant at 95 per cent confidence level. These results show that economic variables are as important as, or even more important than demographic and familial variables, in explaining the underemployment of a female.

The regression analysis did not indicate exclusively that demographic, family related or cultural characteristics were the more important in explaining a persons labour underutilization situation. The outstanding characteristics of underemployed persons were mostly their economic characteristics. Of these, the educational level of a person, the occupation and the employment status were the most important in understanding the underemployment situation of a female.

7.9 CONCLUSIONS

This chapter established clearly that underemployment among women was high and that economic causes of underemployment are important in explaining a persons underemployment situation. However the proposition that demographic, cultural and family related variables are more important than non-demographic variables to understand a

person's labour underutilization situation due to underemployment cannot be completely rejected because some effects of demographic and educational transition are also observed. For example there was an excess likelihood of women in the 20-29 age group, as well as women in the Sinhala community being underemployed. Thus the evidence leads to the conclusion that explanations for female labour underutilization due to underemployment are found more in the levels and patterns of labour absorption and economic development in the country than in the demographic, cultural or family related background of the underemployed. Chapter Eight investigates further, the voluntary part-time employment patterns of females.

CHAPTER EIGHT

VOLUNTARY PART-TIME WORKERS

8.1 INTRODUCTION

This chapter investigates female part-time employment defined as females voluntarily working less than 35 hours and not seeking additional or alternative employment. Part-time employment among women is deemed to be a characteristic of developed economies where women choose to work on a part-time basis (ILO, 1994). The objective of this chapter is to establish the extent to which voluntary part-time work occurs among females in Sri Lanka, examine it's causes and investigate whether voluntary part-time employment contributes to the labour underutilization problem. The theoretical explanations for existence of part-time work among females in developing economies are firstly examined, along with considerations of how such work could be understood in the context of female labour underutilization in developing economies. Explanations are sought for the existence of part-time working women in the currently transitional, less developed economies and in Sri Lanka in particular. Finally, a multiple regression analysis examines all of the characteristics of voluntary part-time workers in a single model, in order to understand the extent to which voluntary part-time work occurs among women, when all of the characteristics and interrelationships between these characteristics are considered.

8.2 THEORETICAL CONSIDERATIONS

Substantial economic development either had occurred or is occurring parallel to the demographic transition taking place in some of the Asian Countries (Mcnicoll and Nag,

1982:130-135; Hugo, 1986:49-52; 1990; Oshima, 1987:49-61; 1990; Jones, 1990b:224-226; Caldwell, 1990:215-221). On the issue of economic development in relation to demographic transition, Sri Lanka is deemed to be an outlier (McNicoll and Nag, 1982:135-138; Caldwell, 1990:199-214; Oshima, 1991:82-87) because the country experienced substantial declines in mortality and fertility without a parallel improvement in economic development. As shown in previous chapters an important outcome of such demographic transitional experience is the increased labour supply of females, which in turn influenced labour utilization patterns in transitional societies. It is argued in this chapter that the existence of voluntary part-time employment is partly an outcome of the transitional economy and its production systems and partly the socio-demographic changes among the working age population in the transitional society.

By definition the distinction between voluntary part-time work and involuntary part-time work is that the latter amounts to underutilized labour (Hauser, 1974:1-15; Standing, 1978:43-47). Usually in developed countries, part-time employment of women is by choice, based on the allocation of the individual's time between market and non-market uses (Becker, 1992:198; Long and Jones, 1981:414; Heckman and Wills, 1977:30-31). Housewives more than other groups tend to have more non-market uses of their time because of their familial and conjugal responsibilities (Prasith-Rathsint, 1989:71; Lim, 1984:631). If married women in developing countries choose to work, such a choice may also depend on the family income, husband's income and

perhaps the educational level of the woman. Often though even in developed countries, the women themselves do not make the decisions (Lim, 1984).

Oshima(1987;1991) argued that the changes that resulted in increased agricultural productivity were in fact the principal causes of agro-industrial transition in predominantly agricultural Asia where a demographic transition is also occurring. Caldwell(1982:344-349) noted that a feature of the demographic transition in Asia is the changing production patterns and value systems of patriarchal society.

The patriarchal family structure had been the historical norm of the west as well as of Asia (Jones, 1984:5; Caldwell, 1982:346). The dominant feature in such a social structure is male domination of the production system and sex segregation of females where the functioning of the system is based on men's control of woman's labour (Mahadevan, 1989:19-21). At the lowest level there would be a division of labour in the household activities where men may take up income earning roles and women the reproductive roles. Education played an important role in breaking down the rigidities of the patriarchal system (Caldwell, 1982:344-349), but still the norms and traditions associated with such a system persist in the transitional society (Samarasinghe, 1989:66-74). Ahmad and Loutfi(1982:19) note that for women 'entering into wage employment often meant an assumption of double or even triple workload (in home, on the subsistence farm and in wage employment)'. In Sri Lanka, a women's responsibility towards household and familial duties may be independent of her employment because

traditionally such duties are considered to be a women's domain and must be performed by her (Kurian, 1985; Lim, 1984; ILO, 1993d). Thus in most Asian countries women have to accept part-time work because of the household allocation of work based on patriarchal social values.

8.3 DEFINITION OF PART-TIME WORK

In this chapter the persons who worked less than 35 hours and did not seek additional or alternative work are defined as voluntary part-time workers and where ever they are referred to as, 'part-time workers' denotes the same meaning. This definition differs from the ILO(1994) definition of part-time work in many ways. The ILO definition of part-time work 'as regular wage employment with hours of work substantially shorter than normal in the establishment concerned' (ILO, 1994:3, 34-37) suits workers in developed and highly industrialized economies dominated by wage employment. Thurman and Trah(1990:23-24) cast doubt on the general applicability of this definition to all countries. In a developing country like Sri Lanka where the economy is in transition, non-wage employment constitutes a substantial proportion of the total employment[1] and employment is dominated by 'non-standard work' such as temporary, non-established, casual, seasonal and unpaid, the

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1 For example the 1971 Census indicated that only 67 per cent of the total employed were in paid employment and more than 30 per cent of the employed were either own account workers or unpaid family workers (Department of Census and Statistics, 1976:7 Table 2). The 1981 Census indicated that 66 per cent of employed were employees and that 32 per cent were either own account workers or unpaid family workers (Department of Census and Statistics, 1983b:ix table F). SE&LFS1985/86 shows that 58 per cent were employees and 39 per cent were own account or unpaid workers (Department of Census and Statistics, 1987a:44 table 3). The more recent data indicate the same trend as the Labour Force Survey 1990 shows that 56 per cent were employees and 42 per cent were either own account workers or unpaid workers (Department of Census and Statistics, 1991c:3 table 5).

ILO definition of part-time work cannot be applied (ILO, 1994:7). Also ILO definition cannot be applied to public sector part-time wage employment where flexible working hour schedules and enterprise flexibility exists or where part-time work is permitted for the operational requirements of the firm (ILO, 1989:17-25); and when there are high and low points in staffing requirements during the day or week (Thurman and Trah, 1990 25-25).

8.3.1 REASONS FOR PART-TIME WORK

The percentage distribution of part-workers by reasons for such part-time work in Table 8.1 shows that close to half of women in SE&LF1985/86 had either not given any

Table 8.1
Percentage Distribution of Employed Persons Working Less than 35 Hours by Reasons for Working Less SE&LFS85/86.

Reasons	Male	Female
Illness or Injury	7.2	3.8
Holiday, Leave of Absence, Strike	4.5	3.9
Other Personal Reasons	22.3	13.0
Reasons Associated With Work	47.5	45.5
Bad Weather	2.2	3.1
Total Given Reasons	83.8	71.6
No Reason Given	16.2	28.4
Total	100.0	100.0
Number Working less than 35 hours	7273	4534

Source: SE&LFS1985/86 Data Tape

reason for working less or had worked less due to reasons associated with work. The larger proportion of men and women who worked less than usual hours due to reasons related to work did so because of the reduction in economic activity,

mechanical or electrical breakdown or shortage of raw materials.

8.4 AGE PATTERNS OF PART-TIME WORKERS

Table 8.2 and figure 8.1 indicate part-time work[2] rates by hours worked and figure 8.2 presents part-time work of each age group in relation to total employment of that group so that a total picture is shown. Figure 8.1 shows

Table 8.2
Part-time Work Rates[3] by Hours Worked.

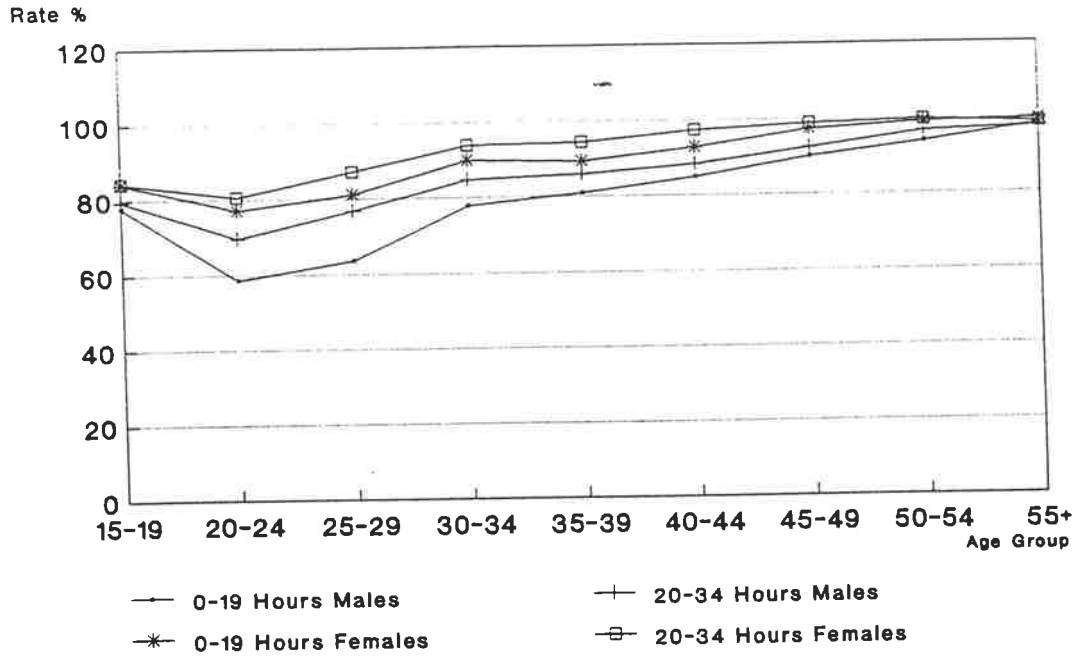
Age Group	Hours Worked			
	Males		Females	
	0-19	20-34	0-19	20-34
15-19	77.8 (262)	79.4 (506)	84.2 (146)	84.4 (218)
20-24	58.6 (268)	69.6 (793)	77.1 (179)	80.5 (349)
25-29	63.5 (211)	76.7 (738)	81.0 (205)	87.1 (389)
30-34	77.7 (193)	84.7 (634)	89.8 (197)	93.8 (439)
35-39	80.9 (204)	85.9 (597)	89.3 (224)	94.4 (445)
40-44	84.8 (138)	88.3 (463)	92.9 (142)	97.4 (348)
45-49	90.1 (132)	92.5 (412)	97.3 (149)	98.9 (282)
50-54	93.8 (113)	96.7 (360)	99.0 (97)	99.5 (227)
55+	98.2 (435)	97.7 (814)	99.5 (192)	98.7 (306)
Total	80.7 (1956)	84.7 (5317)	89.3 (1531)	92.6(3003)

Source: Socio-Economic and Labour Force Survey 1985/1986 Data Tape.
Notes: Part-time work rate is defined as the proportion of employed population in the age-sex group who are working less than 35 hours and do not seek addtional or alternative employment.

that among those who work less than 35 hours, between sixty and eighty per cent of persons in the prime age groups are not seeking additional or alternative employment with rates increasing to reach close to a hundred per cent at the age

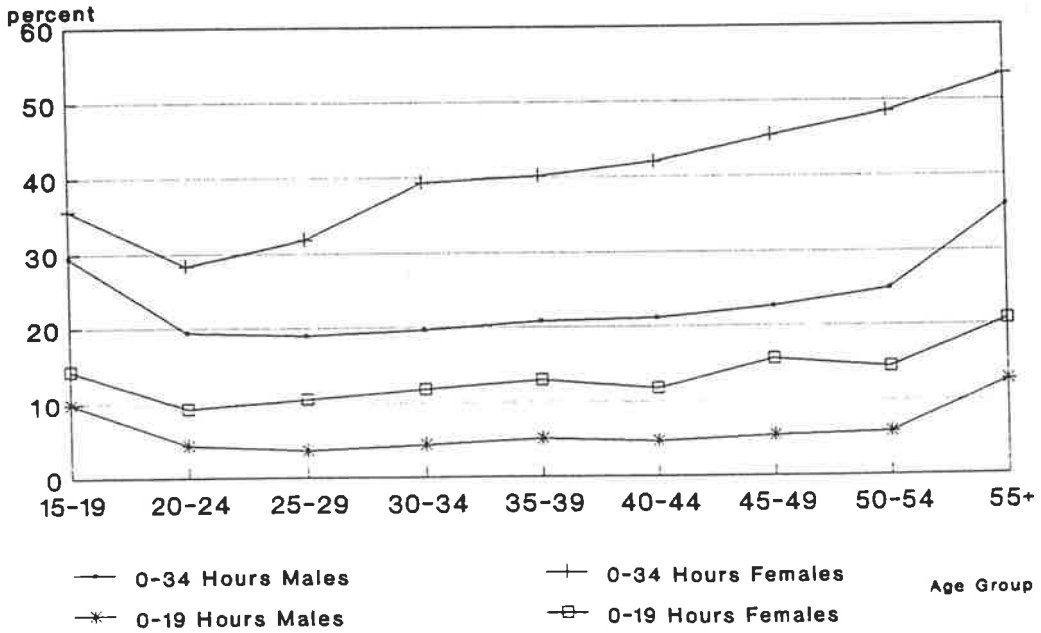
2 A part-time worker is defined as a person who works less than 35 hours per week and does not seek additional or alternative employment.
3 The age sex specific part-time work rate is calculated as follows:
persons working 0-34 hours & not seek additional or alternative employment in the age-sex group divided by
persons working 0-34 hours in the age sex group;
Similar part-time work rates are calculated for those working 0-19 hours and 20-34 hours.

Figure 8.1 PART-TIME WORK RATES OF MALES AND FEMALES, SE&LFS1985/86.



Source: SE&LFS1985/86

Figure 8.2 PART-TIME WORKING MEN AND WOMEN AS PROPORTIONS OF TOTAL EMPLOYED, SE&LFS1985/86.



Source: SE&LFS1985/86

of fifty. However when part-time work is examined as a proportion of total employment (figure 8.2), between thirty five and fifty per cent of total employed females work part-time and 10-15 per cent are working less than 20 hours per week.

Evidence from longitudinal surveys in North America (Leon and Bednarzik, 1978:3-12) support a life cycle hypothesis of part-time work for women. Loomis(1936) and Glick and Park(1965) modelled the family life cycle taking the nuclear family as the unit of analysis. Kwong(1984:567-613) examined the application of this hypothesis and the family life cycle model[4] to the family structure in East Asia and noted that such an application is relevant to explain the behavioural changes of married women in Asian countries where demographic transition is occurring. Becker(1967) suggests that certain personal characteristics of a wife and her obligations to her young family would determine her working hours. Long and Jones(1981:413) based on evidence from North America note that part-time work is mostly a phenomenon of younger and older ages. In the case of married Sri Lankan women, the work patterns are determined by the marital obligations and the expected role of a married women in a patriarchal society in which females tend to be employed part-time when they are in the child bearing ages or having a young family to look after. Due to

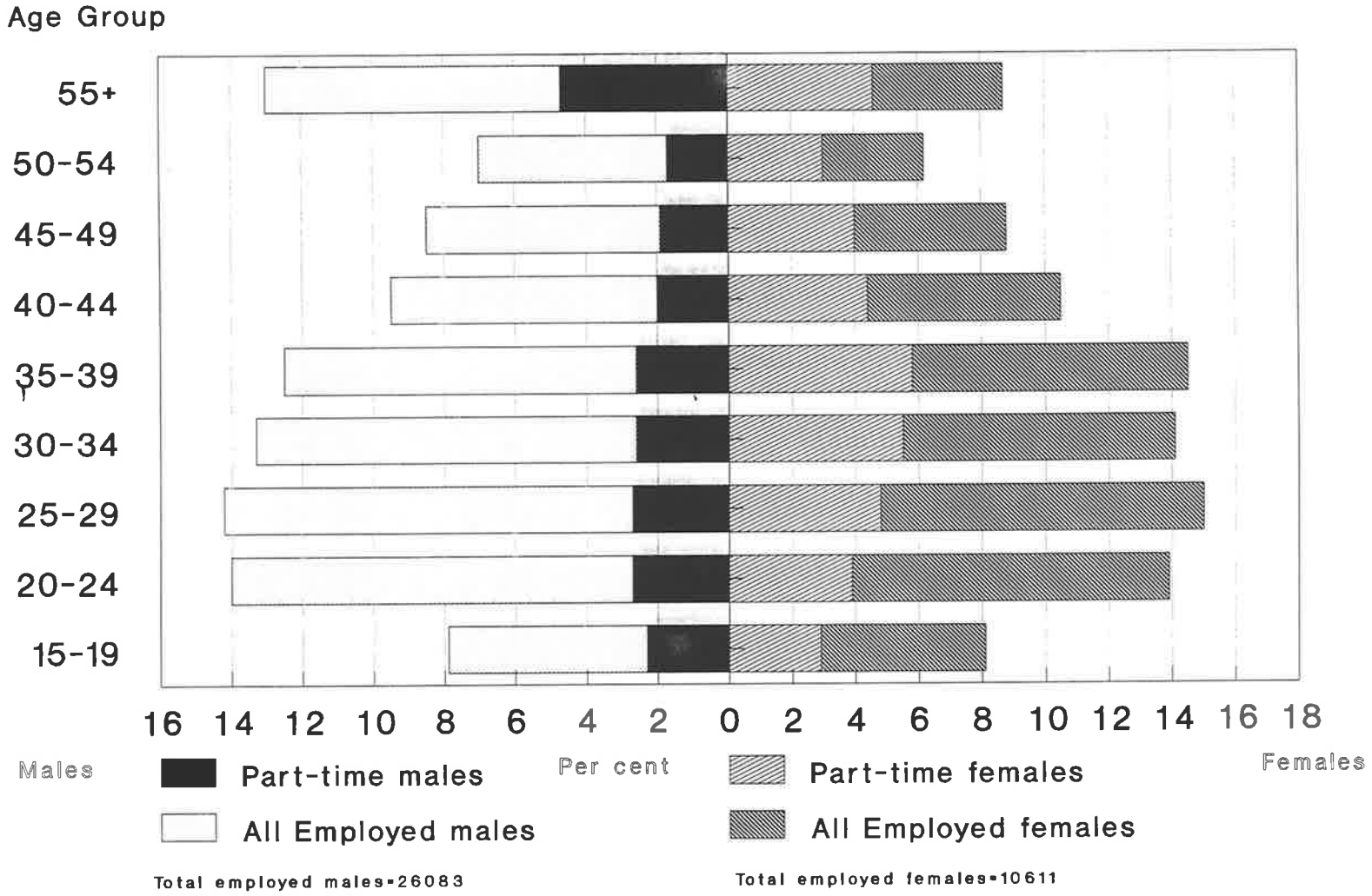
4 The family life cycle (FLC) model takes the marriage of a couple as the beginning of their family life cycle and the death of the wife as the end. The phase 1 of FLC is the family formation and the duration of this phase is the mean age of wife at first marriage to mean age at first birth; the second phase is the family extension, the duration of this phase is the mean age at first birth to the mean age at last birth; the phase three is the mean age of the mother when the first child leaves home; phase four is the contraction phase which begins with the leaving home of the first child and ends with the leaving home of the last child.

delayed age at marriage in Sri Lanka, most women in their late twenties to early thirties have young families and therefore 24-39 age group women have opted largely for part-time work (see figure 8.3).

The age distribution of female part-time workers in relation to the total employed (figure 8.3) shows that part-time work is clearly more prevalent among the prime age groups with an emphasis on the 30-34 and 35-39 age groups gradually reaching a peak at the age of 39 and then decreasing gradually up to age 54. The age distribution of current part-time working women is largely explained by changes in their marital status and the commencement of marital fertility at the early stages of their working life. The age distribution of married women (Department of Census and Statistics, 1986b:98, table 8.9) and the singulate mean age at marriage for women in Sri Lanka since 1981 being around age 24 (Department of Census and Statistics, 1982b:vii), shows that by the age of 29 at least two thirds of working age women tend to settle down and raise a family.

