INSTITUTE OF POLICY STUDIES

THE EXTENT AND NATURE OF THE STRUCTURAL MISMATCH IN THE DOMESTIC LABOUR MARKET

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1. THE CONCEPT OF MISMATCH: SOME GENERAL ISSUES

The concept of mismatch has been normally used to describe a special type of imbalance in the labour market. It is an imbalance which is different from the conditions that arise either from the failure of the economy to grow at an adequate pace to generate the new capacity that can absorb the increase in the workforce, or from a rate of economic expansion greater than what can be sustained by the available labour force. The term "mismatch" on the other hand is applied to a situation in which both the employment opportunities as well as the labour supply are available. The job seekers, however, are either not willing to be absorbed into the available occupations or do not possess the aptitudes and skills required for them. The unemployed who reject the opportunities that exist are not interested in acquiring the skills that are needed. In the case of Sri Lanka it is a situation of this type that the term mismatch attempts to describe.

When the ILO Mission to Sri Lanka in 1971 addressed themselves to this problem, they distinguished between " the overall difference between the total supply and demand for labour (measurable for instance in man-hours) and a structural imbalance in which the types of work which people are willing and able to do, do not match the pattern of opportunities that are available".[1] They argued that while in no situation were employment opportunities readily matched with job expectations, the necessary adjustments took place regularly to correct these mismatches but that in the case of Sri Lanka the mismatches had become chronic. This chronic imbalance they attributed primarily to the educational structure of the labour force and the "formidable rate of educational expansion". Although at this point of their report it would seem that the Mission was critical of the educational expansion itself, elsewhere they made it clear that it was the quality and content of the education with which they were concerned. The basic assumption in this analysis of the mismatch is that the economy

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1/ International Labour Office, **'Matching Employment, Opportunities and Expectations'**, Geneva, 1971, p.21.

has the capacity to absorb the job seekers in employment opportunities other than those they were seeking.

The concept of mismatch includes several other elements which have to be taken into account in the analysis of what is described as structural unemployment. Mismatches do not always stand out distinctly as in the case of those between the opportunities available in the economy and the demands of the job seekers. Mismatches occur continuously and perhaps less conspicuously in any dynamic process of technological and structural change that requires adjustments, retraining and acquisition of new skills. These processes cause "mismatches" which may lead to displacement of labour and the redundancy of skills acquired over a long period. The mismatches can, therefore, originate not only from the supply end through the failure to produce a workforce with the required skills, aptitude and job orientation. They can also occur at the demand end where investments and choices of technology are made in disregard of the appropriate factor mix and the available workforce. In any attempt to identify and assess the mismatch, it is therefore necessary to take into account the factors that originate from both ends. There is not much information regarding the decisions at the enterprise level that are producing significant mismatches in the labour market, but it is possible to identify the type of decisions that can have these consequences. These decisions relate primarily to the choice of technology and the capital/ labour mix as well as policies for recruitment and manpower development. This paper however will be concerned mainly with the problems of supply and will confine itself to a few general observations regarding mismatches that can arise from investment and management decisions and policies.

There are also other implications in the term mismatch as it applies to the Sri Lankan context and these have to be considered in any analysis of the high levels of unemployment that prevail. The workforce must not be seen exclusively from the demand end as persons in the labour market seeking jobs. The workforce is not just a passive element in a situation in which employment is sought and jobs are given, in which investment takes place first and employment of the workforce follows. An educated and trained workforce will accelerate investment and growth by its very presence and its ready availability. But, more important the workforce must be capable of producing the entrepreneurs at every level of the economy. One significant component of the workforce should be seeking, identifying and creating income-earning opportunities and livelihoods. This becomes vital for an economy like Sri Lanka's in which the informal sector, self-employment and small-scale enterprise must make a major contribution to the growth of employment. It is possible to talk of a mismatch in this area if the prevailing system is not producing these entrepreneurial elements that the economy needs and can absorb. But these elements will not be produced through the formal educational system alone, although it would have an important role to perform. The total development strategy, the way in which the economy is managed, the socio-cultural environment and the values, aptitudes and skills it imparts, must all combine to promote this entrepreneurial capability in society.

Right at the outset, it has to be pointed out that the data relating to the labour market and the nature of the mismatch is very scanty. Even with relevant data it is not always easy to separate the "mismatch" from the total imbalance. The surveys on the workforce and unemployment that are available provide little information on either the expectations of the job seekers or the current manpower needs of enterprises and other employers that are not being met through the available supply. Reliable information in regard to both these aspects is necessary for determining whether a significant mismatch exists, estimating its magnitude and ascertaining the various factors that produce the mismatch in relation to both supply and demand. Sri Lanka does not have the type of labour exchange that might have provided this information readily. The analysis presented in this paper therefore relies on the data available in the censuses and other socio-economic surveys conducted by the Department of Census and Statistics and the Central Bank. Conclusions regarding the mismatch

have to be drawn by examining the characteristics of the workforce and the changes that have occurred over time. With the data constraints, it would not be feasible to make any definite quantitative estimates of the mismatch. What is possible is a critical assessment of the hypothesis of a "mismatch" and a qualitative assessment and analysis of the nature of any mismatches that can be identified.

The section that follows briefly surveys the recent trends in the occupational structure and sectoral composition of the workforce. It identifies the main characteristics of the newly employed workforce. The next section examines in detail the educational profile of the workforce, particularly the new entrants to the workforce in the age group 10 to 29 years and compares it with the pattern of school leaving. Through a comparison of the profiles of the school-leavers, the newly employed and the unemployed, an attempt is made to examine critically some of the basic assumptions underlying the hypothesis of a mismatch and thereafter determine the nature and extent of any mismatches that exist. The fourth section examines the characteristics of the unemployed in relation to the hypothesis. The final section identifies some of the more disadvantaged groups of job seekers in the general imbalance that exists between the growth of employment and the growth of the workforce. It summarises the main conclusions regarding the hypothesis, and outlines some approaches to the problems.

2. THE SECTORAL AND OCCUPATIONAL PROFILE OF EMPLOYMENT

2.1 Trends in the Sectoral Distribution of the Workforce

In order to ascertain the nature and extent of the mismatch, it is first necessary to examine the changes taking place in the size and structure of the workforce. These changes will indicate the sectors and the type of occupations in which employment opportunities are growing. The sectoral composition and occupational profile of the new employment being generated in the economy can then be compared with the educational levels, skills and other characteristics of the unemployed.

Three main sources provide comprehensive data on the workforce. These are the decennial Censuses, the Labour Force and Socio-Economic Surveys of the Department of Census and Statistics and the Consumer Finances Surveys of the Central Bank. The surveys that provide the latest data and can be used for ascertaining the recent changes and trends are the Labour Force and Socio Economic Surveys of 1980/81 and 1985/86. As these are specifically designed to elicit data relating to the workforce, they are more useful for the analysis in this paper than the other surveys. They also provide a comparative framework for ascertaining trends.

However, several qualifications have to be made regarding some of the aggregate estimates provided in these surveys. The 1980/81 survey overestimates the total population (at 15.3 million for 1980/81 compared to 14.9 million in the 1981 Census). This would be reflected in the estimates of the workforce, employed and unemployed. The figures for the workforce in the 1980/81 Labour Force Survey are much higher than those of the 1981 Census. The difference between the employed workforce of the Census and that of the Labour Force Survey is as high as 730,000. The definitions of employed and unemployed have evidently contributed to the low estimate in the Census. For example, casual workers who had worked for less than half the reference period of 30 days had not been included in the employed workforce. The agricultural workforce, according to the census data, had increased by only 34,000 during the entire period 1971- 81. The exclusion of a large category of casual workers in the agricultural sector would have obviously contributed to this underestimate.

Similarly, it has been observed that different reference periods and definitions of employment used for the identification of the employed workforce result in significant variations in the estimates.

There is also considerable variation in the workforce participation rates derived from the censuses and surveys. If adjustments are made for these differences on the basis of a fairly stable trend in labour force participation, then the estimates of employment and unemployment will change by margins which are not inconsiderable. All these qualifications have to be borne in mind when the data from these sources is used for the purpose of analysing trends and identifying such phenomena as the mismatch.