During the early adult ages (15-34 years in the case of Sri Lankan females and 15-28 years in the case of males) a large proportion of working age population terminate their formal education and start entering the labour force. According to Wilson (1975:61-62) only 5 per cent of females aged the 20-24 years were in schools in 1971, while 42 per cent were in the labour force. In the case of males, (Wilson, 1975:47-48) while the numbers in schools were approximately the same, those in the labour force were very

Figure 8.3 AGE DISTRIBUTION OF PART-TIME WORKERS IN RELATION TO TOTAL EMPLOYED, SE&LFS1985/86



Source: SE&LFS1985/86

Notes: Part-time workers are included in the total employed

much higher[5]. Table 6.1 in the previous chapter show that in 1990, in the 20-24, and 25-29 age groups proportions in labour force (ie. employed and unemployed) as well as student category have increased.

The distribution of male part-time workers shows a uniform pattern in all age groups, except the youngest and the oldest age groups (figure 8.3), which suggests that the reasons for part-time work among males has been determined by factors different from that of women. A higher incidence of part-time work observed for males in the 15-19 age group show that a substantial proportion initially entered the labour force as part-time workers. Deutermann and Brown(1978:1-9) observe that in North America, many youths of (baby boom cohorts) of post world war II began their working life as voluntary part-time workers while still being enroled at school. In the case of Sri Lanka, the 15-19 age group surveyed by SE&LFS1985/86 are birth cohorts associated with the high population growth period of 1965-1970. The youth who entered the labour force in large batches may have accepted whatever jobs (which needed less than 35 hours per week) that were available because of the existing high unemployment situation and did not seek additional or alternative work because they were getting adjusted to the job. For the younger age groups getting a part-time job initially would be a way of combining work with studies. Students may wish to use their spare time to help pay for their educational or personal expenses. They may work part-time on family farms or family enterprises in

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5 The age specific participation patterns for students and economically active persons (Department of Census and Statistics, 1986b:170-171 table 11.10) for the years 1963, 1971 and 1981 show the same contrast.

their spare time or during the vacations. For example, the Labour Force and Socio Economic Survey 1981/82 (LF&SES1981/82) defined students who worked more than 12 hours per week as employed (Department of Census and Statistics, 1982b:4) and found that a substantial number of persons aged 15-19 were economically active (Department of Census and Statistics, 1983:17). Workers re-entering the labour market may also wish to only work shorter hours.

The approach of retirement can often trigger changes in the patterns of labour force behaviour, especially among women (Peterson, 1979:22-27; Clark and Anker, 1990:255-271). Figures 8.2, 8.3 and table 8.2, show that a higher percentage of males and females who were aged more than 55 years were concentrated in part-time work. Most mature persons close to retiring age, and already working less than 35 hours may not seek additional or alternative employment because of the need for a less hectic work style. Clerk and Anker(1990;255-271) and Hurd and Boskin(1984:) found that increases in the size of social security benefits and decreases in the age of eligibility have reduced the likelihood of older persons remaining in the labour force. This observation is true of regular government employees in Sri Lanka. A series of government regulations facilitated early retirement from the government service without any loss of pension benefits (Government of Sri Lanka Treasury Circulars and Public Administration Circulars enacted during the period 1981 to 1989[6]). An early retirement package was offered as a part of the restructuring process of the public

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6 Public Administration Circulars that had been enacted in 1980 and of 30/88 of 1988 and even later in 1990 that brought down the age of retirement or completion of 15 to 20 years of service.

service. The provision of this facility resulted in a number of highly qualified teachers and other professionals opting for early retirement. Nevertheless, such premature retirees could work part-time to supplement their retirement income (Thurman and Trah, 1990:23-39). The expanding private sector seen after the mid 1980's in Sri Lanka has created a large number of opportunities for such premature retirees from the government to work in the private sector. Thurman and Trah (1990:23-39) argue that part-time work is increasingly attractive to employers because it eliminates the high costs of recruitment training and personnel administration. Reduced family commitments would negatively influence the desire for full-time work and some workers may prefer shorter hours at reduced incomes so that they can devote more time to other activities (Thurman and Trah, 1990:23-37).

8.5 MARITAL STATUS OF PART-TIME WORKERS

Table 8.3 shows part-time work rates by gender, the number of hours worked and marital status. Prevalence of part-time work is high among married women. Table 8.3 shows that more than 90 per cent of currently married women in the age group 35 and above, irrespective of the fact thatthey worked for less than 19 hours per week or less than 35 hours did not seek additional or alternative employment. The rates were universal or nearly so for married women of all ages above 45 years. Voluntary participation in part-time work is high among currently married women because of their conjugal and familial responsibilities. They opted for work situations in which they could be employed and also attend to familial, marital and parental responsibilities.

Table 8.3

Part-time Work Rates by Marital Status.

	Never Married		Currently Married		Currently Single	
	NHW1	NHW2	NHW1	NHW2	NHW1	NHW2
Males						
15-19	78.2 (261)	79.4 (504)	*			
20-24	58.1 (229)	67.8 (655)	63.1 (38)	80.2 (136)	** (**)	83.3 (12)
25-29	53.6 (97)	70.5 (373)	71.7 (113)	83.3 (360)		
30-34	71.4 (35)	81.9 (155)	78.8 (151)	85.4 (474)		
35-39		84.7 (59)	81.9 (182)	85.9 (532)		93.7 (16)
40-44		95.8 (24)	83.3 (126)	87.9 (429)		
45-49	87.9 (66)	78.9 (19)	89.2 (120)	93.1 (379)	98.2 (58)	92.8 (14)
50-54		92.3 (13)	95.0 (100)	96.6 (329)		
55+		96.8	98.1	97.7		
Total	68.6 (688)	74.4 (1834)	86.9 (1200)	89.9 (3346)	94.1 (64)	95.6 (137)
Females						
15-19	83.8 (136)	83.0 (194)				
20-24	63.2 (98)	70.2 (205)	93.0 (86)	95.0 (20)		91.7 (12)
25-29	59.1 (66)	68.8 (125)	92.5 (133)	97.1 (244)	80.9 (21)	80.0 (20)
30-34	67.8 (28)	87.6 (89)	94.3 (159)	96.5 (317)		84.8 (33)
35-39	82.8 (35)	89.4 (189)	95.9 (370)	81.2 (32)	90.0 (40)	
40-44	80.0 (20)	94.4 (18)	93.6 (109)	97.9 (291)	89.3 (28)	94.9 (39)
45-49			98.3 (120)	99.1 (279)	92.6 (27)	95.9 (49)
50-54		100.0 (19)	100.0 (74)	100.0 (154)	95.2 (21)	98.5 (66)
55+			99.0 (97)	100.0 (167)	100.0 (93)	96.9 (131)
Total	65.1 (384)	77.9 (685)	94.9 (961)	97.5 (1928)	92.8 (206)	94.1 (390)

Sources: SE&LFS1985/86 Data Tape
Notes: * - No cases, ** Less than 10 cases
NHW1 - Hours Worked 0-19, NHW2 - Hours Worked 20-34.

Nevertheless, there is no consensus of opinion on this issue. Anker(1978) and Clark and Anker(1990:255-271) argue that strong extended family structures, the important role played by older siblings in child care, the relatively low costs of domestic help and the relative importance of self help and unpaid family work that can be combined with child care, make it easier for married women in developing countries to take up employment.

Sobol(1973:497-505) and Long and Jones(1981:413-425), point out that part-time work is largely centred on currently married women. The high incidence of part-time employment among married women in Sri Lanka shown in table 8.3, compares with previous studies or other empirical evidence showing intermittent participation of women in the labour force. The unique feature in Sri Lankan case is that more part-time workers (working on a continued basis) than additional workers are present. The presence of a large number of part-time workers among married women indicates a stronger commitment among Sri Lankan women to labour force participation, even though they are married. Bowen and Finegan(1969:148-149) support the hypothesis that married women would enter the labour force as additional workers when their husbands were unemployed. Standing (1978:109) argues that in developed countries, the additional worker effect is dominant among currently married women.

Generally, part-time work rates were relatively lower for younger age group (less than 39 years), single women who worked 0-19 and 20-34 hours. In Sri Lanka the average age at marriage for males was 28 years and for females it was 24.6 years (Department of Census and Statistics, 1986b:92-93). In

the previous chapters it was established that a large proportion of never married women of younger ages were either unemployed or underemployed. Compared to currently married women the proportion of young, never married women in part-time work was less if they were seeking additional or alternative employment.

The part-time work rates in table 8.3 show that the pattern of participation of widowed, divorced or separated women was mostly similar to that of married women. A substantial proportion of working women were among the widowed, divorced and legally separated[7]. DeGraff and Bilsborrow(1993:317-335) note that female headed households become increasingly common with economic and social changes in transitional societies. As single parents the familial responsibilities for these women are greater, even though they could use an extra income from additional work. One effect of the transitional society on women was encouragement for them to be more liberated. Such liberation would have come through adoption of western values regarding marriage[8] and economic independence through employment. Caldwell (1982: 348) notes that 'imported western concepts of family have come with the missionaries, administrators, educational systems and the mass media. The rights of wives and children have been emphasised'.

8.6 PART-TIME WORK PATTERNS BY HOUSEHOLD SIZE

Nucleation of the family has resulted in a break-away

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7 A larger proportion of these women were widowed due to the existing ethnic conflicts and related high mortality for prime age males.
8 For example Guest (1990) found that in Indonesia that a high proportion of women in Irian Jaya were divorced. Caldwell (1982:349) notes that among traditional patriarchal families of the agrarian Old World, matrilocality among South East Asian society made them less resistant to change and thus the position of women was stronger.

from the extended family system (Hugo, 1981:1-18). Caldwell(1982:96-97) points out that in terms of the family income, family nucleation resulted in concentration of expenditure and obligations towards ones own family differentiated from members outside the immediate family circle. In the extended family with common household income and expenditure, the parents of spouses are readily available for looking after the children when the mother is working and in the nuclear family structure such services were not readily available. Samarasinghe(1989:66-73) points out that while the better educated, highly paid female workers rely on paid help and female relations, the less educated low income women employed in the modern manufacturing and service sectors have to rely on close family ties. Lack of child care facilities for working mothers (UNICEF, 1987:54-80) induce young mothers without strong family ties to opt for part-time work rather than full-time (Lim, 1984).

Table 8.4 shows the participation of males and females in part-time work by household size and age group. In smaller size households, ie. households with four or less persons, almost all the women aged more than 39 years were in part-time employment. This is because they were engaged in occupations which were compatible with their dual roles of housewife and a producer of economic goods and services. Peek(1978:52-67) found that in Chile, child care burden does have a negative influence on the mother's employment in the modern sector. A second explanation would be that these women who were educated opted for occupations which gave them more leisure time.

Table 8.4
Part-time Work Rates by Household Size, Age Group and Gender
SE&LFS1985/86.

	HHS1		HHS2	
	NHW1	NHW2	NHW1	NHW2
males				
15-19	77.4	77.3	78.6	83.9
	(173)	(344)	(89)	(162)
20-24	59.6	68.8	55.0	72.7
	(208)	(628)	(60)	(165)
25-29	62.8	76.0	70.0	80.8
	(191)	(639)	(20)	(99)
30-34	77.6	84.7		84.2
	(183)	(596)		(38)
35-39	80.3	85.8		92.8
	(198)	(583)		(14)
40-44	85.2	88.6	85.7	
	(135)	(457)	(35)	
45-49	89.9	92.8		87.5
	(129)	(406)		(48)
50-54	95.3	96.8		
	(108)	(350)		
55+	97.7	97.7		
	(429)	(785)		
Total	81.7	85.1	72.0	80.4
	(1752)	(4791)	(204)	(526)
females				
15-19	82.2	83.7	87.5	86.1
	(90)	(153)	(56)	(65)
20-24	75.8	80.9	83.3	78.7
	(149)	(288)	(30)	(61)
25-29	81.8	87.9		78.1
	(192)	(357)		(32)
30-34	89.6	94.1		85.7
	(193)	(425)		(14)
35-39	89.2	94.5		
	(222)	(437)		
40-44	92.9	97.4	82.6	92.0
	(142)	(345)	(23)	(25)
45-49	97.3	98.6		
	(148)	(280)		
50-54	98.9	99.5		
	(96)	(225)		
55+	99.5	98.6		
	(190)	(298)		
Total	89.7	93.2		
	(1422)	(2808)		

Sources: SE&LFS 1985/1986 Data Tape.
Notes: HHS1 - Household Size less than or equal to 4 persons; HHS2 _ Household Size more than 4 persons;
NHW1 - Number of Hours Worked 0-19;
NHW2 - Number of Hours Worked 20-34.

Part-time work rates of younger women in both groups were less than for the older age groups. This is because a large proportion of such women are never married. Oshima(1987) argues that young girls had to stay never married for longer periods to contribute to the family income and help their parents because of greater expenditure in larger families[9]. Table 8.4 shows that in households with more than four members, the number of more mature women who opted for part-time work was either very small or insignificant. This trend suggests that a large number of more mature women from more than four person household are completely out of the labour force due to discouragement or because they are more involved in family responsibilities.

Table 8.4 shows that the rates were lower for younger and prime age group males, especially those who were working less than 19 hours during a working week. The explanation is that in a patriarchal society, irrespective of the age or the marital status, a male is considered to be the person who should provide for the family. In Chapter Seven it was shown that a large proportion of younger age males were underemployed.

8.7 ETHNICITY OF PART-TIME WORKERS

Table 8.5 indicates the part-time work rates by ethnic groups, age and sex. The 'others' group were excluded because the numbers for that group were less than ten for each individual age group. In Chapter Five it was shown that the levels and patterns of demographic transition were different for each ethnic group depending on their degree of

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9 Caldwell, 1982:344 asserts that in the transitional society the parents no longer controlled the employment of adult children and hence could not anticipate no certain return from them.

Table 8.5

Part-time Work Rates by Age, Ethnicity and Sex.

Age Group		15-19	20-29	30-39	40-49	50+	All Ages
Sinhala							
Male	NHW1	79.1	59.1	79.1	88.8	96.3	80.9
		(201)	(389)	(325)	(223)	(461)	(1599)
	NHW2	77.4	69.7	84.9	90.1	97.9	83.5
		(341)	(1112)	(904)	(639)	(895)	(3891)
Female	NHW1	84.8	78.5	89.5	94.5	99.1	89.0
		(125)	(312)	(335)	(237)	(232)	(1241)
	NHW2	80.3	80.9	94.0	97.6	98.8	91.7
		(152)	(535)	(666)	(504)	(410)	(2267)
Sri Lanka Tamil							
Male	NHW1	77.7	68.2	94.7	78.9	97.7	81.2
		(35)	(44)	(22)	(19)	(44)	(164)
	NHW2	87.9	94.2	90.4	93.8	98.6	91.9
		(91)	(217)	(167)	(129)	(142)	(746)
Female	NHW1	90.9	77.5	86.8	88.6	100.0	89.7
		(11)	(40)	(53)	(32)	(39)	(175)
	NHW2	88.5	96.6	93.0	98.1	100.0	94.7
		(26)	(87)	(128)	(78)	(80)	(399)
Indian Tamil							
Male	NHW1	**	**	84.6	**	91.7	80.8
		(**)	(**)	(13)	(**)	(12)	(49)
	NHW2	84.0	88.9	94.4	94.6	89.1	90.3
		(25)	(63)	(66)	(37)	(46)	(237)
Female	NHW1	**	100.0	89.4	100.0	**	96.0
		(**)	(14)	(19)	(11)	(**)	(50)
	NHW2	100.0	93.9	94.5	100.0	100.0	96.8
		(24)	(66)	(55)	(26)	(17)	(188)
Moor							
Male	NHW1	76.5	67.6	80.0	82.3	92.8	79.4
		(17)	(34)	(35)	(17)	(28)	(131)
	NHW2	75.0	70.0	82.2	83.3	95.3	80.7
		(48)	(130)	(92)	(66)	(85)	(419)
Female	NHW1	**	77.8	100.0	**	100.0	88.5
		(**)	(18)	(13)	(**)	(12)	(61)
	NHW2	93.3	93.3	97.0	100.0	100.0	96.3
		(15)	(45)	(33)	(20)	(23)	(136)
All Ethnic Groups							
Male		81.5	70.0	81.6	89.6	97.3	91.5
		(768)	(2010)	(1628)	(1145)	(1722)	(7273)
Female		84.3	82.3	92.8	96.9	99.1	91.5
		(364)	(1122)	(1305)	(921)	(822)	(4534)

Sources: SE&LFS1985/1986 Data Tape.
Notes: NHW1 - Number of Hours Worked 0-19
NHW2 - Number of Hours Worked 20-34
** - Less than 10 cases

exposure to the determinants of the transition. Thus while there are broad common patterns, recent changes are seen in some of the more traditional communities.

Part-time work rates are lower for males than for females among all age groups and all ethnic communities supporting the proposition that part-time work is more prevalent among females, irrespective of their ethnic differences. Voluntary participation in part-time work is high among more mature females and rates reach close to a hundred for the 50 years and over age groups. This pattern confirms the discussion in section 8.5 which suggests that irrespective of ethnic differences voluntary part-time work is more prevalent among persons close to the age of retirement.

Patterns of participation in part-time work by females of minority ethnic communities show that the rates are low for the 20-29 age group of Sri Lanka Tamil and Moor communities rather than the Indian Tamil community. Almost all Indian Tamil women are employed in tea estates and regulated by the work patterns of tea estates. While a low proportion of Indian Tamils are working less than 19 hours, a larger proportion are working 20-34 hours voluntarily because they were not available for additional or alternative work. Absence of child care facilities may be an important factor which discourages women from seeking additional or alternative employment (UNICEF, 1987:54-80; Kurian, 1985:101-103). The workload in the estate, in spite of low and unequal wages, (Kurian, 1985:125-129) very cool to cold climatic conditions, difficult mountainous terrain that result in the relative isolation (Hollup, 1993:69-73)

of tea estate sector workers from other work centres and cultural factors which attribute a major household work load to women are explanations for these work patterns.

An interesting deviation from the expected pattern is shown by Muslim women of the 20-29 age group who worked 0-19 hours. It was expected that a large proportion of Muslim women would be part-time workers because they marry young (Department of Census and Statistics, 1986b) and also have high levels of fertility (Department of Census and Statistics, 1986b:116; Abeykoon, 1987:2-28). Women in this community have a lesser tendency to work away from home as they are more traditional and protected (Ismail, 1989:36-37). Nevertheless, the lower rate of part-time work observed for employed Muslim women of this age group is due to women who work less than 20 hours and who are seeking additional employment.

The lower rates for females in the 20-29 and 30-39 age groups of the Sinhala and Tamil communities show (as discussed in chapter seven) that they are looking for additional or alternative employment. These age-cohorts have been more exposed to demographic and cultural changes that have occurred in the society, are more modern in outlook (Abeykoon, 1987:4). Table 8.5 shows that part-time work rates were higher for women of all ethnic groups than men. Is this an outcome of the multiple roles[10] (Lim, 1984:619) that women have to perform, irrespective of their cultural identity?

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10 Some of this work is not counted in official statistics or not visible in the collected data (Lim, 1984; Ware, 1981)

8.8 THE LEVEL OF EDUCATION AMONG THE PART-TIME WORKERS

Table 8.6 indicates part-time work rates by level of education. The expansion of the formal education system has had important repercussions for employment (ESCAP, 1976:210-220; Jayaweera, 1993; 1979:138-162; Sumatipala, 1967). The additional years of schooling has increased the potential earning capacity of woman and her potential for labour force participation (Bowen and Finegan, 1969:114-115; Standing, 1978:140; Psacharopoulos and Tzannatos, 1993:298).

Table 8.6 shows that females who had a junior secondary level of education comprised the largest number among the part-time employed and rates for younger females were high. Those who entered the labour force with a junior secondary level of education face competition from the more educated or technically trained and therefore face difficulties in fitting into jobs. Because of an over-supply of workers in relation to demand at the higher levels of education, highly qualified people compete with those who have lower level of education such as junior secondary for jobs that require lesser levels of education; and hence the latter are pushed into accepting part-time jobs initially. Table 8.6 shows that with advancing age those who are in part-time employment do not seek additional or alternative employment.

Females who left school with low educational attainment had to fit into employment that did not require a high level of education. Part-time work among low educated females is related to low income or disadvantaged social classes. Caldwell, Reddy and Caldwell(1988:29-51) in a survey done in South India found that cost and work needs were dominant reasons among peasant, artisan, backward and scheduled

Table 8.6
Part-time Work Rates by Age, Sex, Educational Level and Hours Worked.

Age Group	Rates by Level of Education: No Schooling	Primary	Junior Secondary	Senior Secondary
Males				
15-19NHW1	84.2 (19)	73.2 (71)	78.3 (157)	86.7 (15)
NHW2	89.1 (55)	75.5 (163)	79.2 (260)	85.7 (28)
20-24NHW1	76.9 (13)	73.8 (80)	52.6 (133)	42.9 (42)
NHW2	90.4 (52)	77.2 (250)	65.3 (380)	57.7 (111)
25-29NHW1	70.0 (10)	80.0 (60)	64.5 (107)	29.4 (34)
NHW2	86.7 (45)	84.6 (182)	73.8 (390)	70.2 (121)
30-34NHW1	90.0 (10)	83.7 (49)	76.4 (106)	67.9 (28)
NHW2	93.9 (33)	88.5 (182)	83.7 (294)	79.2 (125)
35-39NHW1	100.0 (10)	80.3 (71)	82.4 (91)	71.9 (32)
NHW2	89.9 (49)	87.8 (189)	83.0 (247)	87.5 (112)
40-44NHW1	100.0 (12)	77.8 (45)	86.0 (57)	87.5 (24)
NHW2	96.7 (30)	89.5 (162)	83.0 (153)	91.5 (118)
45-49NHW1	86.7 (15)	94.2 (52)	85.2 (54)	100.0 (11)
NHW2	94.3 (35)	94.9 (158)	90.7 (151)	89.7 (68)
50-54NHW1	100.0 (13)	96.3 (54)	90.9 (33)	84.6 (13)
NHW2	97.7 (43)	96.8 (154)	95.5 (110)	98.1 (53)
55+ NHW1	100.0 (52)	99.5 (183)	96.7 (153)	95.7 (47)
NHW2	96.0 (101)	97.6 (373)	97.8 (274)	100.0 (66)
TotalNHW1	92.2 (154)	77.6 (891)	89.2 (554)	69.5 (246)
NHW2	92.8 (443)	81.0 (2259)	91.4 (927)	81.9 (802)
Females				
15-19NHW1	63.6 (11)	90.3 (31)	82.8 (87)	94.1 (17)
NHW2	88.9 (36)	86.2 (65)	83.5 (97)	75.0 (20)
20-24NHW1	82.4 (17)	93.3 (60)	82.0 (61)	43.9 (41)
NHW2	97.8 (45)	91.0 (89)	84.6 (123)	56.5 (92)
25-29NHW1	94.4 (18)	91.1 (45)	84.3 (89)	62.3 (53)
NHW2	95.7 (46)	88.5 (96)	88.8 (143)	79.8 (104)
30-34NHW1	94.4 (18)	95.7 (42)	90.0 (90)	83.0 (47)
NHW2	100.0 (53)	96.4 (93)	90.4 (156)	94.2 (137)
35-39NHW1	92.7 (28)	94.0 (69)	92.5 (80)	74.5 (47)
NHW2	98.7 (77)	96.4 (117)	94.1 (153)	91.8 (98)
40-44NHW1	93.8 (32)	100.0 (39)	91.8 (49)	90.9 (22)
NHW2	96.1 (77)	99.4 (68)	98.1 (103)	96.0 (100)
45-49NHW1	100.0 (45)	98.8 (46)	100.0 (43)	93.3 (15)
NHW2	98.7 (79)	99.3 (81)	98.2 (56)	98.5 (66)
50-54NHW1	100.0 (31)	100.0 (31)	100.0 (22)	100.0 (13)
NHW2	98.5 (79)	98.8 (66)	97.6 (46)	100.0 (47)
55+ NHW1	100.0 (79)	98.9 (31)	97.0 (33)	100.0 (13)
NHW2	98.5 (133)	99.3 (66)	98.1 (54)	100.0 (24)
TotalNHW1	95.0 (279)	94.9 (430)	89.2 (554)	75.0 (268)
NHW2	97.7 (618)	94.7 (770)	91.4 (927)	87.4 (688)

Sources: SE&LFS 1985/1986 Data Tape.
Notes: NHW1 Number of hours worked 0-19
NHW2 Number of hours worked 20-34
Numbers in parentheses are total numbers in age, sex level of education and number of hours worked groups.

castes to explain why children were removed from school by their parents. Two-thirds of those who were taken out for work purposes were required to work on the family farm as agricultural labourers or in the house. Such employment is casual, more labour intensive and provides work only for a few hours each day. Table 8.6 shows that part-time work rates irrespective of the hours worked (0-19 or 20 to 34 hours) or of the age of the worker, were quite high for females who had no schooling or had done only four years of schooling. With a low level of education there is only a limited choice of occupations for an employee and those are largely in casual and labour intensive jobs in agriculture or production sectors. However, the total number of employed persons with this level of education was much less.

8.9 OCCUPATIONS OF PART-TIME WORKERS

Table 8.7 presents the percentage distribution of part-time working males and females by their principal occupations and employment status. Detailed occupational classifications by age group and by education are contained in appendices 8.3 and 8.4. Analysis of part-time employment by occupations further supports the argument that much of part-time work can be explained by the changes occurring in the transitional society. Current occupational patterns of part-time workers reflect the nature and patterns of social and economic changes that have been occurring. The expected changes towards an agro-industrial transition (Oshima, 1987:56-61) which should have preceded or occurred parallel to demographic transition in Sri Lanka are occurring at a slower rate. The traditional agricultural sector should have improved to increase productivity, inducing a proportion of

those employed in that sector to shift in favour of non-agricultural occupations. The initial changes in the age structure due to the early stages of demographic transition induced higher participation from females, but the traditional economy was not resilient enough to absorb such additions in full-time employment.

8.9.1 AGRICULTURAL OCCUPATIONS

Table 8.7 shows that part-time employment is concentrated largely in the agricultural occupations and agriculture sector has been the principal provider of employment (Chapter Four). Booth and Sundram(1985:17) argue that in contemporary, less developed countries in the early stages of development there is far less industrial specialization than in the developed countries and therefore a person may be engaged in agriculture, cottage industry and a service activity (such as transport) at different times of the year. Investigations in Sri Lanka, Hewavitharana(1986; 1991) confirm this contention.

Table 8.7 shows that a large proportion of employed males were own account workers working on small paddy or land holdings[11], voluntarily working less than 35 hours, which suggests an inherent backwardness in the sector caused by the declining size of the holding. Adoption of modern methods of farming such as use of fertilizer and improved seed varieties would increase production even in a small holding. Such changes introduced in Indonesia for example, had improved productivity (Oey, 1985:18-46). Jayatilaka(1989:21-29) in a survey of villages to assess the

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11 The Census of Agriculture indicated that in 1982, 42.4 per cent of holdings were less than one acre which comprised 8.1 per cent of the total holding area (Department of Census and Statistics, 1983c:9-10).

Table 8.7
Percentage Distribution of Voluntary Part-time Workers Working 0-34 hours by Employment Status and Occupations.

ISCO NO. & Occupations	Employment Status: Regular	Casual	Employer	Own Account	UFW	Total %	Number	Column %
1 Professional Technical and Related								
Male	74.6	7.3	0.3	6.9	0.9	100.0	348	5.8
Female	87.0	4.9	0.4	7.3	0.4	100.0	508	12.3
2 Administrative & Managerial								
Male	83.3	0.0	11.1	5.6	0.0	100.0	18	0.3
Female	**	*	*	*	*		**	
3 Clerical and Related								
Male	78.6	15.5	1.0	4.9	0.0	100.0	98	1.6
Female	78.7	17.0	*	2.1	2.1	100.0	30	0.7
4 Sales								
Male	2.6	10.2	8.5	64.8	13.9	100.0	352	5.9
Female	1.0	5.2	1.0	45.0	47.6	100.0	191	4.6
5 Services								
Male	18.5	35.4	10.8	26.2	9.2	100.0	87	1.4
Female	10.3	42.3	2.1	21.6	23.7	100.0	97	2.3
6 Agriculture								
Male	7.4	25.0	3.7	46.0	17.9	100.0	3536	59.0
Female	12.7	22.0	1.7	19.3	44.2	100.0	2504	60.9
7 Production and Related								
Male	8.1	72.6	2.1	14.7	2.5	100.0	1549	25.9
Female	4.1	37.1	0.6	45.8	12.4	100.0	788	19.1
Total								
Male	12.7	35.4	3.4	36.2	12.2	100.0	5988	100.0
Female	20.1	22.5	1.3	24.0	32.1	100.0	4119	100.0

Source: SE&LFS1985/86 Data Tape
Notes: * No cases; ** Less than 10 cases
UFW - Unpaid Family Workers
ISCO No: - Single Digit Classification of International Standard Classification of Occupations.

impact of the 'green revolution' on the Sri Lankan peasantry, alleged that the changes brought about have not increased productivity but had pauperised the peasants. Hettiarachchy(1989:31-41) in two surveys examining chena cultivations in **Ambilipitiya** in the Ratnapura district in Sri Lanka, concluded that the chena cultivator was a marginalized producer in Sri Lanka and that the attitudes of politicians and administrators had done little to help them.

Oshima(1987:56-62) argues that in transitional societies, in the course of transition from predominantly agricultural to industrial, the productivity in agriculture should increase which leads to the emergence of more full-time work patterns. Higher investment in the sector by 'constructing infrastructure for irrigation, drainage transport, education, electrification and basic industry' is the first step that' would generate more work for peasant families' (Oshima, 1987:61). Adoption of modern technology and cultivation methods flows from higher investment because, when the income of farm families improve, they spend on 'better seeds, fertilizers, insecticides, tools and equipment' (Oshima, 1987:61). A substantial level of infrastructural development had taken place largely through the intervention of the government (see Chapter Four), but the adoption of modern technology by the farmers was also largely due to the role played by the government rather than to their own initiative. Such a pattern suggests that the process of agro-industrial transition is still not strongly fostered.

Traditional work share patterns in rural societies (Mazumdar,1989:8) and the seasonality of agricultural work particularly in Monsoon Asia (Oshima, 1990:44-70) are also reasons for part-time work in agriculture and large scale poverty. A large proportion of employment opportunities are created during field preparation and harvesting times (Oshima, 1990:44-70) and thus at other times the agricultural work force working in paddy sector is seasonally slack (Oshima, 1981:12-13). In non-harvesting periods available work in the family holdings is shared.

Mazumdar(1989:4-9) suggests that low productivity in agricultural employment is created in areas where there is a plentiful supply of labour and when available work is rationed among job seekers. A large proportion of males and females in the 15-19 age group had entered agricultural employment, in paddy farming, vegetable or other food crop cultivation. Most of the female part-time workers were in unpaid family work (see Table 8.7).

Those who were in wage employment in the agricultural sector had a lower tendency to be in voluntary part-time employment. Voluntary part-time work rates for agricultural workers, (appendices 8.1, 8.2 give detailed classifications), ie. paid employees who worked in tea, rubber and coconut plantations or in casual labour in paddy land were motivated to seek additional or alternative employment (see Chapter Seven) because they do not have land of their own[12] to get an income.

Workers in agricultural occupations were the least exposed to agents of change such as education. The percentage distribution of persons with noschooling and primary level of schooling among occupations, show that the largest proportions were found among agricultural occupations particularly among agricultural workers (see appendices Appendices 8.3 and 8.4). Kurian(1985:109-111) attributes the low level of education, of plantation workers to (1) precedence given by the resident plantation labour

12 Landlessness is a situation associated with the continued decline in the land-man ratio. In 1982 11 per cent of the operators in the small-holdings sector had no land and 39 per cent were almost landless, having only home gardens averaging 0.6 acres. In this context the rural hired labour category drawn from the landless and marginal-farmers was estimated at 15 per cent of the total labour force of the country. They have to make a living by taking on any available work, be it farming or non farming (Hewavitharana, 1991:8).

force to plantation activity over education (2) the inferior status of females in the predominantly patriarchal society, (3) the costs involved in sending a child to school among resident plantation workers and poor villagers and (4) the process of pauperisation that is taking place in transitional villages. Such part-time work for women was mainly associated with agricultural, labour intensive casual and regular employment such as rubber tapping and rubber estate labour work, tea plucking and tea estate labour work, coconut estate labour work and cattle and poultry farm work.

In the traditional society which offered higher wages and secure employment opportunities mainly in white collar occupations[13] for persons with higher levels of education, those who aspired to enter the labour force with little education were pushed into agricultural work. At low income levels, the family members and especially females who had no schooling or very little education[14] were expected to join the small family farm or engage in casual employment as general farm workers because such occupations did not require additional skills (ILO, 1969:140; Department of Census and Statistics, 1983b:90-91).

Participation in wage-earning employment[15] was at the cost of subsistence farming which would be largely unpaid

13 White Collar jobs as intended here are defined as (1) Professional, Technical and Related, (2) Administrative and Managerial (3) Clerical (4) Sales (5) Services categories of occupations of ICCO codes 1,2,3,4,5 respectively.

14 Kurian, (1985:109) notes that women in the plantation sector are less educated than the men; while over 98 per cent of the women who were interviewed could neither read nor write, all the men could read, confirmed by a comparison of their levels and years of study.

15 Caldwell, (1982:289) states that modernization is that degree of social change which inevitably accompanies economic change because the new economic order demands it. Oberai, (1978:34) in an analysis of international cross sectional time series data concluded that the process of industrialization and economic development alters labour force status distribution in favour of wage employment (ie., the

family work for women (Hewavitharana, 1991:6). With the monetary income that the women brought into the household, the societal attitudes of women working outside their homes (Jones, 1984:3) tended to change. Caldwell(1990:207-253) argues that the economic change seen in transitional societies is not so much the rise in per capita income, as the penetration of the market economy and the conversion of most transactions to a cash basis. Female wage employment in casual and regular labour intensive occupations in tea, rubber and coconut estates and in paddy fields in Sri Lanka enabled women to contribute substantially to the family coffers[16]. Illo(1984:307-325), based on a survey done in two rice milling villages in the Philippines, recorded that 'women from poorer families in **Gatbo** tended to affect family earnings more dramatically than those from less poor households in **Ayugan**. The contribution of Gatbo working wives for instance, accounted for 26 per cent to 31 per cent of family earnings'.

Part-time work in the case of Sri Lankan women employed in plantation agriculture (for example, in tea and rubber plantations) is due to the nature of the work schedule which provides only part-time employment. In the process of diversifying the traditional agricultural economy to a commercial plantation economy[17], the colonial British government promoted the emigration of families from India (Kurian, 1985:21-29) to work in tea plantations. In low land

proportion of self and family employment diminishes) in each sector as well as in the economy as a whole.

16 Kurian (1985:109) argues that large scale poverty in the villages drives the wives to seek work outside the home. Since women are driven to work outside home at an earlier stage their education is also affected.

17 The plantation economy during British rule in Sri Lanka started with the implementation of Colebrook Cameron Reforms in 1829.

areas, women were largely employed in rubber tapping and other casual work in rubber plantations. The incentive for estate working women to seek additional work was low because of lower discriminatory wages paid to women even for the same types of work as men (Kurian, 1985:125). The division of work in the family, based on patriarchal social values was such that women were inferior to men and child minding was entirely the responsibility of women (Kurian, 1985:49-50, 100) and without adequate services of creches (Kurian, 1985:101-103) or day care centres for working mothers to help with child care (UNICEF, 1987:54-55), they are unable to work additional hours.

8.9.2 PRODUCTION AND RELATED OCCUPATIONS

Table 8.8 indicates part-time work rates and the percentage distribution of workers who are in the production and related group of occupations. A substantial proportion of part-time workers were in spinning, weaving and knitting occupations. Table 8.9 shows that these occupations comprised a substantial proportion of the total production and related occupations but that over the years the numbers have declined. Traditionally, this group of occupations provided home-based, rural, non-farm employment for women (Hewavitharana, 1991:27). Low capital investment was needed to set up a handloom machine and the government policy at that time promoted handloom industry in rural areas by subsidising the costs and marketing the production so that additional employment was created (Ministry of Planning and Employment, 1971:60-75). Therefore it was easier for less educated rural women to enter into employment as spinners,

Table 8.8
Part-time Work Rates and the Percentage Distribution of Production and Related Workers Working Less than 35 Hours.

ISCO No & Age Group	Part-time Work Rate % Male	Female	% Distribution Male	Female
ISCO 700-746				
15-39 Minors &	79.0 (124)	** (**)	6.3	1.0
40+ Wood Preparers	95.0 (60)	** (**)	3.7	0.5
ISCO 752-759				
15-39 Spinners	** (**)	77.1 (48)	0.3	4.7
40+ Weavers & Related	* (*)	96.6 (29)	*	3.6
ISCO 771-779				
15-39 Food &	65.7 (35)	80.0 (70)	1.5	7.1
40+ Beverage Workers	90.9 (11)	98.8 (86)	0.6	10.8
ISCO 781-799				
15-39 Tobacco	87.0 (23)	78.0 (209)	1.3	20.8
40+ Preparers, Tailors	85.7 (21)	91.3 (46)	1.2	5.4
ISCO 801-839				
15-39 Shoe & Leather	87.5 (21)	** (**)	1.4	0.8
40+ Workers	100.0 (21)	** (**)	1.4	0.4
ISCO 841-859				
15-39 Fitters &	64.5 (62)	** (**)	2.6	0.1
40+ Machine Essemblers	69.2 (26)	** (**)	1.2	0.4
ISCO 862-897				
15-39 Plumbers &	72.0 (50)	77.3 (22)	2.3	2.2
40+ Metal Workers	92.3 (26)	84.6 (13)	1.6	1.4
ISCO 942-949				
15-39 Production	75.0 (28)	89.7 (97)	1.4	11.1
40+ Workers NEC	96.6 (29)	98.9 (87)	1.8	11.0
ISCO 951-961				
15-39 Construction	66.9 (260)	** (**)	11.3	0.1
40+ Workers	94.2 (155)	* (*)	9.4	*
ISCO 971-989				
15-39 Transport	69.4 (49)	* (**)	2.2	*
40+ Workers	80.3 (61)	** (**)	3.2	0.1
ISCO 999				
15-39 Labours NEC	65.3 (646)	82.9 (105)	27.3	11.1
40+	87.3 (308)	93.4 (61)	17.4	7.3
Total				
15-39	68.1 (1318)	80.8 (573)	58.1	59.0
40+	89.1 (726)	95.8 (336)	41.9	41.0
All Age Groups	75.6 (2044)	86.4 (909)	100.0	100.0
Total Part-time Workers			(1545)	(785)

SE&LFS1985/86 Data Tape.

Notes: ISCO - International Standard Classification of Occupations, ILO classification 1968, adjusted and updated for Sri Lankan Requirements
* - No cases
** Cases less than 10
Numbers in parentheses are total employed in the group.

Table 8.9
Proportions (per cent) of Spinners & Weavers in Production and Related Occupations (Trends 1971, 1981, 1986).

	% Spinners, Weavers & Related Occupations		Total Number in Production & Related	
	male Per cent	female Per cent	male Number	female Number
1971	1.8	40.1	790766	135625
1981	1.1	15.7	935743	142623
1985/86	0.7	8.8	1086157	334733

Sources:
Department of Census and Statics, 1976:29-49 Table 5
Department of Census and Statics, 1983:24-27 Table 6
Department of Census and Statics, 1987:153-154 Table 9.1
SE&LFS1985/86 Data tape.

weavers or dyers in the 1970's[18]. As an attempt to modernize the sector and create more productive employment (Ahmed, 1987:22-39), in the early 1980's, the government withdrew the subsidy because of the low productivity in the sector (De Mel, 1981:9) and promoted installation of garment industries through investment promotion schemes. These measures were in accordance with government policies of decontrolling prices and liberalization of imports which led to increased competition from imported products. The impact of such policies was negative for a number of small scale, rural industries and one of the most severely affected was the handloom industry (Islam and Romlin, 1988:49-74; Hewavitharana, 1986:1-17; Osmani, 1987; Arachchi, 1985:1-36). Islam and Romijin(1987: 49-74) note that capacity utilization of handlooms was extremely low in the pre 1977

18 The Five Year Plan of 1972-1976 planned to create additional employment for 40,000 persons by increasing handloom production. The plan saw that problems relating to productivity quality and marketing, as well as unsatisfactory supplies of raw materials were main constraints in the development in the sector.

era and that the decline in the number of handlooms operated since then, can be attributed to the of rationalization policies that came in to effect in late 1970's.

Table 8.8 indicates that part-time work was high for production workers in the (NEC.) category. Employment in this category of occupations is associated with mat, rattan and coir weaving and coir rope making which is time consuming but gives low returns. Smyth(1990:1-18) notes that home-based employment for women is low in productivity. and that disorganized and unintegrated work patterns originating from the lack of capital and resources inhibit such employment. Low working hours allowed women to combine the dual roles of household duties while participating in work. The flexibility of working hours in the informal activities is important for working women. The division of labour based on traditional patriarchal values (Caldwell, 1982:354-355; Jones, 1984:4-6) meant that women had to attend to household duties and look after children. Samarasinghe(1989:66-67) notes that women's role in production is conditioned by reproduction. Smyth (1990:1-18) on the basis of evidence of a survey in the village of **Rankulan** in Java, argues that marriage is one of the main mechanisms which cause women to be concentrated in low paid household based activities and which determines the benefits they derive from such activities. Such activities observed in Rankulan are limited to home based work such as bamboo weaving which is characterised by informal work organization and flexible hours and low remuneration (Symth, 1990:1-18).