For the purpose of the analysis in this paper, it is the data from the 1971 Census and the Labour Force Surveys of 1980/81 and 1985/86 that are used. But they are used mainly in order to delineate the broad dimensions of the problems that are discussed and make a few relevant qualitative assessments rather than to derive definite quantitative estimates. Given below is a comparative tabulation of the data on the workforce for the years 1971 and 1981 from the Censuses and for 1981/82 and 1985/86 from the Labour Force Surveys. The analysis that follows ignores the 1981 Census for the reasons already discussed and examines the trends for the period 1971 to 1981 on the basis of the data from the 1971 Census and the 1980/81 Labour Force Survey.

Table 1

Employed population by major industrial divisions 1971-86

	Number (thousand)				Percentage			
	Census		Labour force survey		Census		Labour Force Survey	
	1971	1981	1980/1	1985/6	1971	1981	1980/1	1985/6
1. Agriculture, hunting, forestry and fishing	1829.0	1863.8	2293.3	2531.0	50.1	45.2	47.3	49.3
2. Mining and quarrying	13.1	38.6	63.4	66.7	0.3	0.9	1.3	1.3
3. Manufacturing	339.4	416.8	572.0	648.5	9.3	10.1	11.8	12.6
4. Construction	103.6	124.8	216.1	226.9	2.8	0.3	4.5	4.4
5. Electricity, gas and water	9.6	15.2	19.2	21.5	0.3	0.4	0.4	0.4
6. Transport, storage and communication	178.9	198.8	202.4	220.0	4.9	4.8	4.2	4.3
7. Wholesale and retail trade restaurants & hotels	343.8	433.3	485.8	513.9	9.4	10.5	10.0	10.0
8. Financing, insurances, real estate and business services& ownership of dwellings	24.9	45.5	52.6	65.1	0.7	1.1	1.1	1.3
9. Public administration and defence	492.8	596.7	644.6	631.4	13.5	14.5	13.3	12.3
10. Sercices(nse)	313.9	385.8	301.9	206.8	8.6	9.4	6.2	4.0
ALL	3649.0	4119.3	4851.3	5131.8	100	100	100	100

Source: Department of Census 1971, 1981
Labour Force and Socio-economic Surveys 1980/81 and 1985/86

The data for the 15-year period 1971 to 1986 indicate that no significant changes have occurred in the sectoral composition of the workforce. No doubt the manufacturing sector has recorded an increase in its share from 9.3% in 1971 to 12.6% in 1986. But this has occurred over a period of 15 years and reflects a very slow pace of structural change in the economy. Approximately half the workforce continues to be employed in the agricultural sector. The share of employment in services has declined from 37% in 1971 to approximately 32% in 1986. The construction workforce has increased from 2.8% of the total to 4.4% during this period, reflecting the fairly rapid growth in capital formation and investment that occurred after 1977.

However, before the analysis is taken further, these aggregates as well as the sectoral breakdown have to be placed in the context of the statistical uncertainties mentioned earlier. The sectoral classification of labour is subject to some variability. A part of the workforce, particularly unskilled labour, moves from sector to sector depending on the availability of work and seasonal factors. This will get reflected in surveys in varying manner depending on the reference period used and the number of rounds in the survey. The Labour Force Survey for 1980/81 was carried out in four consecutive rounds with a sample of 10,000 households while the 85/86 survey had 12 monthly rounds with a sample of 25,000. The comparative analysis of data in this paper is based on the report of the four rounds in the 80/81 survey and the preliminary report of six rounds in the 1985/86 survey. The differences in the number of rounds in each survey as well as in the size of the samples are likely to affect the comparability of the data. Changes in another category of workers 1/M those who are not classified sectorally or whose activities have not been adequately defined will also be reflected in the sectoral distribution. A reduction in this category as has happened between 1980/81 and 1985/86 will only signify a better identification of the activities and a fuller sectoral classification of the workforce. The resulting addition to the various sectors will not represent a real increase in employment in them. With all these uncertainties, minor changes in the sectoral distribution of the workforce cannot be used to draw reliable conclusions regarding structural changes in the economy.

2.2 The Sectoral Profile of New Employment.

These reservations need to be kept in mind when the analysis of the workforce data is taken further to ascertain the capacity of the different sectors to provide employment. Table 2 provides the data on the sectoral distribution of new employment.

Agriculture appears to create the largest number of new employment opportunities. During the period 1971 to 1981 its share of new employment was the highest at 38.6%. During the period 1981-86 its share increased to 84%. Manufacturing comes next, with 19% and 27% respectively for the two periods.

Table 2

Sectoral distribution of new employment

	1971 to 1980/81 ('000)	%	1980/81 to 1985/86 ('000)	%
1. Agriculture, hunting forestry and fishing	464.3	38.6	237.3	84.7
2. Mining and quarrying	50..3	4.2	3.3	1.9
3. Manufacturing	232..6	19.2	76.5	27.3
4. Construction	112.5	9.6	10.8	3.8
5. Electricity, gas and water	9.6	0.8	2.3	0.8
6. Transport, storage and communication	23.5	1.9	17.6	6.3
7. Wholesale and retail trade and restaurants	142	11.8	28.1	10.0
8. Financing, insurances, real estate, ownership of dwellings business services	27.7	2.3	12.5	4.4
9. Community, social and personal services	151.8	12.6	-13.2	-4.7
10. Activities not adequately defined	-12.0	-1.0	-95.1	-33.9
TOTAL	1202.3	100.0	280.1	100.0

Source: Department of Census 1971
Labour Force and Socio-economic surveys 1980/81, 1985/86

The main sources of employment creation for the two periods have been therefore the agricultural and manufacturing sectors. The sectoral distribution for 1985/86, however, has to be taken in combination with the large reduction of workers in the category not sectorally classified. The total

number in this category had declined from 301,000 in 1980/81 to 206,000 in 1985/86. This reduction represents workers who had been already employed in 80/81 and who would have been redistributed to the other sectors in the 85/86 survey. If these workers are redistributed proportionately to agriculture, manufacturing and trade, the contributions of these sectors to new employment would have to be reduced correspondingly. These adjusted shares would then probably be in the region of 60%, 20% and 6% respectively with marginal reductions in the shares of some of the other sectors such as transport, storage and communication.

Community, social and personal services, including public administration which had been a large provider of employment during the 1971 to 1980/81 period, declined in absolute numbers, with a negative contribution to new employment between 1981 and 1986. This substantial decline is not easy to explain. There had been a sizeable expansion of public administration and security services in the early 1980s which should be represented in this sector. For a net loss of employment to have occurred in this sector, there should have been a major contraction of other activities. In this sector, the major providers of employment 1/M other than public administration defence, education and health, which would not have suffered reductions during this period are activities such as recreational services, repair of motor vehicles, domestic service and miscellaneous personal services. The disaggregated data for these sub-sectors is not yet available from the 1985/86 survey. Some of the other service sectors also appear to have declined in their capacity to create new employment. Trade and catering, which contributed 11.8% to new employment during the period 1971-81, declined marginally to 10%. The rapid expansion of the construction workforce had tapered off after the large construction projects were completed. Two other sectors (6) transport, storage and communication and (8) financing, insurance and business services 1/M increased their share of the newly employed workforce.

The data on the sectoral distribution of the workforce leads to some interesting findings. The sectors that would normally absorb labour at low levels of productivity such as the service sectors have not grown faster than commodity producing sectors or sectors with high productivity such as financing, insurance and business services. They have not functioned therefore as 'labour absorbers', as they normally do in developing countries during periods of slow growth of the economy when the creation of real employment is slow. Even in agriculture, which traditionally could carry an increasing burden of work sharing and underemployment, per capita productivity has continued to increase. Per capita value added in agriculture at constant 1970 prices grew at 1.5%, from 1971 to 1981 and 1.7% from 1981 to 1985. This would suggest that the new rural workforce is not amenable to the mechanisms of work sharing and underemployment in family farms that often absorbs the major part of the "surplus" workforce in other developing countries. The combination of all these factors has led to an increase in the rate of growth of productivity of the total workforce. The annual increase in productivity during the period 1971-81 was in the region of 1.7%. For the period 1981-85 it had increased to 2.9%. Value added per worker rose from Rs 3,619 in 1971 to Rs 4,268 in 1981 and Rs 4,913 in 1985, in 1970 constant prices, on the basis of estimates of the employed workforce in the Census 1971 and Labour Force Surveys 1980/81 and 1985/86. These trends have to be borne in mind when analysing the problems of the mismatch in the Sri Lankan situation.