A substantial proportion of women in production occupations are poorly educated with only a primary level of

education or with no schooling at all (see appendix 8.3). With low education and no experience they are ill-equipped for the formal labour market (Symth, 1990:1-18). Amin(1987:611-622) notes that women in the informal sector in Dhaka are less educated and less advantaged than their counterparts in the formal sector. An interesting point is that a substantial proportion of women with a senior secondary level of education (see appendices 8.3) in Sri Lanka are also employed in these informal occupations. This situation reflects the lack of adequate employment opportunities for even the more educated[19] women where they have taken up informal part-time employment. Ananta and Tjiptoherijanto(1990: 33-42) examining the Indonesian informal sector, observe that workers in the informal sector may not necessarily be those who have lost hope of finding work in the formal sector, and that women might purposely choose to work in the informal sector because it will pay them more than the formal sector. The employment aspirations of the unemployed investigated in Chapter Five do not support this hypothesis in the case of Sri Lanka. A large proportion of senior secondary qualified graduates aspired to formal employment in professional technical and related occupations. Pettman(1992:45-52) notes that of Korean women in the home based occupations more than a third over 25 years of age had received a secondary education.

A certain amount of modernization in the sector has resulted (Hewavitharana, 1991:34-36) partly through the intervention of government departments and non-governmental

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19 In Chapter Five it was seen that there is a high level of unemployment among the junior secondary and senior secondary graduates.

institutions[20]. The introduction of hand driven coir making machines has infused some technology to manual work related to rope making (Ahmed, 1987:22-39). Most women could not afford even the simple instruments such as wooden fibre cleaning machines that could be rented from traders (Ahmed, 1987:33). Marketing of home-based products has also been helped by the mediation of several government departments (Ministry of Plan Implementation, 1981:238-240).

Table 8.8 shows that at least eleven per cent of part-time working women in production and related occupations were in food and beverage occupations and that part-time work rates were high in this group. The agro-based occupations associated with food and beverage processing are more aligned to formal sector occupations[21] making it easier for modernization trends to infiltrate. Hewavithrana(1991:34) comments, 'thus the use of tractors, diesel operated sprayers, dusters, water pumps, rice mills, sugar cane crushers, synthetic fertiliser and agro-chemicals paved the way for some modern specialised services in the fields of transport, distribution, operation, maintenance and repair of equipment. Furthermore, processing, milling pounding and grinding activities were required to expand when output increased due to new technologies, but oft its concomitant was a modernisation'. Rice millers, bakers,

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20 For example, The Five Year Plan (Ministry of Employment and Planning, 1971:81) took steps to establish a Divisional Development Council Programme to foster small scale industrial units. A scheme was formulated for the Industrial Development Board, the Peoples Bank and the Department of Co-operatives to assist these small-scale ventures.

21 The Census of Industries 1983 showed that important food processing activities were in meat, dairy products, grain mills and bakery products, vegetables and spices employing 70,576 persons in 19,530 institutions and also the processing of black tea employing 69,931 in 4,298 institutions (Department of Census and Statistics, 1985a:5 table 3).

pastry cooks, confectionery workers and biscuit manufacturers at the local level are some of the main occupations of food processing (Department of Census and Statistics, 1986b:99-105 table 21). When compared to food processing and beverage industries operating at a national level[22], the same level of modernization may not be reflected in the production techniques and marketing at the local level. Nevertheless, part-time work patterns in food processing do reflect a changing society and changing consumer preferences with changing income levels (Central Bank of Ceylon Series, 1984:230-270, 1991). Because at a primary level of production a low value is added to the agricultural product (Shand, 1991: in Ceylon Daily News, March 25) and the product is addressed to a specific consumer demand at the village or district level which depends on the income of the consumers at that level (Hewavithrana, 1991:37), the employment created may be mainly part-time because of the narrowness of the market and constraints on expanding (Ahmed, 1987)[23].

Table 8.8 shows that part-time work rates for the younger age group in the production and related occupations

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22 For example in occupations such as bakers, pastry-cook and confectionery makers (ISCO No.776) whose functions were, making bread, cake biscuits, pastries, pies, macaroni and other flour products (ILO, 1969:181 and Department of Census and Statistics, 1983b:86-95) there were national and international companies such as Maliban, Edna, Salgado etc. as well as small bakeries operating at the village or district level. In 1988 of the 84 privately owned establishments producing bakery products, 14 establishments employed more than 25 persons (Department of Census and Statistics, 1989:5-30). According to the Census of Industries (1983:appendix 18 table 4) there were 19,682 establishments engaged in processing of meat, dairy products, fruit, fish, grain mills, bakery products, sugar etc. and of them 17,792 establishments employed less than five persons each.

23 Some of these constraints are the greater need for credit, modern means of production, knowledge of new technology, extension services, participation in rural organization and the access to these factors by the disadvantaged, such as the rural poor and women (Ahmed, 1987:21-37).

are low, particularly for beedi makers[24], other tobacco preparers, tailors and dress makers. A survey done in South Tamil Nadu village (Dharmalingam, 1993: 1461-1469) showed that 97 per cent of the beedi workers started work before the age of 15 years and they are self employed. Beedi preparing, is done either on a putting-out or contract system or on a daily wage basis and is largely part-time work and the payment generally yields a low income of 58-70 rupees a month (Hewavitharana, 1991:10). Availability and frequency of such contracts depends on the demand for the finished product. Dharmalingam(1993:1461-1467) documents the hazards of beedi workers who work on a contractual basis in South India in the context of changing socio-economic values in the country. He notes that the workers have to work 10-14 hours daily, for a weekly wage of 43 rupees and that the workers are exposed to sexual exploitation and health hazards.

Tailoring and upholstery are other types of home-based part-time activities which need specialised skills and generated a high level of female participation, where workers are largely on own account or are casual helpers. These occupations generate low income (Jayaweera, 1979) and the hours worked depending on the demand for such service are generally low. Large scale retail shops and supermarkets are at present mostly in the capital city and in district capitals such as Kandy, Galle and Matara. This is a result of a less complex rural economy adopting western values of

24 Beedi maker is categorised under ISCO Two digit code 7-8. Tobacco preparers and Tobacco product makers and three digit code 785 Beedi makers (Department of Census and Statistics, 1983:92). Beedi is a crude cigarette in which tobacco is rolled in a small beedi leaf and tied with a cotton thread. A beedi is smaller and less expensive than a cigarette (Dharmalingam,, 1993:1461-1469).

consumerism in an early stage of economic transition towards modernization.

Education and training had been an important agent of change in rural production by introducing modern methods of production and market handling[25]. Vocational and technical training centres, as well as mobile training programmes organized by various government departments to promote skill development give an impetus to such production oriented occupations. The Department of Labour, the Department of Small Industries, The National Youth Council, the Department of Technical Education and the Women's Bureau are some of the important providers of such skills. Non-government organizations such as the Sri Lanka Jathika Sarvodaya Movement[26], the Lanka Mahila Samithi[27], the Redd Barna and Save the Children Fund of the United States and the United Kingdom are some of the voluntary association that provide skills training for women in under-privileged socio-economic classes who mostly engage in these part-time activities.

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25 For example, this is part of the work done by the Department of Small Industries in order to guide the craftsmen to ensure quicker and cheaper ways of production, improve production techniques and designs of local crafts guided on the basis of market potential and to impart effective salesmanship techniques (Department of Census and Statistics, 1981:238-240). Similarly, work done by the Ministry of Rural Development such as Change-Agents Pilot Project that promoted people's organization, self help, self confidence and mutual cooperation for development of the rural community (Department of Census and Statistics, 1981:227-232).

26 The Sarvodaya Movement was established in 1958 and is the largest national NGO involved in social and economic development activities. See Doctor (1967:1-10) for the conception of the movement in India and a critique of the Sarvodaya political order.

27 Lanka Mahila Samithiya is one of the oldest NGO's in the country and began to sponsor programmes for women and children in the early 1940's. It has a well equipped training centre for its members at Kaduwela in addition to the 29 Model centres throughout the island where training is provided in agriculture, needlework and sewing, food canning and preservation.

8.9.3 PART-TIME EMPLOYMENT IN SALES OCCUPATIONS

Table 8.7 (section 8.9.1) showed that at least 43 per cent of female sales workers who worked part-time were self employed persons and that 47 per cent were unpaid family workers. The self-employed working proprietors managing their small business places reflect the changing society. Jones and Manning(1992) highlight the traditional role of petty trade in absorbing the surplus labour in Indonesia and the low productivity in such employment. Caldwell, Orubuloye and Caldwell(1992:228) note that in **Ado-kiti** in Africa where the initial stages of fertility decline are evident, women are engaged largely in trading and their husbands mostly provide the initial investment to set up them in business. Usually until women had their own trading activity set up, they assist in their mother's trading activities. The extent of the business and the number of hours worked in the job is determined by the location of the business and the market that it is catering for which in most circumstances is the small rural village. The time consumed in the activity or the productivity in the job is still not a main concern. Jones(1984:13) notes that in the South East Asian Region which is in economic transition, petty trade whether in hawking, market vending or operation of stores has been the occupation of a large number of women. The fact that a large number of women were working part-time voluntarily suggests that such commercial activity is still in its initial stages, where the basis of time use is for subsistence rather than for maximizing profits. Such employment patterns suggest the under-developed nature of the sector. Part-time

workers in small business ventures largely have less than a senior secondary level of education, with most of them having a junior secondary level.

8.9.4 PART-TIME EMPLOYMENT IN PROFESSIONAL, TECHNICAL AND RELATED OCCUPATIONS

Part-time work patterns of casual, informal and non-wage workers were discussed in the previous sections of this chapter. Part-time work patterns examined in this section, among professional and related occupations are largely related to part-time work in the public service. The weekly hours of work that the public servants of different countries of the world have to adhere to are different, because such hours are defined by the needs of the country and the flexibility of working hours allowed especially for women (ILO, 1994:23-26, 34-36). Part-time workers in professional technical and related occupations were predominantly regular employees (see table 8.7).

The division of working hours of teachers between classroom work and preparation work (ILO, 1994) is largely flexible and may be one reason why a large number of women opt for the teaching profession. Employment in the education sector is traditionally associated with part-time work (ILO, 1994:34). Only a part of a teacher's working time is normally fixed, either based on a legal requirement of a minimum number of hours of work or an accepted norm (ILO, 1984a:55, ILO, 1984a:55-69). A large proportion of women chose teaching as an occupation which require only five and a half hours of classroom teaching time daily. Jones(1984:47-51) and Widarti(1991) found the teaching profession to be prevalent among educated Indonesian women.

8.9.5 PART-TIME EMPLOYMENT IN CLERICAL AND RELATED OCCUPATIONS

Table 8.10 shows that less than one per cent of females and less than two per cent of males are associated with

Table 8.10
Proportion of Part-time Workers in Clerical and Related Occupations by the Level of Education 1985/86.

Occupation & ISCO Code	Level of Education: No Schooling	Primary	Junior Secondary	Senior Secondary	Total
Male					
3 Clerical Occupations	*	0.2	1.1	9.0	1.7
of which 373-374 Mail Distributors	*	*	0.7	6.3	1.1
All Part-time Occupations %	100.0	100.0	100.0	100.0	100.0
Number	(551)	(2161)	(2486)	(790)	(5988)
Female					
3 Clerical Occupations	0.1	*	0.4	5.1	1.1
of which 373-374 Mail Distributors	*	*	0.3	3.1	0.7
All Part-time Occupations %	100.0	100.0	100.0	100.0	100.0
Number	(865)	(1126)	(1333)	(795)	(4119)

Source: SE&LFS1985/86 Data Tape.
Notes: ISCO Code indicates International Standard Classification of Occupations adjusted for Sri Lankan Standards, single digit and three digit classification of occupations.
* - No cases

part-time work in clerical occupations and that more than 90 per cent of workers in these occupations are regular employees. Employment trends discussed in the previous chapter also showed that only 4 to 6 per cent of the total employment are associated with clerical occupations. Table 8.10 shows that part-time work in clerical and related occupations is largely associated with mail distributors,

ie. occupations such as postmen and telegraph messengers, mail sorters, mail distributors, peons and messengers. The work associated with ISCO code 373 and 374 occupations are that of postmen and messenger (ILO, 1969:108). Such work entails the delivery of mail along a regular route to private homes and business establishments after sorting it according to streets and street numbers, delivers messages, packages and other items to offices within the establishment or elsewhere (ILO, 1969:108). The part-time work for these employees is due to the nature of the job which takes only part of the time in most rural areas and is delivered usually once, or at most twice a day, depending on the availability of mail to the post offices through the transportation networks. Table 8.10 shows that a large proportion of mail sorters had a senior secondary level of education. The post of peon or messenger is considered a menial post in the professional group of occupations. Persons with a higher level of education have taken on such jobs due to the prevailing high levels of unemployment in the country. A large proportion of such occupations reflects not the need for the service, but the number of created positions in order to incorporate unemployed young persons, mainly by politicians through the administrative system.

8.10 A MULTIPLE REGRESSION ANALYSIS OF THE CHARACTERISTICS OF PART-TIME WORKERS

Table 8.11 indicates the characteristics examined and the variables used for regression analysis. Two sets of regressions, (1) for females separately and (2) for both sexes are presented. These sets examine different characteristics of part-time workers in a single model to

establish the extent to which voluntary part-time work occurs among females when all the characteristics of the person are considered. The dependent variable was part-time employed person; The question asked is 'are you seeking additional employment? The answers given were either 'yes' or 'no'. As in previous chapters logit regression methodology was used because the dependent variable was qualitative and dichotomous and the independent variables were qualitative or para-metric and were either dichotomous or could be given dichotomous attributes. The characteristics examined and the selection of variables are as follows:

Table 8.11
Characteristics Examined and the Variables Used.

Characteristics	**Variables**
Demographic	Age, Marital Status
Familial	Household Status, House Hold Size
Cultural	Ethnicity, Culture
Economic	Occúpation, Employment Status, Education

8.10.1 DEMOGRAPHIC VARIABLES

8.10.1.1 AGE

Table 8.12 presents the results of multiple regression analysis of the characteristics of part-time workers. The likelihood of part-time employment among the 15-19 age group females was strong and significant. In the previous sections of this chapter it was established that in this age group most young people have not discontinued their formal schooling; while some join vocational or technical training programs to be more competitive or to get a preferred job.

The results of the regression for the 20-29 age group were also as expected, ie. negative and significant

Table 8.12
The Maximum Likelihood Estimation (Logit Method) of Women Being in Part-time Employment.

	Females		Both Sexes	
	B Value	T Value	B Value	T Value
Intercept	5.088	99.349 ***	5.042	113.419 ***
Age				
15-19	.168	2.571 ***	.229	6.049 ***
20-29	-.162	-4.464 ***	-.197	-8.655 ***
30-39	.133	2.061 **	-.057	-2.508 ***
40+	.066	1.948 **	.146	6.265 ***
Marital Status				
Never Married	-.108	-2.253 **	-.140	-3.935 ***
Currently Married	.219	4.154 ***	.206	11.309 ***
Wid/Div/Sep	.148	7.196 ***	-.004	-.124
Race				
Sinhala	-.386	-9.259 ***	-.331	-14.292 ***
Sri Lankan Tamil	.597	11.588 ***	.504	16.818 ***
Indian Tamil	3.259	6.511 ***		
Moor	.086	1.133 *	-.036	-.865
Household Status				
Head	-.091	-2.105 **	-.142	-6.347 ***
Spouse	.128	3.399 ***	-.193	-1.736 **
Child	-.148	-2.566 ***	-.157	-4.681 ***
Other	.039	.027	.494	3.047 ***
Household Size				
Less or Equal 4	.166	2.566 ***	-.036	-.820
More than 4	.120	1.849 ***	-.007	-.202
Education				
No Schooling } Primary }	-.037	-1.760 **	-.112	-5.516 ***
Junior Secondary	.099	3.014 ***	-.004	-.250
Senior Secondary	.122	3.114 ***	.166	4.402 ***
Employment Status				
Employee	-.023	-6.921 ***	-.243	-11.789 ***
Employer	.142	1.025	.292	4.697 ***
Own Account Worker	.039	1.027	.009	.241
Unpaid Fam. Worker	.253	6.923 ***	.281	6.493 ***
Occupation				
Agriculture	.049	1.371 **	.141	6.760 ***
White Collar	.185	3.880 ***	-.216	-8.936 ***
Production & Related	-.188	-4.786 ***	-.298	-12.974 ***

Source: SE&LFS 1985/1986 Data Tape.
Notes: * significant at 90 per cent confidence level
** significant at 95 per cent confidence level
*** significant at 99 per cent confidence level.

indicating less likelihood of this age group being in part-time employment. The result is in conformity with the bivariate relationships that had been established for this age group in previous sections where part-time work rates

were mostly low. The majority of women in this age group are either on the threshold of marriage or recently married. In the immediate period after marriage most women are not with a large family. The younger age groups are more exposed education (see Chapter Five), and would have more flexible attitudes about traditional values of familial and conjugal responsibilities and working away from home.

There was a strong likelihood of the 30-39 age group of women being in part-time employment. Generally the strong likelihood of part-time employment among this age group can be expected, because most women are married and have familial responsibilities with young families to look after. This is in accordance with the hypothesis that part-time work among women can be largely explained by their demographic characteristics. However in this age category for different combinations of variables, the sign changed to negative. For example, when variables such as, (i) persons with less than primary education, (ii) household size of more than four persons and (iii) estate sector were introduced into the model, the likelihood of part-time employment is less for women in 30-39 age group. The change in the sign to negative when certain variables are introduced suggests that some women in wage employment in the estate sector appreciate their earning capacity and the monetary value of their potential labour time. Therefore the result confirms that one explanation for part-time work is the transitional nature of the economy. Wage employment has effectively established the concept of monetary transactions and a desire for fuller utilization of work time.

The likelihood of women aged 40 and over being in part-time employment was positive and significant at 95 per cent confidence level. This result was as expected and confirms to findings in the bivariate analysis. When the mother reaches forty years of age or more, the children in the family are relatively grown up and hence, the familial responsibilities of women would be less. Another reason for strong likelihood of part-time employment among this age group is the prevailing high level of unemployment among younger women which would have discouraged older women from seeking further employment.

8.10.1.2 MARITAL STATUS

The likelihood of never married young females to be in part-time employment was less when compared to the likelihood of being unemployed or underemployed; the result was significant at 95 per cent confidence level. Previously it was established that the likelihood of being unemployed or underemployed was positive and significant for never married young females. This result confirms the proposition that in the early phase of fertility transition women who entered the labour force had opted for full-time employment.

For all combinations of variables the likelihood of currently married, widowed, divorced and legally separated women being in part-time employment was positive and significant. The positive relationship between the currently married status and part-time employment was established in the cross-tabulation analysis. The main reason for the strong and significant likelihood of married women being in part-time employment was the need for most married women to combine work with family and conjugal obligations in the

largely patriarchal society and the traditional roles of husband and wife (Kurian, 1981:46-50; Deutermann and Brown, 1978: 3-9). Abeykoon(1987:1-28) found that women in home based work have a higher level of fertility than those who are not working at all. He explains that this is because women who work at home do so because they already have a large number of children. Leon and Bednarzik(1978:3-10) found that the likelihood of part-time work differs for wives with younger children and for wives with higher or lower income husbands. When children are young, family responsibilities direct women towards part-time jobs. The results of the regression for age and marital status supports the hypothesis that demographic characteristics can explain to a great extent the characteristics of part-time employment patterns of women.

8.10.2 FAMILY RELATED VARIABLES

The likelihood of the head of the household being in part-time employment was less and the result was significant at 95 confidence level. This relationship confirms the pattern indicated in the bivariate analysis. In the patriarchal system the head of the family is an important institution and is a male (Mahadevan, 1989). In circumstances when the female is counted as the head of the household, she will give equal priority to earning additional income for the family and to her other familial duties. Being the head of the household (patriarch) entrusts the person with economic power and reproductive decision making (Caldwell, 1982:162,171). Even though the patriarchal society is disintegrating due to westernization and the influence of other agents of change, the head of the

household still has the responsibility of being the main supporter and bread-winner in the family. The gradual nucleation of the family would have registered this fact in a stronger context. The likelihood of a female head of the household being in part-time employment was less than for a spouse and significant at 95 per cent confidence level.

Being a female spouse in a household means that there is a strong likelihood that she may be in part-time employment. The result was strongly significant at 99 per cent confidence level. This result is in accordance with the results of the bivariate analysis for currently married women and spouses. A large proportion of the married women in the sample had the status of spouse which denotes a male dominated patriarchal society[28] (Ismail, 1989:42). The traditional societal acceptance is that the major role of the female spouse is with home and children. However the table 8.12 shows that the likelihood of a male spouse being in part-time employment was less and significant. This supports the argument that Sri Lankan society is male dominated and patriarchal.