2.3 The Occupational Structure of the Workforce

What is more relevant and perhaps more reliable in terms of classification is the occupational distribution. Table 3 gives the comparative data for the employed workforce, based on the figures from the 1971 Census and the Labour Force Surveys.

Table 3

Employed population by major occupational groups 1971, 1981, 1986

	Census		Labour Force Survey			
	1971		1980/81		1985/86	
	Number ('000)	%	Number ('000)	%	Number ('000)	%
Professional, technical and related	178.5	4.9	269.2	5.5	272.8	5.3
Administration and managerial	13.9	0.4	25.4	0.5	26.3	0.5
Clerical and related workers	186.1	5.1	274.1	5.6	280.5	5.5
Sales jworkers	272.4	7.5	396.0	8.2	442.0	8.6
Service workers	198	5.4	265.4	5.5	241.5	4.7
Agricultural workers and fishermen	1782.1	48.8	2191.2	45.2	2438.3	47.5
Production, process and related workers	926.4	25.4	1415.4	24.2	1420.9	27.7
Workers not classified	91.5	2.5	14.0	0.3	9.2	0.2
TOTAL	3648.9	100.0	4850.7	100.0	5131.5	100.0

Source: Department of Census 1971, 1981
Labour Force and Socio-economic surveys 1980/81 and 1985/86

At the lower end of the occupational hierarchy, agricultural and production workers comprise over 70% of the workforce; their share has not diminished since 1970. At the upper end, the professional and managerial groups account for about 6% with marginal variations in the different surveys. The clerical and related workers account for another 5.5%.

This occupational classification however does not help us to identify clearly the social or economic hierarchy of occupations. This hierarchy in terms of income, status and responsibility is relevant for the analysis of the mismatch, as the imbalance between job expectations and the available jobs is related to the middle and higher levels in this gradation. Among the professional, technical and related workers there are a number of grades which cannot be classified as high level. Teachers for example, comprise three fourths of this category. In the occupational hierachy, however, the large majority of them, who would be teachers in primary and secondary schools, would be classified in the middlelevel. There are a considerable number in supervisory and foreman grades included among the other categories such as field and service workers and agricultural and production process workers. For example, according to the 1981 Census there were approximately 50,000 supervisors, foremen, farm managers and other middle grade employees in these categories. Another approximately 190,000 were working proprietors in the service and sales catagories. Among them there would be a small proportion of high-income earners and a substantial number earning incomes equivalent to those of the middle-level wage- earning occupations. According to the Central Bank's Consumer Finances Survey of 1981/82, the cultivation of paddy, vegetables, tea and coconut ranked above work in the service and sales worker categories in average monthly incomes. Average incomes from the cultivation of paddy and export crops ranked above the incomes of even some middle-level occupations. A small proportion of the workers in the production and process category would have occupations in the higher skilled grades, and in terms of income and occupational status rank with middle-level white collar employees.

In a very tentative estimate of middle-level occupations it is therefore possible to include the supervisory and foreman grades, about two thirds of the working proprietors, about 15% of the owner-cultivators, the school teachers who are included in the professional, technical and related

categories, the large majority of the clerical and related workers and approximately 15% of the production and process workers. On these very rough estimates the broad profile of middle-level occupations in the 1981 Census would be as follows:-

Supervisory and foremen grades	50,000
Teachers	150,000
Clerical and related workers	225,000
Working proprietors	120,000
Farmers and owner cultivators	150,000
Highly skilled employees in the production and process category	150,000
TOTAL	845,000

Source: Census 1981 - Population: All-Island Tables, Volume 2, Part 1, Sept. 1985, Table 19.

This group would amount to approximately 20% of the workforce in the 1981 Census. But, as mentioned earlier, the employed workforce was understated in that Census by excluding casual workers and other underemployed categories. If the total workforce including these categories is assumed to approximate to the workforce estimate in the Labour Force Survey 1980/81, then the proportion of middle-level employees would be in the region of 16.7%.

A broad classification of the occupational hierarchy would then have the following proportions:-

High level	5%
Middle level	17%
Low level	78%

This occupational profile bears some correspondence to the income profile of income receivers, as revealed in the Consumer Finances Surveys of 1978/79 and 1980/81. If we assume that the profile of new employment will not be very different from this profile of the total workforce, then according to the estimates of new employment derived from the Censuses and Labour Force Surveys, the number of new middle-level jobs that would be available annually would average approximately 17,000. These are, of course, based on the estimates of the employed workforce, which as stated earlier might be subject to revision. They represent the net addition to this category of middle-level jobs. With replacements for those withdrawing from the workforce the total may be in the region of 20,000. This segment of occupations and employment opportunities has special importance in the assessment of the mismatches in the labour market, as they are the preferred occupations of a significant proportion of those leaving school after the GCE 'O' Level.

2. 4 The Occupational Profile of New Employment

The new employment created in the different occupational categories during the period 1971-86 is given in Table 4. The period between 1971 and 1981 saw sizeable growth in all occupational categories. The occupational structure of new employment seems to have moved away from the structure of the existing workforce. Production and process workers form a larger proportion of the new workforce than agricultural workers. The professional and clerical categories also have higher shares in the new workforce than in the total. This trend, however, is sharply reversed in the 1980-86 period where agricultural workers account for 88% of the new workforce.

Table 4
New employment by major occupational groups

	1970 - 1980/81		1980/81 - 1985/6	
	('000)	%	('000)	%
Professional - technical and related workers	90.7	7.5	3.6	1.3
Administration and managerial	11.5	1.0	0.9	0.3
Clerical and related workers	88.0	7.3	6.4	2.3
Sales workers	123.6	10.3	46.0	16.4
Service workers	67.0	5.6	-23.9	-8.5
Agricultural workers and fishermen	409.2	34.0	247.0	88.0
Production process and related workers	489.0	40.6	5.4	1.9
Workers not classified	76.5	-6.4	-4.8	-1.7
TOTAL	1,202.5	100.0	280.6	100.0

Source: Department of Census 1971, 1981
Labour Force and Socio-economic Surveys 1980/81, 1985/86
Socio-economic surveys 1981/82, 1985/86

In an initial comparison of Table 2 and 4, the occupational pattern of new employment does not appear to be quite consistent with its sectoral distribution. Of course, the two sets of figures are not entirely comparable, as the workers in sectors such as transport communications and construction would be classified under various occupational categories, such as clerical and related workers and production and process workers. Even then, it is difficult to explain how agricultural workers in Table 4 had increased by 10,000 above the total in Table 2, as in their case the classification of workers in terms of sector and occupation should not show any significant difference. In order to explain the occupational classification in terms of sectors, almost all the workers whose activities are not adequately defined would have to be accounted against sectors other than agriculture. It is, however, difficult to reconcile this occupational pattern of new employment with the sectoral composition of GDP growth during this period. The value added in manufacturing, banking, insurance, wholesale and retail trade and public administration all expanded substantially during this period. Manufacturing grew at approximately 30% for the five-year period 1982 to 1986 (at 1982 constant prices), and wholesale and retail trade by 25%, while agriculture, forestry and fishing grew by 20%.

These apparent inconsistencies may throw doubt on the reliability of the data that is being used. However, if the occupational pattern of new employment revealed in the 1986 Labour Force Survey is accepted, there is cause for serious concern. For reasons which are not quite clear, employment has not grown in the very segments likely to be those into which new entrants may be willing to be absorbed.

2.5 The Employment Status of the Workforce

In dealing with the mismatch, another characteristic of the workforce deserves close attention. This is the employment status of the workforce. The status of the new employment created during the two periods 1971-81 and 1981-86 again reveal features which cause concern. The new employment created between 1971 and 1981 was marked by a substantial expansion of employees and 'own account' workers. There was a marginal decline in the number of employers. Apart from any statistical errors and discrepancies that may have occurred, the decline in this category might reflect the various social and economic measures taken in the early 1970s that had an adverse effect on proprietorship and

large-scale ownership of land. The proportion of unpaid family workers in the newly employed workforce is, however, significantly higher, at 20% than its proportion in the total workforce. The presence of a large proportion of unpaid family workers in the workforce would normally indicate a worsening employment situation where new entrants to the workforce cannot be absorbed in paid work and have to remain as unpaid family workers.

Table 5

Employment status of the employed workforce

	1971		1981		New Employment 1971-81		1986		New Employment 1981 - 86	
	Number ('000)	%	Number ('000)	%	Number ('000)	%	Number ('000)	%	Number ('000)	%
Employers	113	3.1	87	1.8	-26		123	2.4	36	10.4
Employees	2432	66.6	3059	63.0	627	51.0	2991	58.2	-68	
Own account Workers	914	25.0	1250	25.8	336	27.0	1332	26.0	82	23.5
Unpaid family worker	190	5.2	455	9.4	265	22.0	685	13.4	230	66.0
	3649	100.0	4851	100.0	1228 *	100.0	5131	100.0	348 *	100.0

Note: * Excluding the loss of jobs in the categories of employer and employee

Source: Department of Census 1971
Labour Force and Socio-economic Survey 1985/86

The problem becomes much worse during the 1981-86 period. There is an absolute decline in the number of jobs which had employee status 1/M by approximately 66,000. Own account workers again increased their share in total employment. The large majority of the new workers are in the category of unpaid family workers. Of the total new employment created during this period (i.e. 348,000, when the loss of jobs in the employee category is excluded), 10.3% had employer status, 23% had the status of own account workers and as much as 82% consisted of unpaid family workers. Here again some of the comments that were made regarding the occupational classification would be relevant to the 1986 data on employment status. A decline in the absolute number of those in the employee category is difficult to explain. One could speculate that despite the expansion of the employee category in such fields as security or manufacturing, the reduction of employment in various other sectors such as travel and tourism might have resulted in a considerable overall contraction.

The high proportions of own account workers and unpaid family workers raise a different set of issues. The economy has evidently been able to create employment opportunities in the informal and small-scale sector. Although in normal circumstances a rapid increase in the number of unpaid family workers might suggest that formal wage employment is not being generated at an adequate rate, there are other explanations which have to be examined. The increase in the category of own account workers probably reflects an increase in the number of family enterprises. These enterprises would normally seek to avoid regulatory supervision and for that purpose may declare that some of the family members engaged in them are unpaid family workers. In many of these enterprises the remuneration to family members would be of an informal nature and not regular wage payments. Therefore, definite conclusions regarding this category of workers cannot be drawn without further empirical Investigation.

3. THE EDUCATIONAL ATTAINMENTS OF THE WORKFORCE

3.1 Changes in the Educational Profile

The Table below compares the educational levels of the working age population with those of the workforce employed and unemployed for the period 1971 to 1986.

Table 6

Population (10 years and over) and employed and unemployed by educational levels

	Percentages								
	1971			1981			1986		
	Population over 10 years	Employed	Unemployed	Population over 10 years	Employed	Unemployed	Population over 10 years	Employed	Unemployed
No Schooling	23.0 [1/]	23.2	5.6	12.3	11.7	3.8	10.7	11.2	4.5
Primary	24.8 [2/]	39.2	9.5	36.1	37.7	16.9	28.0	28.4	14.4
	(31.0)		(11.8				(35.0)	(35.0)	(18.0)
Secondary	46.4	30.2	64.5	36.1	32.4	47.4	44.0	41.4	46.8
	(40.2)		(62.2)				(38.0)	(34.0)	(43.2)
GCE 'O' Level	4.4	4.8	17.7	12.6	14.2	25.7	12.7	14.2	24.0
GCE 'A' Level	1.0	1.8	2.0	2.3	2.7	5.6	2.6	3.0	8.6
Higher	0.4	0.8	0.7	0.6	1.3	0.6	0.9	1.8	0.6
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

1. The population under 'no schooling' includes those who had knot specified any educational qualifications: The population over 10 years of age classified as illiterate amounted to 21.5%.
2. The figures given for primary and secondary for 1971 and 1985 are for grade 1 - 4 and 5 - 9 respectively. If the figures for 1986 are adjusted on the 4 - year average, the proportion would change as indicated in the bracketed figures. However, the 1971 Census classifies the employed population according to the normal grading of 1 to 5 for the primary level.

As might be expected the system of mass free education up to university level has raised the educational levels of the total population as well as the workforce. There has been a progressive rise in the proportions of the workforce educated up to the secondary level and above, and a corresponding decline in the proportions of those educated only up to the primary level and those who have not been to school. The share of those educated upto the secondary or higher levels secondary has increased from 37% to 59% (or 53% after adjustment in the primary level) between 1971 and 1986 while the workforce with primary education or no schooling has dropped from 62% to 45% in the same period.

The rise in educational levels is higher for the workforce than for the population as a whole. This is mainly due to the fact that the labour force participation rate has risen progressively with the rise in the level of education. For example, though the share of the population educated up to the G.C.E. 'O' Level is 12.7% in the total, it is 14% in the workforce. Similarly, the corresponding figures for, those with the G.C.E. 'A' Level are 2.6% and 3%.

These changes in the educational levels of the workforce have taken place without matching changes in its occupational structure. The proportion of agricultural workers in the workforce, which was 48.8% in 1971, remained at 47.5% in 1986. The changes in other segments of the workforce have been marginal. Although it is not possible to draw any firm conclusions regarding the nature of the

occupational structure relative to the educational levels of a given workforce, there are certain distinct features in the Sri Lankan situation which have some relevance in the analysis of the "mismatch". First, among low-income developing countries with per capita incomes below US $400, Sri Lanka has an enrolment in secondary education that is nearly double the average for this group of countries. With 64% of the population in the relevant age group enrolled in secondary schools, Sri Lanka is at a considerably higher level than the average for the lower middle-income countries as well. Countries that compare with Sri Lanka in the lower middle-income category are the Philippines and Peru which have much higher per capita incomes.

Table 7

Per capita income and school enrolment for selected countries, 1984

	Per capita income (US $) 1984	Primary- percentage of age group	Secondary- percentage of age group	Higher - percentage of age group
Low Income country average	260	97	32	4
Bangladesh	130	62	19	5
India	260	90	34	9
Nepal	160	77	23	5
Burma	---	102	24	5
Ghana	239	67	36	2
Sri Lanka	360	103	61	4
Lower middle-income average	740	101	40	12
Philippines	660	114	63	26
Thailand	860	99	29	22
Peru	1000	116	61	22
Costa Rica	1190	102	44	26

Source: World Bank, 'World Development Report 1987'

Sri Lanka had maintained comparatively high rates of participation in both primary and secondary education from the 1950s, with the result that by the end of the 1970s the workforce had undergone a very significant transformation in terms of educational attainment. The countries that have a workforce with similar levels of formal education such as the Philippines or Peru have structures of production in which manufacturing has a larger share in the GDP than in Sri Lanka 1/M 26% in the Philippines and 25% in Peru, compared with 14% in Sri Lanka. The data points to the conclusion that the slow structural changes in the economy and the relatively static occupational structure is related to the mismatches and high levels of unemployment in Sri Lanka. However, as stated earlier, mismatch signifies that the educational levels and expectations that prevail do not match the jobs that are available. The imbalance in the Sri Lankan situation is not a mismatch in this sense of the term. It is not a situation in which the educated workforce is unwilling to take the jobs that are available . The total supply of jobs is itself insufficient to satisfy the demand at all educational levels. The imbalance has therefore arisen mainly as a result of a rate of economic growth and structural change that did not keep pace with the increases in the workforce as well as its rising educational attainments. The pattern of this imbalance at different educational levels has however changed over time, with the imbalance in some segments being more pronounced than in others. This again is largely due to the general educational advancement of the total labour force.