The likelihood of a person with child status in the household, being in part-time employment was low and significant at 95 per cent. Largely females who are still retained in the family are young, single or recently

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28 The male dominance in Sri Lankan society and the dominant patriarchal system was referred to in previous sections of this chapter. This is a result of the Aryan system brought in by the earliest settlers from India. Ariyapala (1956) refers to the low status of women in the medieval Ceylon; and the influence of the Western system brought in through colonial rule. Even though patriarchal system have largely disintegrated in the West due to economic and Social development which have vastly improved the status of women, in Asian societies in general and among Sri Lankan families the concept of male dominated head of the household still prevail (Kurian, 1982:40-51; Duraisamy, 1987:21-25; Ismail, 1989:32-33; Perera, 1989:49-65).

married. They are the more exposed to education and other social changing agents. In the changing society the family expectations from siblings who had more chances of schooling will be relatively high, especially if the parents are in the lower economic strata. This result is also in accordance with trends observed for never married women and women in younger, prime working ages and supports the hypothesis that familial variables are important to understand the part-time employment situation of a person.

8.10.3 CULTURAL CHARACTERISTICS

The cultural characteristics were investigated using the variable of race. The likelihood of Sinhala women in part-time employment was less when compared to Indian or Sri Lankan Tamil women and the result was significant. UNICEF(1987:73) observes that it is not possible to identify a single profile of women in Sri Lanka, as ethnicity class and residence interact with gender to determine the role and position of women. Sinhala comprise the largest ethnic group in the country, and thus a larger proportion of never married, more educated persons coming from less than four person households are concentrated in this group. The analysis in previous sections of this chapter showed that part-time work rates were low for Sinhala women, while underemployment among them was high (see Chapter Seven). Sinhalese women who are largely Buddhists or Christians have absorbed western concepts and ideas much more than most other traditional communities[29]. For example, Jupp

29 For example, Abeykoon(1987:1-28) who examined ethno-religious differentials of fertility behaviour among Sri Lankan women concludes that Sinhalese Christians demonstrate a high level of modernization. The Sinhalese Buddhists exhibit less modern features than the Christians but are more modern in their behaviour than the Sri Lanka Tamil Hindus. The

(1978:25-46) examines changes infused through westernization in Sri Lankan society in religion, caste and social structure. Seats of government in the country are mainly controlled by the majority community. Thus, it could be argued that Sinhala women would have a better chance of getting more regular jobs.

8.10.4 ECONOMIC VARIABLES

Women who were in agriculture denoted a strong likelihood of being in part-time employment. As was seen in the bivariate analysis, such part-time work is an inherent feature of own account work or unpaid family work in the traditional paddy sector. Most of these women had lower educational qualifications and were in the older age groups.

There was a strong likelihood of persons in professional, technical and related, administrative and managerial, clerical, sales and services, loosely termed here as 'white collar workers' to be in part-time employment. The bivariate analysis indicated that a majority of these workers were either in sales related occupations or professional, technical and related occupations, mainly teachers. Thus the result for white collar workers was as expected. These women were mostly those who had higher levels of education, mostly junior secondary or senior secondary as generally white collar jobs are selective of high educational qualifications.

The likelihood of women employed in production and related occupations to be in part-time work was low. A large proportion of women in these occupations were either casual or own account workers with relatively high levels of education. They were mostly in the prime age groups, ie.

less than 40 years and thus they represented a segment among the employed who were more exposed to the changing agents of demographic transition. They may be on the look-out to make better use of their potential labour time.

The results of the regression for economic variables show that they are important to explain the part-time employment of a person. The findings support the theoretical stance that explanations for labour utilization in Sri Lanka and in other transitional societies should be found in the changing nature of society and economy. The effects of demographic, education and agro-industrial or even agro-service transitions as documented by Caldwell(1982, 1990), Caldwell Reddy and Caldwell(1988), Oshima(1987), Jones(1990a, 1990b), Hugo(1985, 1990) are seen in current part-time employment patterns.

8.11 CONCLUSIONS

Part-time work among females demonstrates a life cycle pattern. The nucleation of family size as well as, the conjugal and familial responsibilities of working women in a patriarchal society, the changing status of women towards a more westernized, modernized and liberated womanhood have affected their part-time working patterns. Such trends have driven women towards wage employment and increased education has tended to provide women with more occupational choice of employment, while the patriarchal values prevailing in the society offered them no choice but to find compatibility between work and family. Existence of part-time employment among women is attributed partly to the combined effects of the changing demographic, cultural, familial and economic processes in Sri Lanka.

CHAPTER NINE

CONCLUSION

9.1 INTRODUCTION

The effects of demographic, social and educational processes occurring in Sri Lanka during last four decades have produced irreversible changes on female labour supply and absorption. The rapidly changing status of women and their increased labour force participation have added to an existing labour underutilization problem in Sri Lanka. Nevertheless, issues of female labour underutilization due to unemployment, underemployment or part-time employment have hitherto not been adequately addressed by policy makers or researchers in Sri Lanka. This study has attempted to make a contribution toward understanding the effects of the demographic, educational, mobility and agro-industrial transitions occurring in Sri Lanka on the female labour supply and underutilization. A proper understanding of the context of the problem makes it easier to find solutions. Findings of the study are highlighted in this concluding chapter.

9.2 MAJOR FINDINGS

It is important to return to the objectives of the study unfolded in chapter one and assess the extent to which they have been fulfilled. A specific objective of the study was to establish clearly the extent and nature of female labour underutilization in Sri Lanka. The investigation has established that a high level of female labour underutilization due to unemployment and underemployment exists in Sri Lanka. In addition, part-time employment among women is high. Chapter Six investigated labour

underutilization occurring from unemployment. There were identifiable specific patterns in female unemployment that could be related to recent demographic and socio-economic changes occurring in the country . Chapter Seven examined underemployment and found that incidence of underemployment, for females is high in Sri Lanka and that labour underutilization due to underemployment arose due to a high female labour supply and a low absorption in non-agricultural employment. Chapter Eight examined part-time employment and found that voluntary part-time emloyment was high among females. These findings will be spelt out in further detail in forthcoming sections.

9.2.1 EFFECTS OF DEMOGRAPHIC AND EDUCATIONAL CHANGES ON FEMALE LABOUR SUPPLY AND CHARACTERISTICS

A second objective of this study was to establish the characteristics of underutilized women. The age structure, marital status and educational level of the current potential labour force is a by-product of recent socio-demographic changes that have occurred in the country. Labour supply of young never married females is high which indicates that the female labour supply was largely influenced by the demographic transition. Table 9.1 indicates the distinctive phases of demographic transition in Sri Lanka and the effects of each of these phases on labour supply. As shown in the table the rapid declines in mortality since the 1950's (see Chapter Five) have contributed to the supply of labour in all age groups and during the phases of transition observed in this study.

Bloom and Freeman(1986:361-413) Bauer(1990:615-640) Jones(1992:26-28) Brander and Dowrick(1994:18) Cobbe, and Boediono(1993:5-14) have highlighted that a lagged effect of

Table 9.1
Differential Effects of the Phases of Demographic Transition on the Labour Supply of Females as Observed on Age Groups of the Survey Populations

Selected Indicators of Transition								
Observed phase of Transition					Observed Effects on Labour Supply	Affected Survey Age Group in Each Transitional Phase		
						SES69/70	LF&SE85/86	LFS90/91
			Growth Rates					
	TFR	CDR	(1)	(2)				
1. Decrease in Mortality and High Fertility								
1946	5.6	22.1}	2.7	2.1	{increased labour	23+	39+	44+
1947-51	5.1	14.7}			{supply due to lagged	22-26	38-42	43-47
					{effect.			
2. Rapid Decline in Mortality & Stabilized High Fertility								
1952-56	4.9	11.4}	2.5	2.8	{increased labour	17-21	33-37	37-41
1957-61	4.9	9.4}			{supply due to lagged	12-16	28-32	33-37
1962-66	4.8	8.5}	2.8	2.2	{effect.	23-27	28-32	
1967-71	4.4	7.8}			{	-	18-22	
3. Stabilized Mortality at Lower Level and Declining Fertility								
1972-76	3.9	8.2}	2.2	1.7	{increased labour	-	13-17	18-22
1977-81	3.7	6.5}			{supply due to lagged	10-12	-	13-17
					{effect: increased			
					{labour supply due to		18-44	18-44
					{immediate effect too			
4. Stabilized Mortality at Lower Level and Substantial Declines in Fertility								
1982-86	2.8}	6.2	2.1	1.3	{Declining labour supply	-	-	10-12
1987-90	2.3}				{due to lagged effect;			
					increased labour supply due		18-44	18-44
					to immediate effect.			

Notes: Growth Rate (1) - Population Growth Rate of Females
Growth Rate (2) - Population Growth Rate of 10+ Age Group Females
TFR - Total Fertility Rate
CDR - Crude Death Rate

population growth has increased the labour supply and employment in developing countries. The investigation in this study showed that the lagged effect of previous high fertility periods coupled with declining mortality had

augmented the labour supply because of consequent high growth periods of the working age population. Increased labour supply is also due to declines in mortality which resulted in increases in the life expectancy of the working age population. Demographic transitional effects are particularly evident on the participation patterns of younger age groups whose participation, as well as the level of unemployment was high.

Caldwell (1982:185) observed that initial fertility decline in the west and in Australia occurred with delayed age at marriage for women. Watkins(1989:27-35), Jones(1990a:512) and Langford(1981:285-306) comment that rising age at marriage is also a feature in developing countries. Mason(1987:104-106) found a positive relationship between delayed age at marriage and women's desire or ability to work and parental desires to prolong their daughter's employment in developing countries. This study has shown that in Sri Lanka increased labour supply occurred during the initial stages of fertility transition when women began to postpone their marriages. Labour underutilization due to unemployment or underemployment was high for never married women. Increased female labour supply was also due to increased participation of married females. Fertility decline among young females enabled them to participate more in production of economic goods and services. Previously women in reproductive age groups largely allocated their time to reproductive activity and familial and conjugal roles.

Linkages between demographic and mobility transitions (Zelinsky, 1971) and the effects of circulatory

international migration (Hugo,1984:14) on the growth patterns of the working age population were discussed in Chapter Five of this study. It is no accident that female out-migration has increased and this is also seen partly as a lagged effect of high population growth in the early expanding phase of the Demographic Transition on the labour force and prevailing high levels of labour underutilization of men and women. The increased labour supply generates a pressure on the labour market that already suffers from an over supply. Thus persons in potential working ages are tempted to look for work outside their country. Availability of such work and offers of higher pay in foreign countries, as well as government policies promoting migration for employment in foreign countries are seen not only as solutions to the unemployment problem, but also as encouragement for remittances from abroad. This trend of international migration had several effects on the labour force and the emigration of skilled and unskilled labour to the Middle Eastern Countries can be seen as part of a process of mobility transition occurring parallel to demographic and education transitions which affected female labour supply. Most of the migrants were young and had either a middle to low level of skills or had no identifiable skills. Recent contract migration trends show that females have out-numbered males and that these females were largely in unskilled occupations, especially in domestic services although many have relatively high levels of education.

The education transition (Caldwell, 1980: 1982) (exposure of a large number of population to modern

schooling) that occurred in Sri Lanka during the last half a century resulted increasingly, in women participating in education and in the labour force (Jayaweera, 1979; Jones, 1992). This study indicates that increases in the more educated female labour parallelled increases in the underutilization of educated labour. In the process of demographic transition the system of education has performed a dual role to develop potential human resources in the country. Firstly, it has been a supplier of better trained and qualified human resources. The subject matter taught in modern schools resulted in a change in attitude towards traditional socio-economic values and infused changes in the system of production. Secondly, the education system was an important agent of change in the process of 'westernization' (see also Jayaweera, 1979: 1985: 1993) and in pioneering the attitudinal change that was needed for the initial disintegration of patriarchal values and production systems in the transitional society in Sri Lanka.

9.3 CAUSES OF FEMALE LABOUR UNDERUTILIZATION

9.3.1 UNEMPLOYMENT

A third objective of this study is to identify causes of female labour underutilization. Findings relating to causes of female labour underutilization that originated from labour supply as well as labour absorption patterns are spelt out in the forth coming sections.

A summary of some of the regression results presented previously in Chapters Six, Seven and Eight, are presented in table 9.2 which highlight some of the causes of unemployment originating from the supply of potential labour. The likelihood of unemployment is high and significant for never married females in younger age groups

Table 9.2
Likelihood of Unemployment for Females by Characteristics of Unemployed

Age Group	Bivariate analysis The proportion (percent) Unemployed in age group	Regression analysis expected		observed	
15-19	9.1	+	***	+	**
20-24	22.0	+	***	+	**
25-29	13.8	+	***	+	ns
30-34	7.3	+	*	-	***
Marital Status					
Never Married	18.5	+	***	+	*
Ever Married	3.2	-	***	-	***
Household Status					
Head of House Hold	2.3	-	***	-	***
Spouse	2.5	-	***	-	**
Child	18.2	+	***	+	*
Others	7.1	+	***	+	**
Level of Education					
No Schooling	10.8	-	***	+	**
Primary	8.5	-	***	-	***
Junior Secondary	8.5	+	***	-	*
Senior Secondary	15.3	+	***	+	***
Degree and Above	14.0	+	***	+	*

Sources: Chapters Six, Seven and Eight
Notes: *** strongly significant at 99 per cent confidence level; ** significant at 95 per cent confidence level; * significant at 90 per cent confidence level
ns - Not significant

and for children or 'others' category in the household, and for persons who had senior secondary or above level of education. The significant positive relationship between unemployment and never married females in the age groups 15-19 and 20-24 shows that the likelihood of unemployment is high for women whose participation would have increased as a result of declining fertility due to the postponement of marriage, ie. the initial stage of fertility transition. The

strong likelihood of unemployment for these selected groups shows that there was a strong and interrelated impact of the early phases of the fertility transition and the educational transition in a context of slow economic growth (see Chapter Four) that resulted in an increased supply and subsequent underutilization of more educated female labour. The current high level of underutilization due to unemployment of never married females in Sri Lanka, is partly attributed to the 'initial fertility transition' (ie. a decline in fertility due to a rise in age at marriage) investigated by (Langford, 1981) which resulted in never married young adult females entering the labour force in larger numbers.

The changing roles and value structures of women in the household and in the transitional society promoted increased female participation. The likelihood of unemployment was strong for female children in the household and a large number of persons in the sample were in the category 'children in the family'. If the traditional economic values prevailed in the predominantly agricultural economy, these persons should have been absorbed into the traditional avenues of family income (which would be mostly farming) as additional hands. The changing nature of the patriarchal social and production values is reflected in the children who were willing to wait until they got their preferred occupation rather than work within the feudal family system, particularly if they were more educated. That such values are being developed in the society are shown by the fact that these children received the support of the family which was given in spite of the low average income

in the household (SE&LFS1985/86) during the period of unemployment.

The proportion unemployed among young adult women in the Sinhala community increased over the years and because they are in the majority numerically, this largely reflects the effects of demographic and educational changes on female participation and the attitudinal changes occurring in the society towards females. Between 1969/70 and 1990/91, the level of unemployment had increased for the Moor ethnic community. Apart from the general scarcity of employment opportunities for persons seeking employment, this pattern reflects the social changes brought in by the educational transition among women in the more traditional ethnic communities. The young Muslim women have started to play a more assertive role as earners in the household and evidence from other sources adds strength to this contention (Dias, 1989:209). Among the Indian Tamil community, the likelihood of female unemployment was less because most of the women are absorbed by the tea plantation sector.

While the job preferences indicated that there were high job expectations and aspirations among the unemployed persons, support from the family during the period of unemployment suggests that the parents also had high expectations for their children, particularly for those who were more educated. The likelihood of a person being unemployed was shown to be high when that person had preferences for professional and related jobs or production and related occupations. The 1985/86 Survey showed that young females predominantly preferred production and related jobs, while the 1990/91 survey showed a stronger preference

for white collar occupations, followed by production and related occupations. This also suggests that there is a segment of voluntary unemployment even among those who were technically defined as involuntarily unemployed who opted to wait until they come across a job that met their aspirations.

A large proportion of the unemployed population had either a junior secondary or senior secondary level of education. They were persons exposed to a formal education based on the western tradition and were armed with skills that largely emphasised academic achievement, rather than vocational skills. These persons were largely the output of modern educational and technical institutions.

The likelihood of unemployment was higher for females who had a junior secondary or senior secondary level of education and who were never married. The more educated had specific occupational preferences and were willing to wait until the preferred occupation came up. Women with lower levels of education tried to fit into whatever work that was available. These results reflect the differential effects of the early fertility transition and the educational transition on the labour force participation of females when the economy was growing at a slow pace.

Unemployment was high for the more educated who had aspirations of obtaining employment in professional and technical occupations. There was a strong likelihood of unemployment for young persons who had senior secondary or higher level of education and who aspired to enter professional and technical occupations[1]. These occupational

1This comment is made on the basis of regression tables that had been controlled for each level of education.

aspirations are associated with the expectation of a potential high income and an occupation which is compatible with the level and content of education and training. In Sri Lanka, professional jobs have been generally in the public sector and the preference for professional occupations often reflects a desire for long term continuous and secure jobs, assuring a regular income. These results further support the proposition that the problem of labour underutilization is closely linked to the pace, level and interrelationships of changes occurring in demographic, educational, social and economic aspects of the society in Sri Lanka.

9.3.2 UNDEREMPLOYMENT

Underemployment was found to be a major problem for males as well as females. The magnitude of the underemployment problem for females is indicated by the large proportion (43 per cent) of the total employed females who were working less than 35 hours per week with some 55 per cent of them seeking additional or alternative employment. At least 34 per cent of the underemployed women were working less than 20 hours.

Underemployment was equally high for all age groups and for both genders. However, the regression that tested all characteristics in a single model showed that those in the younger ages were more likely to be in underemployment than females in the older groups. This feature can be explained as a life cycle pattern of female labour force participation in which, with marriage and children women opt for part-time work. Nevertheless, these results also confirm the proposition that demographic characteristics are important in explaining labour underutilization due to

underemployment, particularly of young people who are seeking work or are in underemployment. The predominance of young never married females in underemployment is a lagged effect of high population growth on labour absorption and is identified by birth cohorts of early phase of the demographic transition (table 9.1). Persons identified in birth cohorts of high population growth periods have increasingly entered the labour force during the last two and a half decades. Also included in this set are cohorts of females who increasingly postponed their marriages and by doing so, found more time for economic activities, however there are other economic reasons for their underemployment. The share of underemployment in comparison to the share of employment among the never married women is high. This is a result of the general lack of suitable employment opportunities to absorb the exodus of never married new entrants to the labour force in productive employment. By intent or by chance, in the Free Trade Zones (FTZ) in Sri Lanka, several employment avenues have been created since 1977, mainly absorbing never married young females. Nevertheless, the strong likelihood of underemployment for this group shows that employment avenues created in the (FTZ) have not been adequate.

Underemployment patterns differed between ethnic groups. This shows that there were differences in the impact of the transitional society for each ethnic group. There was a strong likelihood of underemployment among women of the Sinhala community (see table 9.3). Sinhalese are the majority community and they represent a large proportion of the population who have been exposed to socio-demographic

Table 9.3
The Expected and Observed Relationships Between Cultural Characteristics and Underemployment/ Part-time Employment

	Underemployment Expected		Underemployment Observed		Part-time Employment Expected		Part-time Employment Observed	
Sinhala	+	***	+	***	-	***	-	***
Sri Lankan Tamil	+	***	-	***	-	***	+	***
Indian Tamil	-	***	-	***	+	***	+	***
Muslim	-	***	-	***	+	***	+	*

Sources: Chapters Seven and Eight
Notes: *** Strongly significant at 99 per cent level
* significant at 90 per cent confidence level

and economic changes. The result is an indication that the pace of the impact of the changing society on women and how they reacted to these changes was different for each ethnic community.

Table 9.4 shows that the likelihood of underemployment was strongly and significantly related to a person's economic characteristics. The likelihood of underemployment for production and related workers was strong and significant. Cross-tabulation analysis showed that the

Table 9.4
The Likelihood of Underemployment and Part-time Employment by Economic Characteristics of Employed Persons.

Occupations	Underemployment Expected		Underemployment Observed		Part-time Employment Expected		Part-time Employment Observed	
White Collar	-	***	-	**	+	***	+	**
Agriculture	+	***	+	ns	-	**	+	**
Production	+	***	+	***	-	***	-	***
Employment Status								
Casual	+	***	+	***	-	***	-	***
Own Account Worker	+	***	+	ns	-	***	+	ns
Unpaid Family Worker	+	***	-	**	-	***	+	***
Employer					-	***	+	ns

Sources: Chapters 7 and 8
Notes: *** Significant at 99 per cent confidence level
** Significant at 95 per cent confidence level
ns Not significant

increased supply of young female labour had been largely absorbed by informal occupations in the production sector. In case of unpaid family workers and agricultural workers the observed result deviated from the expected result largely because their work time is also determined by their conjugal and familial duties as discussed in section 9.3.3.

The pattern of high underemployment among persons irrespective of their level of education, is partly attributed to an oversupply of manpower in relation to a low demand. High levels of underemployment among all educational levels is an indication of the nature of job scarcity prevailing in the country which is affecting all levels of education. Such underemployment was particularly high for those with senior secondary level of education. The general tendency of more educated persons was to enter or wish to enter higher income employment. The highest income brackets of salaried persons were those with a senior secondary or higher levels of education. Nevertheless, a large proportion of persons in current employment who have higher educational levels, even if they were working normal hours sought alternative or additional employment because their income from employment was low. The largest proportions of the lowest income receivers were concentrated among persons who had low educational levels.

9.3.3 PART-TIME EMPLOYMENT

Table 9.5 presents some of multiple regression results of part-time working women that had been previously presented in Chapter Eight. Cross-tabulation analysis showed that part-time work was high for females among all age groups, except for 20-29 age group which is also confirmed

Table 9.5
Characteristics of the Part-time Working Females

	Proportion of employed working less than 35 hours and not seeking work	Expected	Observed
Age			
15-19	84.3	+ ***	+ ***
20-29	82.3	+ ***	- ***
30-39	92.6	+ ***	+ ***
40-49	97.1	+ ***	+ ***
Marital S status			
Never Married	73.3	- *	- **
Currently Married	96.2	+ ***	+ ***
Widowed/Divorced/Sep	94.4	+ ***	+ ***

Source: Chapters Six, Seven and Eight
Notes: *** strongly significant at 99 per cent confidence level; ** significant at 95 per cent confidence level
* significant at 90 per cent confidence level.
ns - Not significant

by the regression analysis which showed less likelihood of part-time employment for this group. It was seen in the previous section that there was a strong likelihood of underemployment for the 20-29 age group. The increased age at marriage of females, declining marital fertility, the smaller family size in the early years of marriage, are suggested as reasons that have not only promoted higher participation of women of potential reproductive ages but also have increased their ability to participate in full time occupations.

The likelihood of part-time employment for the 15-19 age group was positive and strongly significant. This result can be explained by the fact that the 15-19 age group have settled for part-time employment to be compatible with education or to gain initial entry to the labour market.

Cinar(1994:372) found that scarcity of jobs open to unskilled, married females in Turkey lead married women to take up informal sector subcontracted employment to work at home and that such work is largely 'disguised'. Leon and Bednarzik(1978:4) found that in the United States of America there was a strong likelihood of married women with children who are working away from home to be in part-time employment. Both these patterns can be identified in Sri Lanka. There was a strong likelihood of currently married women being in part-time employment, because while the poor economic conditions compel women to work in order to supplement the family income, the patriarchal nature of the society entails that with marriage, a larger proportion of females would either prefer short hours of work or become full-time housewives so as to be compatible with the many roles that a women has to perform (Kurian, 1985; Mahadevan 1989). The likelihood of part-time employment for widowed, divorced and legally separated women indicated the same pattern as for currently married women. There was a strong likelihood of female spouses being in part-time employment (table 9.6) and this is due to the familial and conjugal obligations required of married women (Kurian, 1985; Hollup, 1993:67-87). The part-time employment of these women enabled compatibility of the dual roles that they had to play as housewives and income earners. This pattern of participation suggests that being married increased the tendency for a woman to prefer part-time employment.

There was a strong likelihood of part-time employment for Indian Tamil women. The result is related to the hours of work in the tea estates being curtailed by climatic

Table 9.6
The Likelihood of Voluntary Part-time Employment of Women by Household Status.

	Part-time Employed	
	Expected	Observed
Head of household	- ***	- **
Spouse	+ ***	+ ***
Child	- ***	- ***
Other	- ***	+ ns

Sources: Chapters 7 and 8
Notes: *** Significant at 99 per cent confidence level
** Significant at 95 per cent confidence level
ns Not significant

factors. Kurian(1985) notes the dominance of patriarchal values among Indian Tamil estate workers. The reason why they do not seek additional or alternative employment can also be related to their family obligations associated with patriarchal social values of Indian Tamil community where rigid role segregation in the household prevails. It is exclusively the responsibility of women to attend to household chores and bring up the children. Another reason for the low number of hours worked in rubber and coconut estates is the nature of the work which takes only a few hours. For example, a rubber tapper has to work only for a few hours in the morning.

Of the 60 per cent of total part-time employment in agriculture, close to half were unpaid family workers. Such voluntary part-time work was largely associated with spouses and children of own account farmers. The patriarchal social values of production, as well as the labour surplus nature of the traditional agricultural economy are important causes of these trends. Among production related occupations part-time work was largely concentrated among home-based

occupations such as **beedi** preparation and spinning, weaving and related occupations. In these occupations close to 80 per cent of female part-time workers were either regular or casual labourers or own-account workers and reflect the expanding informal sector in the changing economy. The deviation of observed from expected for domestic servants, boarders and lodgers who comprise the others category is because of their temporary status in the household and therefore the result do not indicate the actual pattern.

9.4 FEMALE LABOUR ABSORPTION PATTERNS

Labour underutilization in Asia originates from (1) landlessness or seasonal factors affecting agricultural production patterns, (2) the level and pattern of economic development in the country and (3) the nature of labour absorption in different sectors of the economy (Oshima, 1990:44-45). Patterns of underemployment in agricultural sector in Sri Lanka reflect all of these. The agriculture is the main source of employment (comprising close to 50 per cent of total employment) for a large proportion of underemployed women. They largely work as casual labours or unpaid family workers. Land for production in the sector is scarce and is dominated by marginal sized holdings (Department of Census and Statistics, 1982a:13-15).

The wide spectrum of production and related occupations reflects the complexity and heterogenity of informal activities. The heterogenity of skills in the sector further supports the contention that the sector is expanding. The occupations in this sector are largely those that need craftsmen-level skills and unsophisticated services requiring only a small input of capital investment. Female

labour absorption to the production sector industries is largely as casual employees or own-account workers. They are engaged mostly in off-farm activities or home based informal activity such as **beedi** making, basketry weaving. Such activities are mostly unorganized and use traditional methods. Analysis in Chapters Seven and Eight showed that most of the younger population who were new entrants to the labour force took up informal employment due to the scarcity of employment opportunities. The structural change that had occurred is that, women who are employed in non-agricultural or off-farm informal activities, are those who have been pushed out of the already fragmented agricultural land, largely due to the scarcity of land (Hewavitharana, 1986; 1991).

Oversupply in relation to a limited demand in the local market has created underemployment among skilled workers and particularly among males. The increased supply in the early to late 1980's was partly due to the government policy to train additional skilled workers to work in foreign countries (Employment and Manpower Division, 1982:40-43; 1985). This policy was adopted to combat unemployment and to earn foreign remittances. Those who were working more than 35 hours were also looking for additional employment. This is a result of low wages and the income levels of all wage employees in general.

The incidence of formal and informal commercial activities in the sales category of occupations suggests that commercial activities in the private sector are growing fast. Nevertheless, the high level of underemployment in the sector suggests low productivity in terms of potential

working hours. The prevailing circumstances do not provide the adequate business environment to fully utilize the management and entrepreneurial skills of the work force. For a strong private sector to function it is important that such skills should be utilized fully. A growing interest in entrepreneurial work (though at an embryonic stage) among women is shown by the substantial proportion of (at least one third) self-employed women in the services sector, suggesting that there is further scope for the private sector to strengthen and expand in the country.

A large proportion (more than half) of women in the services sector were in domestic and laundry services and they were largely underemployed. A high incidence of domestic workers is also an indication of the lack of employment opportunities for women generally and low wage levels associated with excess supply in a situation of low demand especially for less educated women.

In a transitional society or in a developing economy, voluntary part-time work of women should be understood in the context of the changing role of women. Social and economic changes in transitional societies have driven women towards wage employment and increased education has tended women towards more occupational choice and to find compatibility between work and family.

The slow change in the absorption of females into employment is reflected in the large number of females still employed as unpaid family workers in agriculture, as well as in production related occupations. Such occupations were largely in the informal sector and home based industries.

The prevailing patriarchal production values, where the labour of women and children is taken for granted by the head of the household and lack of adequate employment opportunities for the increasing numbers of females who are seeking employment, have caused such employment patterns.

9.5 POLICY IMPLICATIONS

As a consequence of the high population growth patterns of the preceding two decades, the current labour force growth rates in Sri Lanka are high. Similarly, the declining fertility among currently fecund females who have opted to push up the age of marital fertility augments the flow of females into the labour force. An important implication of such a development is whether the economy is capable of providing suitable employment for this large influx of more educated, young adult females. A large proportion of the addition to the labour force would be initially never married or newly married with small families. The occupational aspirations of unemployed young persons shows that they largely prefer employment in the manufacturing sector or in professional, technical and related occupations. To cater for these aspirations the economy should expand, particularly in these sectors. Can these aspirations be met by encouraging the services sector to expand? What should be the role of the public sector in this regard? Public sector occupations in education and health sub-sectors show that chances of further employment creation in these sectors are low. Creation of employment opportunities in the professional, technical and related occupations should not be at the cost of productivity of employment in these sectors. If the need for professional

and technical occupations rises as a result of a multiplier effect of the expanding manufacturing sector, productivity in these occupations could be achieved. The lack of adequate investment potential within the country may be a major problem in expanding the manufacturing industries. Encouragement of direct foreign investment to expand manufacturing industries is part of the solution.

Several roles performed by women need to be recognized in female-targeted development programmes. The demographic transition has brought about a nucleation of the family which tended to increase the labour force participation of women from smaller sized families. Not only should service support (which should include child care services, the provision of facilities such as water service and electricity, and the use of time saving devises to lessen household chores) be provided for participating women, but also ways and means of promoting the participation of married mothers in economic activity should be examined and fostered.

Even though a free education policy has been in place for the last forty years, a substantial proportion of the school population drop out of the system before junior secondary level of education. These dropouts comprise an addition to the labour supply of young persons. Improvements in school attendance and fostering increased participation of young adult persons in primary, junior secondary and senior secondary education would retain these persons in the school system for a further period. This would reduce the addition of school dropouts to an already labour surplus market in the immediate period. Policies to retain a larger

number of primary and junior secondary school children in schools for a longer period of time would also improve the quality of labour supplied. However the lagged effect of every new intake into the school system on the labour market, (at least on broad terms) must be considered in the employment creation policies.

A quarter to a half of the working age population as indicated by the three surveys analysed in this study had more than a junior secondary level of education. At least one-fifth of the working age population with this level of education were unemployed and closer to half of the employed were involuntarily working less than normal hours. Continuous output from the educational institutions increases the magnitude of the problem. The younger generations armed with skills and aptitudes received from the education system are not capable of finding employment. The fact that the economy, was incapable of absorbing the output from the educational institutions was not a result of complete incompatibility between the education system and the economy but rather an over supply for a limited demand. This contention is supported by the substantial growth in the economy in more recent years. This has resulted in the younger entrants to the labour force to being lost between two worlds; the world that they were born into which inherited the traditional society and the world that they were learning to fit into which is the changing society. Thus, when it came to the question of finding employment for those who had come out of the educational system, it was the traditional economy which provided the opportunities.

The future output from educational institutions providing junior secondary and above levels of education could be better matched to fit into the needs of the changing economy. The changes in the economy should be biased towards manufacturing employment which would lead to an accelerated agro-industrial transition[2] in the economy. The fact that a large proportion of the employed are still traditional farmers or in home-based production occupations which employ only traditional skills suggests that the contribution of the education system to the modernization of the agricultural economy has been limited. An educational expansion targeting the already employed should be launched, with a view to expand agro-based industries that provide additional secondary employment for those engaged in the agricultural occupations.

Expansion of educational opportunities has had positive results for women, such as the improvement of assertiveness, leadership potential and labour force participation (Samarasinghe, 1989). Increased exposure to formal education resulted in a change of attitude towards the economic value of female human resources and their earning potential. Policies promoting skill development of women in the wider scope of vocational and technical areas has widened the occupational horizon of employment for women (National Planning Division, 1988:98-106). The more educated women are able to find better paid employment in the professional, technical and related occupations. Unemployed, educated women who aspire to enter professional and technical

2 The Ceylon Daily News, October 12 1993 reports that the government and private sector leaders have set the year 2000 as a deadline for Sri Lanka to achieve Newly Industrialised Country status.

occupations cannot find employment because simply such employment avenues are not available because of the stagnant nature of the services sector. The crucial question to address is how, in what proportion and in which sectors of the economy the employment policies could incorporate the job aspirations of a large number of persons seeking professional and technical types of jobs. Should these occupations be created in the private sector or the public sector? Which are the sectors that need further development and where could additional types of employment be created? Already there are restructuring programmes in operation to curtail low productivity in the government services. There is a need to look at new directions to create such employment situations. If the private sector is to play a major role what should be the role of the government? The economic development strategy and the investment policies of the government should address these crucial questions.

Since the 1980's employment creation for women in the modern sector has largely been in the labour intensive, manufacturing industries located in free trade zones (Masinghe and Gunasekara, 1991:350-351; Daily News, 1992:February 19; Daily News, 1994:January 6). However the demand in export processing zones is based on the motivation of employers to cut costs and increase international competitiveness by employing women who have a relatively weaker labour market position than men (ILO, 1993d). Female workers with their 'nimble fingers, docility and beaverish productivity' are more likely to accept low wages and poor working conditions and are less likely to complain' (ILO, 1993d). Female workers, especially the older and married

ones, are also vulnerable to labour shedding by companies which normally do not want to keep them after a few years. These female workers therefore tend to be in a state of 'dependent insecurity', threatened by redundancy, retrenchment or replacement. ILO(1993d) asserts that there is an urgent need to understand the changing employment practices of foreign and local investors, especially those in the export processing zones. The challenge is to ensure that manufacturing actually offers women modern, secure, remunerative and long-term employment, instead of the sector being an avenue through which women are made to bear the brunt of structural adjustments.

The Sri Lankan government has taken steps to identify the marginalized persons in home-based occupations and pay them a supplementary subsistence allowance (Ceylon Daily News, 1994: February 14). A better way would have been to address the problem at the village level by incorporating these occupations into the development effort and taking steps to make such industries more productive.

Women employed in the production sector were largely in unskilled, labour intensive jobs either as self-employed or as unpaid family workers, mostly concentrated in rural areas. These women who are employed in home-based occupations, cottage industries or in the informal sector need a new impetus. 'It is the successful development of self-employment and micro enterprises that will determine whether the informal sector is a sector of last resort or a productive and viable source of employment for women' (ILO, 1993d:104; ESCAP,1993:12-16). The existing drawbacks for the development of these cottage industries by each village

should be investigated and steps taken to rectify the situation. In helping out these industries it is important to distinguish between home-based work linked with the formal sector 'which is just a different form of paid employment and those involved in cottage industries or micro enterprise businesses who are actually self-employed and often have no, or irregular, links with the formal sector' (ILO, 1993d:92). Successful market-oriented intervention programmes providing marketing supports should have the potential to reach the largest number of beneficiaries. Some of these low cost, easy to deliver programmes would be rural credit schemes and income generating activities, training, counselling and technology transfer addressed to both men and women.

The **Janasaviya** project which is being implemented in Sri Lanka is largely an agricultural development project which emphasises productivity and poverty alleviation, rather than employment creation. This project was launched as a crash programme to uplift 15,000 villages (Ceylon Daily News, 1993, March 7th) and targeted only a small proportion of the poverty stricken villages. Poverty alleviation projects have generally promoted a masculinization of opportunities and a displacement of female labour, so that women have been increasingly pushed into marginal production (ILO, 1993d:13; ESCAP, 1993). Such labour displacing mechanisms include the 'mechanization of rice cultivation and threshing, direct seeding of rice displacing labour associated with transplanting and increased use of herbisides displacing weeding'. Therefore it is important to understand the effects of agricultural development policies

on women and steps taken to ensure employment for women working in agriculture because more than half of employed women are in the agricultural sector.

The **Janasaviya** project was formulated by government officials targeting low income recipients. In the formulation of such a policy, a greater participation of the villagers at the grassroots level of development is desirable. For example, the sum of Rs 25,000 handed by the government to each identified family should not denote that the government is giving money to help with day to day consumption needs because these households have no other income. instead the money input should be taken as a capital input to the unemployed to support them in potential employment ventures or enhance the existing employment and thus improve the economic condition of the villages through improving productivity. The government help is addressed mainly to the head of the household who in most of the households is a male. Therefore the **Janasaviya** project does not specifically address the needs of the women in the household.

The **Janasaviya** project in its current form does not address the specific problems of women who are largely in home-based production. Some of these problems are the absence of recognition of work performed by women, the lack of occupational skills, the needed production finesse, and the lack of marketing skills etc. These are all attributes of informal activities. In the planning process, employment projects which address these drawbacks must consult the targeted population so that they are accepted by the

targeted female population and implemented with the guidance of the government.

At the implementation level, immediate relief could be given by adopting some general strategies to help these industries. An immediate necessity is to identify women who are engaged in home-based industries at the village level. This could be easily done by using data already available from **Gramasevaka** officials. There are women who need financial help to improve their industries. An immediate step that could be taken is to facilitate adequate collateral for self-employed women to borrow from lending institutions. Some of these women who are in need of technical competence could be given skills training to enhance their home-based productions and encourage and train them to target their production for sophisticated markets within the country, as well as overseas. Finding local and international markets for such products, organizing transportation of the products and helping them to sell their products at reasonable prices may be some of the additional strategies to develop these home-based production related occupations. Other than the above mentioned general approaches, the identification of the problem of labour underutilization in home-based industries, should be addressed in terms of the unique nature of the problem of each individual person and solutions put forward accordingly.

Large proportions of women (at least 40 per cent of the total employed) who are unpaid family workers reflects the unequal status of women as economic producers in the production system which still upholds patriarchal societal

values in rural areas of Sri Lanka. Such situations show that women's economic role is regarded as secondary and supplementary. 'The patriarchal economic values and attitudes define separate domains of privilege and responsibility for men and women' (Caldwell, 1982). Further education of these women would help in this regard. Official estimates should take into account the contribution of these women to the gross domestic product. Employment generating policies that intend to develop the village economy by fostering income generation and employment should recognize the economic contribution of female unpaid family workers who engage in food production and who perform other various services. Steps should be taken to ensure their rights and enhance their income and productivity.

Domestic service has been an important sector in providing employment for women. In view of this fact, steps should be taken to regularise domestic service under suitable protective labour regulations. The working hours, conditions of work, training to use modern household equipment, employer-employee relationships and most importantly, wages of those who are engaged in such employment should be defined and protected by law. 'The household is a non-profit earning institution which provides employment' (ILO, 1993). In such a context, 'The characteristics of the private households as a sector of employment should be taken into account when considering protective legislation covering servants. For instance, continued survival of the household is rarely dependent on the domestic worker and there is no profit motive as in a business where increasing costs can be recovered from

clients, so separate wage fixing may be appropriate.' (ILO, 1993:94).

9.6 IMPLICATIONS FOR FURTHER RESEARCH AND DATA COLLECTION

In the course of this study several issues relating to the problem of labour underutilization of women which warranted further investigation were revealed. Fragmentation of agricultural land and scarcity of land for agriculture affected those employed in the agricultural sector by denying them adequate use of the most important source of production, ie. 'agricultural land'. The nature of data collected by agricultural censuses and other sources such as surveys do not throw light on how land fragmentation has affected the productivity and employment patterns of females engaged in agriculture. A large proportion of young, as well as older women find employment in agriculture, largely working less than normal hours of work. An investigation into patterns of labour underutilization associated with land ownership and fragmentation among women, would help understand the problem better. Such a study should examine the issues of the impact of changing agricultural technology and production on women; the ownership of land, other assets, technology, and skills available to women; whether there is a relationship between land ownership, land fragmentation and labour underutilization of women in the agricultural sector and whether there is a regional variation in the land man ratio and female labour underutilization in the country. What is the effect of land settlement schemes based on river valley development on the ownership of land by women?

Little is known about the home-based production sector even though this sector dominates in providing non-agricultural employment for women. Studies are necessary to understand the income levels and earning patterns of women in home-based production among voluntary part-time workers in order to assist in developing appropriate policy and programme protection. Such a study should examine the line of production of home based commodities and services up to the retailing of such commodities and services and the institutions and procedures involved in the process.

Time use studies at the village level should be conducted to find out the contribution of women to the economy, how women use their time in economic and domestic tasks around the house and the economic value of such work. Such a study not only should assess the contribution of women to the economy, but also should include the value of their contribution to the national income.