3.2 The Educational Attainments of the Newly Employed Workforce

These features of the imbalance, which have relevance for the discussion of the mismatch, could be examined further by analysing the educational attainments of the new entrants to the workforce, the rates of labour force participation at different educational levels and the rates of unemployment at these levels.

Table 8 provides the relevant data for the workforce in the age group between 10 and 29 years. The large majority of the workers and job seekers in this age group have entered the workforce during the last ten years after leaving the formal educational system at different levels. This age group in would therefore best represent the educational attainments of the new entrants and throw light on the nature of the imbalance in the labour market and its linkage with the educational system.

It would be seen that the educational levels of this component of the population are significantly higher than those of the total population. The population with schooling between the 5th and 7th grades is 27.3% in the younger segment compared to 25.4% in the total population of working age (1985/86). Those with education upto grades 8 or 9 account for 24% in the younger age group compared to 19.4% for the population of working age.

What is more significant is the labour force participation rates for the population at various educational levels. As might be expected, the participation rate increases progressively from 33% for the population with educational levels below the 7th grade, to 42% for those educated to grade 8 or 9 and 48% for those with GCE 'O'Level qualifications. Thereafter there is a steep rise to 70% at 'A'Level and 90% for those with university degrees. The only exception is the population with no schooling where the participation rate is as high as 54%. There are several factors that contribute to the high participation rate of those without schooling, the most important being the large share of the population with no schooling in the estate sector, combined with the unusually high rate of participation by females in that sector.

The most important change that has taken place as a result of the rise in educational levels is the rapid increase in the participation rate of females, which rises as education levels rise. For example, for the age group 20-24, the participation rate for the female workforce with primary level schooling is 45%, compared to 90% for males; at the GCE 'O'Level, there is a distinct upsurge, the female participation rate rising to 55%, compared to 76% for males. The difference between male and female participation rates at the 'A'Level is only marginal.

While the longer period spent in the learning system has moderated the work participation in the young age group this has been more than off-set by the increased entry of females into the workforce. Mass free education has evidently had a major impact on the workforce participation of females. Given the socio- cultural environment and family structure, adult males, whether educated or not, would have a high rate of participation in the workforce. In the case of females, the access to formal education has obviously been a strong inducement for entering the labour market in search of paid work. In all probability this would have been reinforced by the rapid expansion of certain categories of occupations in the 1950s and 1960s, particularly the service occupations in the school system and health services, which offer state employment to women in teaching, nursing, midwifery and a host of other similar jobs.

Table 8

Educational level of the workforce 10 - 29 years, 1985

Educational Level	Total population		Employed	
	10-29 yrs (000's)	%	10-29 yrs (000's)	%
1. No schooling	367	6.00	177.70	9.2
2. Grades 1 - 4	1647	26.00	490.6	25.4
3. Grades 5 - 7	1708	27.00	456.1	23.6
4. Grades 8 - 9	1500	24.00	436.8	22.6
5. G.C.E. 'O' Level	900	14.00	273.9	14.1
6. G.C.E. 'A' Level	208	3.00	80.9	4.1
7. Degree	18	0.30	12.9	0.7

Educational Level	Unemployed		Workforce	Labour orce Participa-tion rate	Rate of un-employment	Unemployed
	10-29 yrs (000's)	%	10-29 yrs (000's)	%	%	>30 yrs (000's)
1. No schooling	24.1	3.70	201.8	54.0	12.0	13.2
2. rades 1 - 4	79.7	12.20	570.3	34.0	14.0	41.3
3. Grades 5 - 7	112.0	17.20	568.0	33.0	19.7	41.5
4. Grades 8.9	201.3	31.00	637.00	42.0	31.5	38.1
5. G.C.C. 'O' Level	164.2	25.20	437.0	48.0	37.5	45.0
6. G.C.E. 'A' Level	64.0	9.80	144.9	70.0	44.1	9.0
7. Degree	3.9	.60	16.8	90.8	23.2	1.5

In the case of males, the higher levels of formal education would have produced different changes in such processes as work- sharing and underemployment. In a different situation where the majority of males did not go far beyond the primary level, the workforce would have been easily absorbed in the family farms and other traditional activities. Underemployment would have subsumed the problems of unemployment that would normally follow the increase of the workforce which outpaced the increase in man- years of new employment. In the Sri Lankan case, a young workforce reaching the secondary level of education has moved into the labour market in search of occupations outside the family and the situations of underemployment.

Therefore, the processes that have been at work in Sri Lanka appear to have produced open unemployment in a manner more pronounced than in many other South Asian countries with lower levels of education and lower rates of female participation in the workforce. Education appears to have introduced an element of dynamism to the traditional workforce with results which are both negative, in that it increased unemployment, as well as positive in its potential for increases in productivity and structural change. In other words it might be possible to advance the hypothesis that with less education the female population may not have entered the workforce in such large numbers and male unemployment might have been mitigated through underemployment. Education on the other hand resulted in a sharper articulation of unemployment in the context of inadequate economic growth. As mentioned earlier, the employed workforce sustained an increase in productivity while unemployment grew or continued at high levels. These imbalances might have been otherwise disguised at a low-level equilibruim through underemployment and lower participation rates. The imbalances will tend to push the economy towards higher rates of growth and a higher "equilibrium".

In the 10 to 29 year workforce approximately 14% comprise workers with 'O'Level qualifications. This is not very different from the proportions in the total workforce in 1986. The pattern becomes somewhat different if we examine the increment to the workforce betweeen 1971 and 1986.

Table 9

Educational levels of the increment to the employed workforce 1971-86

	(000's)		
	1971	**1986**	**Increment**
No Schooling	839	575	- 264
Primary	1430	1455	+ 25
Secondary	1109	2124	+ 015
G.C.E. 'O' Level	175	730	+ 555
G.C.E. 'A' Level	69	155	+ 86
Degree and above	29	89	+ 60

About 31% of the increment to the workforce consisted of workers with 'O'Level qualification and another 58% those with secondary level qualifications. Although the net increment to the workforce was in the region of 1.47 million workers, the number of new entrants reflected in the table is 1,740,000. The net increment to the workforce will normally not represent the number of new entrants as some of them will take the place of those who retire. The tabulated data has captured a part of these replacements as the educational classification brings out the net loss of jobs in the no-schooling category[2].

One conclusion that emerges from this data is that persons with 'O'Level qualifications have been ready to move into all sectors of the economy. The 1981 Census gives a detailed classification of occupations for the different educational levels of the 672,000 workers enumerated as having passed the G.C.E. 'O'Level with six subjects; 205,000 were in the agricultural sector as farmers and workers and 266,000 were in the production and transport sector and were distributed among a large number of categories, both skilled and unskilled. A sample of the occupations of 'O'level workers in the 1981 Census is given below.

Clerical and related workers: 55,000.00
Working proprietors, wholesale andretail trade . . . 47,000.00
Cooks waiters and related workers 8,000.00
Cultivators and farmers 144,000.00
Agricultural and animal husbandary workers 47,000.00
Tailors, dressmakers : 15,000.00
Machinery fitters and related workers 18,000.00

2/ We can compare these figures with the newly employed workforce in the 20 to 35 year age group of the 1985/86 Labour Force Survey; this will include the large majority of workers who are new entrants to the workforce during 1971-86 after completing their secondary education. The workers qualified at the 'O' and 'A' Levels in this age group amount to 473,000 as against 641,000 in Table 9. This discrepency could be due to several reasons including errors in the educational classification, workers in the 1971 workforce who had lower educational qualifactions obtaining higher qualifications and falling into older age groups, and inaccuracies in the responses given.

Construction workers	28,000.00
Transport equipment workers	32,000.00
Labourers not elsewhere classified	98,000.00

Source: Census 1981; All-Island Tables, Vol 2, Part I, Table 26, Sept 1985.

The structural mismatch explanation of unemployment has normally assumed that those who have reached the higher secondary level, particularly those with 'O'Level qualifications, are selective about the employment they will accept and that the occupations they prefer are largely in segments which cannot expand at an adequate pace: the supervisory, clerical and related middle-level grades. It is believed that G.C.E 'O'Level job-seekers will not accept lower occupations. This is certainly not true of a large proportion of those with 'O'level qualifications who have found employment during the last 10 to 15 years. Therefore many of the popular assumptions regarding the nature and magnitude of the mismatch are not tenable.

3.3 The School-leavers and their Entry to the Workforce

The pattern of entry to the workforce at different educational levels is regulated by the movement of the school cohorts and their drop-out within the educational system. The school leavers are the source of supply of the new entrants to the workforce. It would therefore be useful to compare

Table 10

Distribution of school leavers in an annual cohort, by educational level

	School cohort	Percentage of cohort	Percentage of population aged 5 in 1975
1. Total population at age 5 (1975)	335,000		
2. New entrants in 1975			
to government schools	290,000		
to other schools	13,000		
	303,000		
3. No schooling	32,000		9.6
4. No. from 1975 cohort in grade VI [in 1980]	239,000		
5. No. leaving from cohort in primary level [between 1975 and 1980]	64,000	21.3	19.1
6. No. from cohort in grade IX [in 1983]	189,000		
7. No. leaving in grades VI - VIII	50,000	16.5	14.9
8. No. from cohort in grade X [in 1984]	168,000		
9. No. leaving grade IX	21,000	6.9	6.2
10. No. qualifying to sit 'A' Level	85,000		
11. No. leaving formal studies after sitting GCE'O' Level	83,000	27.2	24.7
12. No. with minimum marks required for admission to university	28,000		
13. No. leaving after sitting A'Level	80,000	26.4	23.2
14. No. admitted to universities	5,000	1.7	1.5

Source: Ministry of Education, School Census 1975, 1980, 1983, 1984, 1987

the information available at the school end with the data on the newly employed workforce obtained from the surveys. What is available from the school end is likely to reflect the educational levels of the young age group more reliably as it is drawn from school censuses of the total student population, and might be less subject to errors and bias than the survey data based on samples and responses from interviewees. Table 10 above shows this movement for an average cohort of new entrants.

The estimates have been prepared on the basis of the cohort of new entrants in 1975 and the school census data for the school population in different grades and the proportions dropping out of school for the period 1975 to 1987. These estimates represent a cohort which entered in 1975 and has moved through the school system in the last 12 years. But the outflow at different educational levels from this cohort will broadly resemble the annual outflow at these levels during the recent past, with marginal adjustments for the increase in the size of cohorts and rising rates of retention in the system. New admissions to the government schools have increased from about 300,000 in the mid- fifties to about 370,000 in 1985. It is possible to construct a more accurate estimate of the flow of successive cohorts through the system; but for the purpose of the analysis in this paper, the broad proportions and magnitudes are sufficient.

Initially it has to be pointed out that the numbers leaving school at different grades cannot be easily related to a particular cohort of new entrants and the way in which this cohort gets reduced as it proceeds from grade 1 to grade 10. The school population in each grade will contain a significant proportion of repeaters; the school censuses indicate that this proportion ranges from about 10% in the first 5 grades to about 5% in grades 7 to 9. Consequently, the progressive reduction of the cohort as it moves up in the school system has to be estimated after making allowance for a reasonable proportion of repeaters from that cohort.

The problem, however, becomes much more complex after the cohort reaches the G.C.E. 'O'Level. The rate of repetition is about 8% in the school system as a whole but rises to as much as 40% for those who study for the G.C.E. 'O'Level and repeat the examination. The numbers who are considered as having passed the fall into different categories - those who have qualified for entry into the G.C.E.'A'Level, and those who have obtained six passes but failed to qualify for the 'A'Level. According to the data available the numbers sitting the G.C.E.'O'Level in the last four years have averaged approximately 430,000. These include both those who sit the examination from within the school system approximately 280,000 as well as private candidates. Of this number, students sitting for the first time would be in the region of 160,000.

These figures indicate that a proportion of students who continue in the school system up to grade 10 remains as students attempting to pass the G.C.E.'O'Level for a period which extends well beyond the normal span of schooling. If we assume that there are approximately 160,000 students who sit the 'O'Level for the first time, it would appear that roughly another 270,000 others will continue to sit the examination in progressively smaller numbers over a period of about five years, with several objectives in mind. These include obtaining full passes in the 'O'Level, qualifying to sit the 'A'Level examination, and obtaining passes in selected subjects. At each of these attempts a small proportion will be successful in achieving one of the two objectives of obtaining full passes or qualifying for the 'A'Level. Those who qualify for the 'A'Level will proceed further in the educational system. Some of the others will enter the workforce while some continue to sit the 'O'Level examination until they decide to enter the workforce after having failed to qualify for the 'A'Level. A small proportion of them, however, will enter other parts of the tertiary system such as post- secondary training programmes.

An attempt has been made to indicate the manner in which this age group continues in the learning system or leaves it to enter the workforce, on the basis of estimates constructed form the data that is available. According to the information provided by the Ministry of Education, an average of approximately 55,000 school candidates sitting the G.C.E. 'O'Level have been successful in qualifying for admission to the G.C.E. 'A'Level in the years 1985 and 1986. But apart from the school candidates, private candidates sitting from outside the school system obtain the qualifications to sit the 'A'Level. If we assume that another 5% of the cohort reaching the 'O'Level privately qualify in this manner, it would appear that eventually about 40% of the students who sit the 'O'Level examination for the first time succeed through one or more further sittings to obtain sufficient credits to satisfy the requirements to sit the 'A'Level examination. In addition, there are those who have obtained six passes but have not acquired the credits necessary to become eligible for the 'A'Level examination.

The average annual number gaining admission to the universities in the recent past has been in the region of 5,000, while those who obtain the minimum marks that qualify them for admission have been in the region of 25,000. Eventually, therefore, it would seem that of the 160,000 students in the original cohort of new entrants who reach the 'O'Level, approximately 105,000 leave the school system after sitting the 'O'Level examination during the next 2 years. A proportion of them re-sit the 'O'Level examination as external candidates and succeed in qualifying for the 'A'Level examination. Of all those who sit the A'Level annually about 5,000 enter the university system at their first, second or third attempt.

This reconstruction of the movement of an average cohort through the school system brings into focus several unsatisfactory features which have implications for the workforce:

- It would seem that as much as 21% of the students entering the school school system leave at the primary level. Most of these school-leavers who enter the workforce would work with their parents or relatives on a family farm or other family enterprise and acquire skills in this informal manner.From the information available only a small proportion of the females outside the estate sector who leave school at the primary level participate in the workforce. The rest evidently get absorbed in household activities.

- Approximately 23% leave school between the ages of 12 and 18 before reaching Grade 10. They too move out of the school system without any form of certification that would assist them in the labour market. Neither are the school curricula so organised as to provide them with an integrated body of knowledge that could be readily applied outside the school system in income-earning opportunities and occupations. The present school system is organised for the first stage of certification at the 'O'Level. The curricula are therefore structured to reach some level of integration as a body of knowledge only at the end of the 'O'Level. Even at this level a great deal of the learning is done as a preparation for further learning to enter the tertiary system.

- In the case of those who reach the 'O'Level stage, it would appear that a large number fail to obtain the standard required to sit the 'A'Level. This appears to be as high as 55% to 60% of the examinees at the 'O'Level. Such a large proportion of 'failures' poses serious problems, when the curriculum itself is deficient in terms of 'integration' and relevance for the world of work.

- Immediately after the G.C.E. 'O'Level there is a 'telescoping' of several one-year cohorts of students who are engaged in the attempt to acquire the G.C.E.'O' and 'A'Level qualifications. The sojourn at the 'O'Level appears to extend up to 5years and the average annual

number sitting the G.C.E.'O'Level examination has now increased to 470,000. This will soon be reaching 500,000. This cohort of youth between the ages of about 17 and 22 constitutes approximately one third of the total population of this age group. The protracted struggle to acquire qualifications and the high rate of wastage are obviously generating frustration and social tension among young people who are at a stage of life where the transition from adolescence to adulthood has its own severe inner stresses.