Patterns and causes of unpaid family work in different sectors of the economy should be investigated. Such an investigation should reveal the contribution of unpaid family workers to the family income and the national income. A high incidence of unpaid female family workers were observed in all levels of educationa and in all occupations, particularly in agriculture which is dominated by traditional practices. Whether unpaid family work is a feature due to the persistence of patriarchal production values in the society or whether it is due to a lack of other avenues of employment should be examined.

There are several aspects of domestic workers that need to be further investigated including their characteristics

which have not been studied. Apart from the assumption that prevailing poverty drives women to enter domestic services, little is known about such workers. Studies that reveal the determinants of the supply and demand for domestic services are lacking. Little is known about the relationship between the family size, increased female participation in economic activity and the need for domestic services? Do domestic workers move into other sectors of the economy? Are they socially mobile? Do they become more assertive? The internal migration patterns of domestic workers have not been investigated at all. There is no information to understand the migration patterns of domestic workers. Are domestic workers mainly local or migrant workers who have migrated from villages to towns? What are the similarities and differences between domestic workers who work in the country and international domestic workers?

Needs assessment studies for working women at the district level should be conducted to assess the support services required by working women. Such studies could give guide-lines to organize a network of child-care services and other support services for women with the support of the government and non-government organizations.

Female international labour migration was an important issue during the 1970's and 1980's. Contributions of migrants in terms of remittances to the economy have been the most important source of foreign exchange for the country. Even though migration of the potential working age population has been an important issue in Sri Lanka, this aspect has not been investigated in relation to the prevailing high levels of labour underutilization. Another

important question regarding the current migration patterns is whether such patterns conform to the hypothesis of mobility transition. It would be interesting to investigate this aspect.

There is a need to investigate how social labour protection could be extended to the informal sector. Since these persons currently do not have any form of occupational protection there is a need to find out how fundamental rights, minimum health and safety standards and rudimentary forms of social protection to workers who are currently unprotected can be given. Effects of the extension of such legislation on the particular groups of workers should also be studied in order to establish priority and feasibility, as well as to establish complementary enforcement mechanisms.

A series of studies should be conducted at the village/town/district/province levels to monitor educational output from the school system, and to identify how such human capital resources have been utilized. The use of current education and the required additional educational skills for each employed and unemployed person should be investigated. These studies could be used for the establishment of a national data base on human capital resources which could be updated on a continuing basis. The feed-back from such studies could be used to address district specific vocational education requirements in the education system and man-power planning requirements.

An inevitable aspect of demographic transition is the process of ageing that the population undergoes. Repercussions of such an ageing process on the working age

population and the labour force participation are many. Is there a relationship between the ageing process and the part-time employment patterns of females? In the course of this study it was noted that the older age group of men and women tended to participate in voluntary part-time work. Further research is needed to understand the effect of ageing on the labour force participation of females and employment patterns of the working age population.

The censuses and surveys conducted by government authorities responsible for collecting data for use by policy makers and researchers have not adhered to comparable definitions, especially with regard to the collection of labour force data and units of measurements. The comparability of definitions such as economically active population, employment, unemployment, reference periods used, and household or housing units, used to measure the economically active population is important to build up a time series data base and to comprehend the changes that have occurred over time. The use of different time reference periods is the most obvious drawback that could be rectified quite easily and without any additional cost. Similarly, the definition of employed and unemployed that had been used differ in these sources of data. There are also differences in the use of units of measurement where some surveys have used the household, while others have used housing units as the units of measurement. If conversion factors for converting the data collected from the household to that collected from housing units, or vice versa were available this problem could have been easily resolved. To rectify anomalies of this nature not only should different

departments in the same ministry who have an interest in labour force data get together and discuss, but also different ministries who collect labour force data should discuss the comparability of definitions before conducting censuses and surveys.

The Quarterly Survey that has been initiated to collect labour force data since 1990 is an important step in collecting regular labour force data to observe continuous trends and patterns. Even though most definitions used in this survey were comparable with the Socio-Economic and Labour Force Survey of 1985/86, the definitions used for voluntary and involuntary part-time employment were not comparable. Such incompatibility is created by the sequence of the questions asked regarding the hours of work and the secondary employment in the Quarterly Survey. This anomaly can be easily rectified by adjusting the sequence of the questions and adding a question relating to whether he/she is seeking additional or alternative employment. This question should be asked for all employed persons, and irrespective of the number of hours worked. Such a question should be asked from all persons who are employed. In addition details of all secondary employment of the person should be collected. The structure of the questionnaire can also be improved to obtain more relevant information regarding underemployment.

This study has been hampered by the inadequacy or unavailability of migration data, particularly for females. There is inadequacy and unavailability of migration data for the researchers as well as planners even though mobility transition was an important component of socio-economic

transition that occurred in the country. Since the 1980's migration had become one of the important determinants of labour supply. Other than ad hoc surveys mostly done at the village level, a continuous source of information concerning migrants is the information obtained at the ports of landing and departure. Embarkation and landing cards therefore are the basic sources of information about Sri Lankan migrants. Every effort should be made to ensure that correct and complete information is obtained from persons who fill in these cards, by ensuring that they are filled in properly. Some of the migration data collected were not available by demographic and other socio-economic characteristics. The information obtained from the landing card can be improved by including a question on the duration of stay abroad. Currently the information requested is only regarding the date of last departure which is not adequate. That question does not provide correct information if the migrant has visited the home country prior to his/her final landing. Similarly, on this card information could be collected on the level of education, professional, technical or vocational education, skill and the occupation of the person concerned before migration. Assurance of confidentiality is not given regarding the personal information revealed in the card. If information obtained from landing cards is not used for tax purposes, more accurate information could be obtained regarding occupations and the purpose of migration.

Female labour migration in Sri Lanka is a recent development and has complex socio-economic, demographic and cultural implications. As such, migration of women deserves a better focus in data collection as well as data analysis.

Some of the studies that have been done regarding migration of Sri Lankans abroad are not gender-focused at all or only partially focused. Recently created semi-government agencies such as the Sri Lanka Bureau of Foreign Employment (created in 1985) is also an agency in possession of data regarding migrating women. SLFBE should take steps to analyse such data or make such data available for planning purposes.

The coding that has been used in some of the major analyses of embarkation cards (for example the study done by Employment and Manpower Division, 1985) to understand the skill requirements and the level of education of the migrants is arbitrary and too broad. For example, the categories such as high, middle, skilled and unskilled are too broad indeed. These definitions do not compare with coding used by other sources of data. These anomalies can easily be rectified by adhering to coding using educational levels.

The demographic and agro-industrial transitions have brought forth a transitional economy and society which has important repercussions for female labour force participation in Sri Lanka. The analysis in this study has shown that there is a serious problem of labour underutilization among Sri Lankan women. Encouragement of female labour force participation has been an issue of importance in this international decade attributed to women. Therefore an equally important issue and a challenge for the government of Sri Lanka and for governments around the world is to facilitate adequate utilization of female labour resources.

Appendix 2.1
Survey Questions: SES1969/70, SE&LFS1985/86, LFS1990/91.

Socio - Economic Survey 1969/70 (SES1969/70)
Personal Characteristics
1 Serial number of the household
3. Relationship to head of household (HH):-
Head of household/wife/husband/son/daughter/parents/
other relation/domestic servants/ other
5. Sex: - Male/female
6. Age:- Age at last birthday
7. Marital status:- Never married/married/widowed/
divorced/seperated
8. Nationality:- Ceylonese by decent/Ceylonese by
registration/ non Ceylonese
9. Race:- Sinhalese/Ceylon Tamil/Ceylon Moor/
Malay/Burger/Other
10. Religion:- Buddhist/Christians/Hindu/Muslim/Other
12. Level of education:- No schooling/primary
(grades 1-5)/ middle school (passed grade 6 to GCE)/
passed GCE/passed Advanced GCE or HSC/under graduate/
degree/Post graduate
Labour Force Characteristics
14. Type of Activity:- Employed/unemployed/engaged in own
house work/ student/retired, old, disabled/too young to
work/other
15. Principal occupation or kind of work
16. Type of economic activity or place of work
17. Employment status:- Employer/employee/own account
worker/unpaid family worker.
18. If unemployed whether registered for employment:-
Registered/ not registered.

Source: Department of Census and Statistics,
1973a:Appendix

Socio - Economic and Labour Force Survey 1985/86 (SE&LFS 1985/86)
Personal Characteristics
1 Serial number of the household
3. What is your relationship to the head of household?
Head of household/wife/husband/son/daughter/parents/
other relation/domestic servants/other
4. Sex:- Male/female
5. Age:- Age at last birthday
6. Race:- Sinhalese/Ceylon Tamil/Ceylon Moor/
Malay/Burger/Other
7.Religion:- Buddhist/Christians/Hindu/Muslim/Other
8. Level of education:- No schooling/Passed grade 0-4/
passed grade 5-7/passed grade 8-9/passed GCE OL/
NCGE/passed GCEAL or HNCE/ degree/post graduate degree
10. Marital status:- Never married/married/widowed/
divorced/seperated
Labour Force Characteristics
4. Was he/she economically active for a major part of
last 12 months (employed or available for emplyment)?:-
Yes/no

5. Was he/she usually employed:- Yes/no
   or unemployed:- Yes/no
6.Was he/she mainly engaged in household duties/ student/ otherwise inactive.
10. Did he/she do any work for pay profit or family gain during the last calendar week? Yes/no
11. Did he/she have an enterprise or job at which did not work last calendar week? Yes/no
12. Was he/she available for work during the last calendar week? Yes/ no
13. Reason for non availability:- Studies/ household work/ retirement, old age/ infirmity, disability/ too young/ other reasons (specify).
14. Why did he/she not work during last calendar week? Illness or injury/ strikes or lockout/ holiday, vacation or other leave of absence/ reduction in economic activity/ off-season inactivity/ bad weather/ mechanical or electrical breakdown/ shortage of raw materials or fuels/ other reasons (specify)
15a. How long has he/she been continuously absent from work?
15b. What kind of attachment has he/she to his/her job or enterprise?
Own enterprise/ Payment for duration of absence/Assurance or agreement on return to work/ Other forms of attachment if any
16. Nature of main occupation:- (a) Industry (b) Occupation (c) Status-
Paid employee:- Regular/casual/
Self employed /employer/own account worker/ unpaid family worker.
17. Nature of second occupation if any:- (a) Industry (b) Occupation (c) Status
18. The number of hours actually worked during the last calendar week?
On the main occupation/ on all occupations
21. What are the reasons for working less?
Voluntary:- Illness or injury/ holiday/leave of absence/strike/not available for full-time work for other voluntary reasons
Involuntary:- Mechanical or electrical breakdown/ shortage of raw materials or fuel/lock out/lay off/bad weather/ off season/full time work not available for other involuntary reasons
22. Was he/she available for additional work during last calendar week?
23. What type of work would he/she be available for? Paid employment/self employment/any other
24. What steps has he/she taken during the last 12 months in search of paid employment?
Registered with public or private employment agencies/applied to prospective employers/checked at farms/estates/factories/ markets/work sites/placed or answered advertisements/sought assistance of friends or relatives /looked for land, building, machinery, equipment or finance for setting up own enterprise/

other steps (specify)/ no specific steps taken.
25. How long has he/she been seeking employment since he/she became unemployed?
26. Why has he/she not been seeking employment? Discouraged due to inability to get a job/ Believes no suitable work available/ Engaged in household duties/ Engaged in studies/ Engaged in other non-economic activity/ Other reasons
28. What kind of occupation would he/she prefer?
29 Assistance received during unemployment:- Government/ charitable institution/ parents/ spouse/ children/ relations/income from savings/sale of property or liquidation of assets/present occupation/ no assistance required.

Source: Department of Census and Statistics, 1987a: Appendix A

Labour Force Survey 1990/91 (LFS1990/91)
(a) Personal Characteristics
1 Serial Number of the household
3. Relationship to head of household (HH)
(a) What is your relationship to the head of household? Head of household/wife/husband/son/daughter/parents/ other relation/domestic servants/ other
4. Sex:- Male/female
5. Age:- Age at last birthday
6. Race:- Sinhalese/Ceylon Tamil/Ceylon Moor/ Malay/Burger/Other
7.Religion:- Buddhist/Christians/Hindu/Muslim/Other
8. Marital status:- Never married/married/widowed/ divorced/seperated
9.District of birth
11.Educational attainment:- No schooling/passed grade 0-4/ passed grade 5-7/ passed grade 8-9/passed GCE (OL)/ NCGE/ passed GCE(AL) or HNCE/ degree/ post graduate degree

(b) Labour force Information
1. Serial Number of the house hold
2. Did he/she do any work for pay, profit, or family gain, last week? Yes/no
3. Did he/she have a job or enterprise at which he/she did not work? Yes/no
4. During the past week was she/he available for work? Yes/no
5. Could she/he have taken a job last week if one was available? Yes/no
6. Why could he/she work last week? Already has a job/ temporary illness/ going to school/ family responsibilities/ other (specify)
7. Why was he/she not available or looking for work? Studies/ household work/ retirement/ infirmity, disability/ not interested in having a job/ other (specify)
8. Why did he/she not work last week? Illness or injury/ strike/ holiday, vacation or leave/ reduction in economic activity, off season inactivity, bad weather/ mechanical

or electrical faliure/ short of material or fuel/ other reason (specify)
9. Nature of the Main work? (a) Industry (b) Occupation (c) Sector 1. Public 2. Private
(d) Status: 1. employee 2. employer 3. own account worker 4. unpaid family worker
10. How long has he/she been working in this occupation? Years/ months
11. Number of hours usually worked in a week at this job:- Hours
12. Number of hours actually worked at this job last week?:- Hours
14. Ask reasons for working less than usual hours:- Illness or injury/ strike/ holiday, vacation or leave/ reduction in economic activity/ off season inactivity/ bad weather/ mechanical or electricity faliure/ short of raw materials or fuel/ other reasons (specify)
15. Did he/she have secondary work: Yes/no
16. Nature of secondary work: (a) Industry (b) Occupation (c) Sector (d) status
17. How long has he/she been engaged in economic activity? Years/ months
18 Number of hours actually worked last week at this job
19.What kind of work would he/she expect to get? occupation or activity?
21. Would he she available for:- (a) Full-time employment (b) Part-time employment (c) Self employment (d) Any kind of employment
22. What steps has he/she taken in search of work in the past four weeks? Registered at employment agencies/ applied to prospective employers/ checked at farms, factories estates, markets, work sites/ places or answered advertisements/ sought help from friends or relatives/ looked for land, building machinery equipment or finance for setting up own enterprise/ applied for permit or licence to set up own enterprise/ other steps taken (specify)/ no steps taken.
23. How long has he/she been seeking employment? Less than one month/ 1-2 months/ 3-5 months/5-8 months/ 8-11 months/ 12 months or more
24. Why has he she not been seeking employment? Discouraged, not able to get a job/ believes no suitable work available/ has no skills or training/ engaged in housework/ engaged in studies/ other reasons (specify)
25. Did he/she ever have a job? Yes/no
28. Source of assistance during period of unemployment? Government/ charitable institution/ parents, spouse, children, other relatives/ income from property/ assets/ present occupation/ no assistance required/ no assistance available
29. During the last 12 months did he/she work for pay profit or family gain? Yes/no
30. During the past 12 months did he/she look or was available for work? Yes/no

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Source: Department of Census and Statistics, 1991:42-50

Appendix 2.2
Computation of Rates: Activity Rates, Underemployment and Part-time Employment Rates and Ratios of Discouragement.

Activity Rates

1. **Proportion of Unemployed in the Working Age Population (presented as age-sex specific rates):**
   Number of Unemloyed persons in the age-sex group divided by the working age population of the same age-sex group and multiplied by hundred.

2. **Proportion of Employed in the Working Age Population (presented as age-sex specific rates):**
   Number of emloyed persons in the age-sex group divided by the working age population of the same age-sex group and multiplied by hundred.

3. **Proportion of Students in the Working Age Population (presented as age-sex specific rates):**
   Number of Students in the age-sex group divided by the working age population of the same age-sex group and multiplied by hundred.

4. **Proportion of the Own House Workers in the Working Age Population (presented as age-sex specific rates):**
   Number of Own House workers in the age-sex group divided by the working age population of the same age-sex group and multiplied by hundred.

Underemployment Rates

5. **Age-sex and Hours of Work Specific Underemployment Rates**
   Proportion of employed population in the age-sex and the number of hours worked group who are seeking additional or alternative employment divided by number employed in the respective age sex and the number of hours worked group.

6. **Age-sex, Marital Status/Level of Education/Household Size Specific Underemployment Rates**
   Proportion of employed population in the age-sex, marital staus/educational level/household size and the number of hours worked group who are seeking additional or alternative employment divided by the number employed in the respective age-sex, marital status/educational level/household size and the number of hours worked group and multiplied by hundred.

Part-time Employment Rates

7. **Age-sex and Hours of Work Specific Part-time Employment Rates**
   Proportion of employed population in the age-sex group who are working less than 35 hours and do not seek additional or alternative employment, divided

by the number employed in the respective age sex and the number of hours worked group.

8. **Age-sex, Marital Status Specific Part-time Employment Rates**
Proportion of employed population in the age-sex, marital staus group who work less than 35 hours and not seek additional or alternative employment divided by the number employed in the respective age-sex, marital status and the number of hours worked group in the employed population and multiplied by hundred.

9. **Ratio of Dicouragement**
The number of persons who did not seek work because they thought that they would not be able to get a job or because they thought that no suitable work was available, divided by the number unemployed and multiplied by hundred.

Appendix 2.3
The Model Used for Multiple Regression Analysis and Operationalization of Dependent and Independetnt Variables for the Use of Logit Method

1. The model investigated is as follows:-

Y= IDC+ICC+IFC+IEC
Where Y is the Unemployed or Underemployed or Part-time employed person (the three dependent variables are mutually exclusive)
and
IDC = Individual Demographic Characteristics = age sex and marital status
ICC = Individual Cultural Characteristics = race and religion
IFC = Individual Familial Characteristics= status in the family, household size, support during person's unemployment
IEC = Individual Economic Characteristics = educational level, main occupation, employment status, preferred occupation

The parameter estimates were done using the logit model:
(LOG(p/(1-p)/2+5)=Intercept + BX

where p is the probability of a person being unemployed or under employed or part-time employed and (1-p) is the probability of a person not being unemployed or underemployed or part-time employed (Gujarati, 1980:480-491) for each B value of the independent variable X. Therefore [p/(1-p)] is the odds ratio. For the final result only models which converged at iteration 6 or 7 and at convergence criterian .00000 or .00001 were accecpted.

2. Operationalization of Dependent Variables for the use of Logit method

(1) Y= unemployed person
and Y =1 if actively seeking work
Y =0 if not actively seeking work

(2) Y= underemployed person
and Y=1 if working less than 35 hours and seeking additional employment

Y=0 if working less than 35 hours and do not seek additional employment

(3) Y= part-time employed person
and Y=1 if working less than 35 hours and do not seek additional employment
Y=0 if working less than 35 hours and seek additional employment

3. Operationalization of Independent Variables for the Use of Logit Method

Following independent variables were used in this analysis:- (1) age (2) sex (3) marital status (4) education (5) ethnicity (6) religion (7) size of the house hold (8) Status in the family (9) sector (10) period of search for work (11) support during unemployment (13) employment preferences of the unemployed person (14) main occupation of the employed persond (15) main industry under which the employment is classified (16) employment status of the employed person The forth coming sections will present in further detail, each of the independent variables that have been selected and the sub-categories of those variables.

4. Conversion of Dichotomous and Politomous Independent Variables.

The independent variables in the above paragraph are either qualitative or parametric, because they indicate presence or absence of a quality or an attribute which influence the dependent variable. One method of quantifying such attributes is by constructing artificial variables which take the values of '0' or '1' where '0' indicates absence of the attribute and '1' indicates the presence of the attribute. Variables which assume such '0' and '1' values are called dummy variables. The

general rule of converting qualitative variables to dummy variables is 'if a qualitative variable has 'm' categories introduce any 'm-1' dummy variables' (Gujarati, 1988:436).

Each independent variable is= X. Therefore in the logit model, for each investigated sub-category Xi of the X variable, Xi is equated to 1 while all the other sub-categories are equated to 0.