- At the next stage of education and entry to the workforce similar stresses are at work. From a given cohort, approximately one fourth of those who sit the 'O'Level examination attempt to enter the tertiary system. The numbers entering university amount only to 10% of this group. The present educational pyramid is therefore extremely narrow at the apex. After having provided open access at the primary and secondary levels leading to a participation of about 60% of the relevant school-going population at the secondary level, the system becomes severely restricted. This restriction is reflected in the unusual situation where about half of the persons sitting the 'A'Level qualify to enter university but only 20% of that group find places in the university system. This means that less than 2% of the original cohort which entered the school system gain admission to universities. Table 7 presented the data for pupil enrolment in the primary, secondary and tertiary stages for a number of developing countries. In most countries where secondary level participation is at about the same rate as in Sri Lanka, the rate of participation at tertiary level is in the region of 20 - 25% of the relevant age group, in contrast to 4% in Sri Lanka. In terms of the flow of students through the system, and the internal balance between the different levels, Sri Lanka appears to have an unusual structure. It is evidently producing an examination system and a competitive process that are wasteful and excessively restricted.

4. THE PROFILE OF UNEMPLOYMENT AND THE HYPOTHESIS OF MISMATCH

The hypothesis that the unemployment that prevails or a considerable part of it, is the product of structural mismatch ought to be manifested in the characteristics of the newly employed and the unemployed.

4.1 The Age, Gender and Educational Levels

The analysis of the newly employed in the preceding section highlighted several features relevant to this hypothesis. First, the educational level of the population as a whole had been rising steadily, resulting in a general improvement of the educational levels of the entire workforce in all sectors and occupations. As might be expected this trend is most pronounced in the younger age group which comprises the relatively recent recruits to the workforce. Second, the changes have had a dramatic impact on the rates of participation of the female population, particularly the educated age group between 20 and 30. Significant increases in the rates of female participation are recorded in these age groups, the largest increases occurring during the period 1980 to 1986. Meanwhile the female share in the employed workforce has increased from 22% in 1971 to 25% in 1981 and to 30% in 1986.

Female employment grew by approximately 91% during the period 1971 to 1985, that is, at approximately 4.7% per annum. This compares with the growth of male employment, which increased by 26% for the entire 14-year period or at an annual rate of 1.6%. However, during the 15 years the total female workforce has grown by approximately 4.9% a year compared with the annual rate of nearly 1.7% for the total male workforce. The growth rates of employment by themselves were moderate for the males. They might be regarded as high for the females. But the growth rates of the

total female workforce were even higher. Consequently, unemployment accumulated at a much higher rate in the female workforce (2.6% annually for males and 5.3% for females), producing a backlog of unemployed which was almost equal in size to that of the males 407,000 for females compared to 431,000 for males. The rates of unemployment were much higher for the females.

Table 11

Growth of employment and unemployment - male & female, 1971-1985

	Male			Female		
	1971	1985	Growth (%)	1971	1985	Growth (%)
Workforce	3141	4014	1.7	1007	1957	4.9
Employed	2838	3581	1.6	810	1550	4.7
Unemployed	303	433	2.6	197	407	5.3

Source: Dept of Census & Statistics: Census 1971, Labour Force and Socio Economic Survey 1985/86

The characteristics of the unemployed workforce can now be examined in some detail against this backlog. The three major periodical surveys that have been carried out, the Censuses, the Consumer Finances Surveys and the Labour Force Surveys, give different estimates of unemployment[3]. These have been derived from the enumeration done in these surveys. This paper does not intend to discuss the comparative reliability of these estimates. The aggregate data in the Labour Force Survey of 1985, 86, on a first assessment, appear to be understatements, when 1 matched against projections of the total workforce based on the census estimates of population and age-specific activity rates for the different age cohorts as they move into the labour force. However these projections, based as they are on the census data for 1971 and 1981, need to make due allowance for the fact that the growth of the workforce would have been affected by the substantial outmigration that took place during the seventies and eighties. The net migrant outflow is in the region of 750,000 for the period 1971 to 1986. The outmigration included the repatriation of Indian estate labour, the migration to the Middle East and other outflows, particularly that caused by the ethnic conflict. Each of these outflows would have contained significant proportions of those who were already in the workforce or would have entered it soon. When all these factors are taken into account, it is likely that the aggregate figures for both the total workforce as well as the unemployed would not be much higher than the estimate in the 85/86 survey.

This paper uses the data for the unemployed given in the 1985/86 survey. There were 840,000 unemployed in 1985/86, 433,000 of whom were males and 407,000 females. Table 12 below compares the distribution of the unemployed according to age, sex and educational attainment in the Labour Force Surveys of 1980/81 and 1985/86.

The profile of the unemployed as revealed in the table has the following features:

- The large majority of the unemployed, approximately 80%, are concentrated in the age group 15 to 29. Almost all of them are new entrants to the workforce with waiting periods of 1 to

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3/ For example, the Consumer Finances Survey 1981/82 is based on a sample in which the employed population in the estate sector amounts to 11.1% of the total employed workforce in the sample. In the 1985/86 Labour Force Survey the proportion is in the region of 8.5%. As a result there are significant variations in the rates of participation, unemployment, etc., derived from the two samples.

9 years. In the Census of 1981 the unemployed who had been seeking work for over 3 years amounted to nearly half the total approximately 48%. In the 80/81 Labour Force Survey the proportion of those who had been unemployed for over 3 years is less, amounting to 35%. The age of the unemployed and the duration of unemployment are consistent with the assumption that these are new entrants who had not found employment after they entered the workforce.

- The female unemployed are greater in number and proportion than unemployed males in the age group 20 to 29years 244,000, or 60% as against 207,000 or 48%.

- One third of the unemployed have the G.C.E. 'O'Level or higher qualifications 32% in 1980/81 and 33% in 1985/86.

- The female unemployed have, on average, higher educational attainments than the males. Approximately 30% of them have passed the G.C.E. 'O'Level, 12% the 'A'Level and 0.8% the degree, compared with approximately 19%, 5% and 0.4% respectively for the males.

- The rate of unemployment for females is double that for males, 20.8% compared to 10.8%.

- The largest proportion of the unemployed is in the age group 20 to 24. In terms of the educational level, theunemployed who have left school in grades 8 and 9 a count for the largest proportion, 28%, while those who have left after the GCE 'O'Level account for 24%. These proportions, however, need to be examined together with the rates of unemployment for each of these groups, as will be discussed later.

As mentioned earlier, there are no surveys bringing together data on the demand for manpower by firms and employers and the expectations of job seekers in a manner that throws light on any mismatches that may have contributed to the high level of unemployment. In the absence of such data other indirect methods would have to be used. The structural mismatch would be revealed in several ways.

First, the output of the educational and training system will be significantly different from the educational level and training of those who are absorbed into the employed workforce. Section III examined relevant data and argued that the educational levels of the newly employed workforce have been steadily rising, reflecting the rising levels of the new entrants to the workforce.

Second, the distribution of the unemployed by educational level, gender and age group could also reveal mismatches in which the incidence of unemployment will be higher in certain identifiable groups of new entrants to the workforce. The duration of unemployment would be significantly longer in some segments than others. In regard to age, the peak period of unemployment is, as noted earlier, in the age group 20 to 24. This is probably because the largest number of new entrants come into the workforce during this period after secondary school education and repeated failure to move further in the educational system. The age-wise distribution by itself therefore would have no significant implication for mismatch.