Examples

Age: sub-categories 15-19, 20-29, 30-39, 40-49, 50+
X=1 if the age category is 15-19
X=0 Otherwise
sex:sub-categories:- male/ female
X=1 if sex=female
X=0 if sex =male
Marital Status sub-categories:-
never married/ currently married/ widowed, divorced or legally separated
X=1 if Never married
X=0 Otherwise
Level of Education sub- categories:- No schooling/ primary/ junior secondary/ senior secondary or above
X=1 if the level education is no schooling
X=0 otherwise
Race sub-categories:- Sinhalese Sri Lankan Tamil/ Indian Tamil/ Moor/ Others
X=1 if Sinhalese
X=0 Otherwise
Religion sub-categories:- Buddhist Hindu/ Moor/Christian/
X=1 if Buddhist
X=0 if Otherwise
Size of House hold sub-categories:- Household size less than five/ Household size five and above
X=1 if household size is less than five
X=0 Otherwise
Status in the Family sub-categories:- Head of the household/ spouse/ son or daughter/ other
X=1 if Head of the household
X=0 Otherwise
Sector sub-categories:- Urban/ rural /estate
X=1 if Urban
X=0 Otherwise
Period of Search for Work:- Sub-categories
6 months or less / more than six months
X=1 6 months or less
X=0 of Otherwise

Support During Unemployment sub- categories: - support from the family/ support from non family sources
X=1 if support from family
X=0 Otherwise
Employment Preferences of Unemployed sub- categories:- Agriculture/professional and technical/ clerical/ sales/ production
X=1 if agriculture is preferred as an occupation
X=0 Otherwise
Main Occupation of the Employed sub-categories:- white collar/agriculture/production/services
X=1 if the main occupation is agriculture
X=0 Otherwise
Employment Status of the Employed sub-categories:- Employer/ casual employee/ regular employee/ own account worker/ unpaid family worker
X=1 if the employment status is employer
X=0 Otherwise

Appendix 4.1
Sectoral Shares of Gross Domestic Product (Sri Lanka)
(Estimated US$ values of averaged GDP for five year periods)

	1960/64	1965/69	1973/77	1978/82	1983/8	1988/91
Agriculture Forestry and Fishing	417.2	516.5	522.6	695.0	979.4	1371.1
Mining & Quarrying	5.4	7.6	33.4	51.0	87.4	126.7
Manufacturing	125.8	170.0	350.2	429.9	533.5	773.2
Construction	48.4	71.8	68.4	197.7	274.9	383.3
Electricity Gas & Water	1.8	2.6	10.9	24.1	46.2	68.0
Transport Storage	104.8	147.8	140.5	232.2	386.6	532.5
Wholesale & Retail Trade	162.9	228.1	332.2	465.5	688.3	865.2
Banking & Insurance	10.6	18.9	24.3	77.3	137.6	239.8
Ownership of Buildings	41.1	55.4	41.0	67.2	101.4	128.6
Public Administration	57.1	70.5	57.1	80.0	153.5	287.3
Services	139.6	188.9	147.8	170.9	151.6	210.0
Gross Domestic Product	1114.9	1478.2	1728.4	2490.7	3540.5	4985.7
Net Foreign Income	-7.3	-10.3	-14.8	-34.9	-86.8	-122.6
Gross National Product	1107.6	1467.9	1713.5	2455.8	3453.7	4863.1
Exchange Rates						
1US$=Rs	6.0	6.0	15.0	26.0	42.0	51.0

Sources: Central Bank of Ceylon, 1960-1991, Annual Reports (Series)

Appendix 4.2
Productivity of Employment in Manufacturing Industries

(Annual Output Per Worker in Rupees) 1973	1975	1978	1985	1988
Food & Beverages				
38673	89978	84096	164326	282065
(238)	(167)	(310)	(639)	(520)
Textiles				
14036	23883	25958	127008	211824
(300)	(373)	(388)	(748)	(858)
Wood and Wood Products				
10596	15990	18765	72226	67471
(40)	(72)	(66)	(98)	(89)
Chemical, Petroleum, Coal Rubber & Plastic Products				
19788	47252	42233	156514	157334
(121)	(127)	(160)	(222)	(213)
Non-Metallic Mineral Products				
53744	157750	204490	588838	642572
(85)	(115)	(149)	(179)	(189)
Basic Metal Products				
22269	21144	39652	103494	119738
(12)	(13)	(21)	(22)	(16)
Fabricated Metal				
45416	96677	103742	55935	294082
(187)	(140)	(162)	(116)	(105)
Manufacturing nec				
18593	27114	36474	137526	235009
(22)	(14)	(15)	(23)	(36)
Total Manufacturing				
26121	51462	65008	182224	254577
(1056)	(1079)	(1362)	(2123)	(2122)

Productivity in Manufacturing Industries (Growth Rates)	73/75	75/78	78/75	85/88
Food and Beverages	42.2	-2.3	9.6	18.0
Textiles WA & LP	26.6	2.8	22.7	17.1
Wood and Wood Products	20.6	5.3	19.3	-2.3
Paper & Paper Products	43.5	-3.7	18.7	0.2
Chemical, Petroleum, Coal, Rubber & Plastic Products	53.8	8.7	15.1	2.9
Non-metallic Mineral	-2.6	21.0	13.7	4.9
Basic Metal Products	37.8	2.4	-8.8	55.3
Fabricated Metal Products	18.9	9.9	19.0	17.9
Manufacture nes	-1.6	29.8	5.9	2.6
Total Manufacturing	33.9	7.8	14.7	11.1

Sources: For years 1973-1978 Central Bank of Ceylon, 1973:, 1978:
For years 1983-1988 Department Census and Statistics, 1988::
Notes: Productivity in employment is calculated by dividing the value of output by the number employed in each sector Numbers in parenthesis are number employed in hundreds.

Appendix 4.3
Development of Hospitals and Other Hospital Services

	1950	1960	1970	1980	1985	1990
Hospitals	233	270	329	480	490	497
Doctors	1230	1726	3243	3059	3108	3380
Nurses	1500	1996	5033	6227	7216	7848
Attendants/Midwives	1378	3026	5755	4525	4932	4953
Ayurvedic Physicians	2450	7640	10102	10207	12277	13570
Health Expenditure Rs.millions	64.2	140.0	349.6	1341.8	4673.4	3710.2
Number of Patients	846.0	1277.7	1711.4	3425.2	32067.0	36889.0
Health Expenditure as % of GDE	1.0	2.0	2.4	4.7	3.5	5.5

Percentage Increase	50/60	60/70	70/80	80/85	85/90
Hospitals	15.9	21.8	45.9	0.8	2.7
Doctors	40.3	87.9	-36.8	37.6	19.6
Nurses	33.1	150.7	24.5	15.9	8.8
Attendants/ Midwives	37.1	90.2	-21.4	9.0	0.4
Ayurvedic Physicians	211.8	32.2	1.0	20.3	10.5
Health Expenditure	118.1	149.7	283.8	248.3	-20.6
Number of Patients	42.6	33.9	100.1	-6.4	15.1
Health Expenditure as % Total Expenditure	10.0	20.0	95.8	-25.5	57.1

Average Annual Increase	50/60	60/70	70/80	80/85	85/90
Hospitals	1.5	2.0	3.8	0.2	0.5
Doctors	3.4	6.3	-4.6	6.4	3.6
Nurses	2.9	9.2	2.2	2.9	1.7
Attendants/Midwives	3.2	6.4	-2.4	1.7	0.1
Ayurvedic Physicians	11.4	2.8	0.1	3.7	2.0
Health Expenditure	7.8	9.2	13.4	25.0	-4.6
Number of Patients	3.5	2.9	6.9	-1.3	2.8
Health Expenditure as % GNE	6.9	1.8	6.7	-2.9	4.5

Sources: IBRD, 1953:718 TableIV
Central Bank of Ceylon Annual Series Central Bank Reports and Review of the Economy 1960-90; 1980:93 Table 4.9; 1987:101 Table 4.14
Department of Census and Statistics, 1959:154, 1960:202
Notes: Doctors include assistant medical practicians in column '1990' data are for 1987 and in column '1960' the data are for 1959

Appendix 4.4: Development Indicators showing growth of Health Services, (Average Annual Growth Rates, Per cent)

	1950/60	1960/70	1970/80	1980/85	85/90
Hospitals	1.5	2.0	3.8	0.2	0.5
Doctors	3.4	6.3	-4.6	6.4	3.6
Nurses	2.9	9.2	2.2	2.9	1.7
Attendants/Midwives	3.2	6.4	-2.4	1.7	0.1
Ayurvedic Physicians	11.4	2.8	0.1	3.7	2.0
Health Expenditure	7.8	9.2	13.4	25.0	-4.6
Number of Patients	3.5	2.9	6.9	-1.3	2.8
Health Expenditure as % GNE	6.9	1.8	6.7	-2.9	4.5

Sources: IBRD, 1956:718 TableIV
Central Bank of Ceylon Annual Series Central Bank Reports and Review of the Economy 1960-90; 1980:93 Table 4.9
1987:101 Table 4.14
Department of Census and Statistics, 1959:154, 1960:202
Notes: Doctors include assistant medical practicians Data indicated in the column 1990 are for 1987 and in column 1960 are for 1959
See Appendix 4.3 for details of compiled data

Appendix 8.1
Part-time Work Rates by Occupation (Females)

Occupations	Age Groups				
	15-19	20-29	30-39	40+	Total
Professional Tech & Related					
NHW 1	** (**)	** (20)	78.2 (23)	100.0 (28)	74.6 (53)
NHW 2	** (**)	83.3 (85)	96.4 (165)	99.0 (194)	94.6 (163)
of which: Teachers					
NHW 1	* (*)	** (14)	78.9 (19)	100.0 (18)	76.5 (51)
NHW 2	** (**)	83.7 (98)	96.3 (162)	98.9 (183)	92.5 (455)
Clerical & Related Workers					
NHW 1	* (*)	** (**)	** (**)	** (**)	92.8 (14)
NHW 2	** (**)	82.5 (17)	78.6 (28)	100.0 (30)	89.1 (76)
Sales Workers					
NHW 1	** (**)	** (12)	** (10)	** (**)	92.8 (24)
NHW 2	** (**)	55.1 (29)	88.9 (36)	100.0 (30)	88.1 (96)
of which: Managers, Working Proprietors, Buyers					
NHW 1	** (**)	** (**)	** (**)	93.3 (15)	87.9 (33)
NHW 2	** (**)	88.9 (17)	86.7 (30)	100.0 (58)	94.4 (110)
Salesmen Shop Assistants, Street Vendors					
NHW 1	** (**)	** (**)	** (**)	100.0 (13)	95.8 (24)
NHW 2	** (**)	90.9 (11)	** (**)	100.0 (15)	80.5 (36)
Service Workers					
NHW 1	** (**)	** (**)	** (**)	100.0 (16)	77.8 (36)
NHW 2	** (**)	91.7 (12)	93.7 (16)	97.4 (38)	95.8 (72)
Agricul. Animal Husb., Forestry Workers & Fisherman					
NHW 1	87.2 (117)	85.6 (265)	90.6 (287)	98.1 (418)	91.8 (1087)
NHW 2	87.0 (154)	87.5 (373)	95.7 (467)	98.8 (690)	94.0 (1604)
of which: Cultivators of Paddy					
NHW 1	83.3 (36)	81.1 (69)	93.5 (77)	98.2 (115)	91.2 (297)
NHW 2	90.5 (42)	81.8 (88)	94.3 (107)	99.2 (128)	92.6 (365)
Cultivators of Vegetables					
NHW 1	93.7 (16)	90.7 (43)	96.7 (30)	97.4 (39)	94.5 (128)
NHW 2	** (**)	81.5 (27)	100.0 (18)	100.0 (24)	93.3 (74)
Cultivators of Other Mixed Crops					
NHW 1	85.7 (14)	95.8 (24)	81.8 (33)	100.0 (38)	91.7 (109)
NHW 2	100.0 (11)	88.5 (26)	96.7 (30)	98.4 (63)	96.1 (130)
Labourers NEC.					
NHW 1	** (**)	92.3 (13)	84.6 (13)	93.3 (15)	90.5 (42)
NHW 2	** (11)	77.8 (36)	96.8 (31)	93.5 (46)	85.5 (124)

Source: SE&LFS1985/86 Data Tape
Notes: NHW 1 - Number of hours worked 0-19
NHW 2 - Number of hours worked 20-34
* No cases
** Less than 10 cases

Appendix 8.2

Part-time Work Rates (per cent): Selected Occupations, Males

	Age Groups 15-19	20-29	30-39	40+	total
Professional Technical and Related					
NHW1	** (**)	** (**)	** (**)	91.2 (34)	90.6 (53)
NHW2	* (*)	85.2 (47)	89.5 (86)	93.7 (176)	78.3 (309)
of which: Teachers					
NHW1	* (*)	** (**)	** (**)	100.0 (17)	100.0 (26)
NHW2	* (*)	93.7 (36)	93.7 (63)	99.2 (122)	95.9(221)
Agricultural Workers					
NHW1	82.6 (195)	76.1 (304)	85.3 (224)	96.4 (550)	85.3(1273)
NHW2	82.7 (319)	77.2 (804)	87.9 (619)	94.1(1064)	86.6 (2806)
of which cultivators of paddy					
NHW1	91.9 (62)	71.4 (140)	93.6 (94)	98.0 (253)	89.8 (549)
NHW2	83.1 (95)	76.8 (237)	92.7 (191)	93.3 (397)	87.8 (914)
Cultivators of vegetables					
NHW1	84.0 (25)	** (19)	100.0 (10)	4.3 (35)	82.0 (89)
NHW2	96.1 (26)	78.4 (37)	72.7 (22)	100.0 (29)	86.8 (114)
cultivators of other food crops					
NHW1	92.6 (27)	52.4 (21)	78.6 (14)	100.0 (24)	82.5 (86)
NHW2	95.2 (21)	76.3 (59)	89.2 (37)	100.0 (54)	88.9 (152)
Cultivators of mixed crops					
NHW1	92.8 (14)	57.9 (19)	84.6 (26)	98.3 (58)	88.0 (117)
NHW2	82.1 (28)	70.9 (55)	90.2 (41)	94.9 (99)	86.5 (223)
Animal husbandry workers					
NHW1	60.0 (45)	68.9 (90)	77.4 (62)	92.7 (109)	77.8 (306)
NHW2	69.9 (103)	75.1 (333)	83.1 (2260)	92.1(343)	82.2 (1039)
fisherman and hunters					
NHW1	** (**)	** (**)	** (**)	91.7 (12)	79.4 (34)
NHW2	100.0 (29)	96.5 (58)	100.0 (33)	100.0 (60)	98.9 (180)

Source: SE&LFS1985/86

Appendix 8.3: Percentage Distribution of Part-time Workers by the Level of Education, Females

	20-34 hours				0-34 Hours				
	No School.	Primary	Jun.Sec.	Sen.Sec.	No School.	Primary	Jun. Sec	Sen.Sec	Total
1 Professional Technical and Related									
	0.3	*	**2.0**	**70.4**	**0.2**	**0.3**	**1.9**	**57.9**	**11.9**
of which Teachers									
	0.2	*	1.9	67.9	0.1	*	1.5	55.2	11.2
2 Administrative & Managerial									
	*	*	*	**0.2**	*	*	**0.1**	**	**0.2**
3 Clerical & Related									
	0.2	*	**0.5**	**5.7**	**0.1**	*	**0.4**	**5.1**	**1.1**
of which Mail Distributors									
	*	*	0.3	3.4	*	*	0.3	3.1	0.7
4 Sales Workers									
	4.0	**4.9**	**8.0**	**2.2**	**3.5**	**4.4**	**6.4**	**3.1**	**4.6**
of which Managers, Working Proprietors									
	3.5	4.3	5.5	1.0	2.9	3.1	4.4	1.8	3.2
Shop Assistants & Other Sales Workers									
	0.5	0.5	2.5	1.2	0.6	1.3	2.0	1.4	1.4
5 Service workers									
	3.1	**2.6**	**2.7**	**1.3**	**3.5**	**2.4**	**2.2**	**1.4**	**2.3**
of which Managers, Working Proprietors									
	2.0	1.4	1.8	0.8	2.0	1.3	1.3	1.0	1.4
6 Agriculture Animal Husbandry Workers and Fisherman									
	71.9	**70.4**	**58.7**	**12.6**	**73.7**	**72.7**	**64.9**	**22.9**	**60.8**
of which Cultivators of Paddy									
	11.5	12.9	17.4	5.0	13.2	15.1	19.3	8.4	14.8
Cultivators of Vegetables									
	2.5	2.4	3.8	0.8	4.8	3.4	6.4	3.0	4.6
Cultivators of Other Food Crops									
	5.5	6.2	5.8	1.0	5.7	6.5	7.0	1.5	5.5
Cultivators of Export Crops									
	1.5	2.6	2.8	0.3	1.8	3.0	3.2	1.2	2.5
Cultivators of Mixed Crops									
	4.0	5.1	6.1	2.2	5.0	6.1	6.6	3.1	5.5
Cattle & Poultry Farmers									
	1.2	1.5	4.3	1.3	2.1	3.8	5.2	3.1	3.8
Agriculture Workers									
	45.7	38.6	17.7	1.8	41.0	33.6	16.0	2.4	23.4
7/8/9 Production & Related Workers									
	20.4	**22.1**	**28.1**	**7.5**	**18.9**	**20.1**	**24.1**	**9.4**	**19.1**
of which Spinners Weavers and Knitters									
	2.1	1.5	2.7	*	2.2	1.6	1.9	2.5	1.6
Food & Beverage Processing Workers									
	4.8	4.9	5.1	0.7	3.8	4.2	4.3	0.5	3.4
Tobacco Preparers, Tailors, Dress makers ect.									
	1.3	3.0	9.0	4.9	0.9	3.1	8.2	6.5	5.0
of which Other Production & Related Workers									
	4.3	5.5	5.9	1.0	5.2	5.4	4.6	0.7	4.2
Lab n.e.c.									
	6.0	5.0	3.4	0.8	5.3	4.1	3.4	0.9	3.5
Total No:									
	602	720	840	595	865	1126	1333	795	4119

Source: SE&LFS 1985/1986 Data Tape

Appendix 8.4: Percentage Distribution of Part-time Workers by the Level of Education and Occupation.

	Hours Worked								
	20-34 Hours				0-34 Hours				
	No School.	Primary	Jun.Sec.	Sen.Sec.	No School.	Primary	Jun.Sec.	Sen.Sec.	Total
0/1 Professional Tech & Related	**0.7**	**0.6**	**1.8**	**39.6**	**0.5**	**0.7**	**1.6**	**35.9**	**5.7**
of which Teachers	0.2	0.1	0.3	32.3	0.4	0.1	0.2	28.9	4.0
2 Administrative & Managerial	*	**0.1**	**0.2**	**1.6**	*	**0.1**	**0.2**	**1.5**	**0.3**
3 Clerical & Related	*	**0.3**	**1.2**	**9.4**	*	**0.2**	**1.1**	**9.0**	**1.7**
of which Mail Distributors	*	0.1	1.0	7.9	*	0.0	0.7	6.3	1.1
4 Sales Workers	**3.9**	**3.9**	**8.1**	**8.4**	**3.6**	**3.6**	**7.6**	**8.2**	**5.9**
of which Managers, Working Proprietors	1.5	3.2	6.2	7.5	1.1	2.4	4.5	5.9	3.6
Shop Assistants & Other Sales Workers	2.4	0.7	1.9	0.9	1.8	0.5	1.4	0.7	1.0
5 Service workers	**1.9**	**1.1**	**1.4**	**2.1**	**1.8**	**1.3**	**1.3**	**2.0**	**1.4**
6 Agriculture, Animal Husbandry, Forestry Workers, Fisherman & Hunters	**68.7**	**64.3**	**54.2**	**26.9**	**69.9**	**66.6**	**58.8**	**31.5**	**59.0**
of which Cultivators of Paddy	14.9	20.7	19.5	12.9	16.7	23.7	24.0	14.4	22.0
Cultivators of Vegetables	2.4	2.1	2.7	1.1	3.1	2.6	3.3	2.1	2.9
Cultivators of Other Food Crops	5.9	3.5	3.5	1.4	5.6	3.7	4.0	1.6	3.7
Cultivators of Export Crops	1.5	1.9	2.3	1.9	1.6	2.3	2.6	3.0	2.5
Cultivators of Mixed Crops	3.2	5.7	3.9	3.0	5.4	5.7	4.5	3.8	4.9
Cattle & Poultry Farmers	1.0	0.4	1.3	0.8	0.7	0.6	1.3	0.7	0.9
Agricultural Workers	35.2	25.4	15.5	4.0	32.7	23.8	14.6	4.2	18.2
Fisherman & hunters	3.4	4.3	4.9	*	*	*	3.7	1.0	3.4
7/8/9 Production & Related Workers	**24.7**	**29.6**	**33.0**	**12.1**	**24.1**	**27.4**	**29.4**	**11.8**	**25.9**
of which Minors, Metal & Chemical Processors, Woodpreparers	2.2	2.4	3.1	1.6	2.0	2.5	3.1	1.6	2.6
Brick layers & Carpenters	1.9	5.2	8.4	2.1	2.2	4.9	7.5	1.9	5.3
Material handling & Related workers n.e.c.	18.3	17.2	14.1	3.3	18.1	15.5	12.5	3.3	12.9
Total %	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total No.	409	1592	1800	629	551	2161	2486	790	5988
All Occupations	6.8	26.6	30.1	10.5	9.2	36.0	41.5	13.2	100

Source: SE&LFS 1985/1986 Data Tape

Notes: * - No cases, ** - Less than 10 cases

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