Table 12
Unemployed by age and sex and educational level (percentage distribution)

Age	Labour Force Survey 1980/81			Labour Force Survey 1985/86		
	Total	Male	Female	Total	Male	Female
10 - 14	1.8	1.8	1.7	1.2	1.7	0.5
15 -19	26.2	28.9	22.4	22.2	25.6	18.6
20 - 24)	59.7	56.8	63.8	36.6	34.5	38.9
25 - 29)				17.4	13.9	21.2
30 - 34)	9.5	8.4	11.1	9.2	7.9	10.4
35 - 39)				4.5	4.8	4.3
40 - 44				3.3	4.2	2.4
above 45	2.8	4.1	1.0	5.6	7.4	3.7
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0
Educational Level						
No schooling	3.8	4.5	2.9	4.5	4.9	4.0
Grades 1 - 4	19.9	21.5	10.4	14.4	17.9	10.9
Grades 5 - 7)	47.4	50.7	42.7	18.3	23.0	13.4
Grades 8 - 9)				28.5	29.3	27.6
GCE 'O' Level	25.7	19.5	34.5	24.0	19.6	30.5
GCE 'A'Level	5.6	3.4	8.6	8.6	4.9	12.8
Degree and above	0.6	0.4	0.9	0.6	0.4	0.8
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0

Note: The educational classification for the 1980/81 survey is different from that of the 1985/86 Survey; the levels are classified in to grades 1 - 5 (Primary) and grade 6 - 10 (Secondary) in the 80/81 Survey

Source: Labour Force and Socio-Economic Survey 1980/81, 1985/86

The education-wise distribution of the unemployed has been the main premise on which the hypothesis of a mismatch has been based. When the data on the educational levels of the newly employed workforce in the ages 15 to 24 is compared with for the unemployed, it becomes clear that the unemployed are increasing at a higher rate among the new entrants with secondary schooling beyond the 8th grade, Approximately 60% of the unemployed are in the category with educational attainments beyond grade 8. If we examine the pattern of school-leaving, we observe that the proportion of school-leavers with educational attainments above grade 8 is also in the region of 60%. In other words the new entrants are coming into the workforce in increasing numbers from among those who have gone beyond grade 8. In a situation of slow employment growth and general unemployment it is therefore not unusual to find that the larger proportion of the unemployed are among those who have moved beyond grade 8.

On the other hand, it might be argued that if the new entrants were willing to accept any employment that was available regardless of their educational qualifications, then the new employment would have also been distributed in proportions that were comparable to the proportions in the different educational categories. When we examine the employed workforce in the 20 to 29 year age group we observe that approximately 52 % of the employment created for this age group benefited those in the educational category above grade 8. This is not significantly different from the educational levels of those who are moving out of their student status and becoming the sources of supply for the new workforce. It has to be noted, however, that there are two features in this situation that can aggravate unemployment for the school-leavers beyond grade 8. Those with lower educational

attainments would move earlier into low-level manual occupations. Those with higher attainments are likely to seek employment at higher income levels, with some proportion of them turning to low-income occupations only when they realise that for them there is little prospect of high-income employment. Second, the rate of participation of the school-leavers at higher educational levels is likely to be greater. This has been clearly demonstrated in the case of females. The rates of unemployment among those with higher educational attainments will therefore be pushed upwards as a result. Both these processes will combine to produce a higher rate of unemployment among new entrants who have qualifications above grade 8 and those who have proceeded beyond grade 10. These differences in rates of unemployment, however, do not support the hyppothesis of a mismatch, which is based on the assumption that those with higher educational attainments do not move into occupations that are available, mainly on account of their education and the higher job expectations that this has generated.

Within the framework of general unemployment in which the rates of unemployment are inordinately high, the problems become increasingly acute as we move from the primary grade to the higher levels. There is a situation in which education, through higher rates of participation, is raising the levels of unemployment. It is possible that with lower levels of education there would have been lower levels of participation in the female workforce which could have reduced unemployment levels by some proportion. As mentioned earlier, lower levels of education would also have meant the absorption of the workforce at a lower level of productivity, with greater work sharing and higher under- employment. Even so, with slow economic growth there would have been a large unemployed workforce with lower educational attainments. The differential rates of unemployment therefore do not support the contention that there is a mismatch in the labour market in the conventional sense.

4 .2 The Duration of Unemployment and Job Expectations of the Unemployed.

This is also borne out in the period of search for employment among the different categories according to educational levels. The table below provides information on a sample surveyed in the Central Bank's Consumer Finances Survey of 1981/82.

Table 13

Sampled unemployed population by number of months unemployed and education level

Number of months unemployed	All island total	No. schooling illiterate	No schooling literate	Primary	Secondary	G.C.E. (O/L)	G.C.E. (A/L)	Undergraduate
01 - 03	8.1	14.3	0	11.4	6.9	7.7	6.8	28.6
04 - 06	8.4	7.1	0	8.0	8.6	8.2	8.2	28.6
07 - 12	25.5	26.2	50	26.6	26.8	22.1	30.6	14.3
13 - 24	28.0	35.7	0	28.3	29.1	27.1	25.8	14.3
25 - 48	18.5	119	0	14.7	19.3	20.6	17.0	0.0
Above 48	11.5	4.8	50	11.0	9.3	14.0	11.6	14.3
TOTAL	100.0	100.0	100	100.0	100.0	100.0	100.0	100.0

Source: Central Bank, Socio Economic and Consumer financial Survey 1981/82, Table 4.37, p.161

In this table there are no significant differences for the periods spent looking for employment of search at the various educational levels. Even among the illiterate unemployed the proportion who have experienced waiting periods over a year is not significantly different from those of the other categories. The highest proportion is among G.C.E. (O.L) unemployed, with 27% waiting of 1 to 2 years, 20% between 2 and 4 years and 14% above 4 years. The corresponding proportions for the secondary level are higher for the 1 to 2 year period but marginally lower for the 2 to 4 year period

and appreciably lower for those waiting for employment above 4 years. The proportions for the 'A'Level category are marginally lower than those for the 'O'Level for all three waiting periods. In the data in the 1981 Census, the pattern regarding the period of search for work is somewhat different for all categories, with longer average periods of search. The G.C.E.'O'Level category fares worst when the proportions having to wait 5 years and more are compared. There are no significant differences for unemployed with educational attainments at grade 8 and beyond for waiting periods between 3 to 4 years, 2 years and 1 year. Even the unemployed with no schooling and those with primary grade education have significant proportions who have to wait beyond 3 years for employment. This analysis of the waiting period of the unemployed at different educational levels does not reveal variations to the extent that would justify the inference that there is a noteworthy mismatch for any specific educational category.

Table 14

Unemployed population (actively seeking work) by educational attainment 1981

Educational Attainment	Sex	Total		Period of Search for Work: < 1 year		1 - 2 yrs		3 - 4 yrs		5 - 8 yrs		> 9 yrs	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
All Attainments	T	659,179	100	56,055	8.50	174,633	26.49	203,529	30.88	149,172	22.63	75,790	11.50
	M	327,822	100	32,065	9.78	91,013	27.76	102,355	31.22	69,876	21.32	32,513	9.92
	F	331,357	100	23,990	7.24	83,620	25.24	101,174	30.53	79,296	23.93	43,277	13.06
No Schooling	T	19,150	100	3,019	15.77	5,255	27.44	4,543	23.72	3,463	18.08	2,870	14.99
	M	9,674	100	1,558	16.11	2,786	28.80	2,434	25.16	1,681	17.38	1,215	12.56
	F	9,476	100	1,461	15.42	2,469	26.06	2,109	22.26	1,782	18.81	1,655	17.47
Grade I - IV	T	39,542	100	4,866	12.31	11,746	29.71	10,897	27.56	7,309	18.48	4,724	11.95
	M	24,340	100	3,063	12.58	7,293	29.96	6,831	28.06	4,410	18.12	2,743	11.27
	F	15,202	100	1,803	11.86	4,453	29.29	4,066	26.75	2,899	19.07	1,981	13.03
Grade V - IX (O/L < 6 subjects)	T	472,499	100	39,163	8.29	128,210	27.13	148,638	31.46	106,721	22.59	49,767	10.53
	M	245,220	100	23,054	9.40	68,630	27.99	77,417	31.57	52,716	21.50	23,403	9.54
	F	227,379	100	16,209	7.13	59,580	26.20	71,221	31.32	54,005	23.75	26,364	11.59
GCE (O/L), GCE (A/L) < 3 subjects	T	105,331	100	6,648	6.31	23,647	22.45	32,290	30.66	26,647	25.30	16,099	15.28
	M	39,436	100	3,283	8.32	9,902	25.09	12,734	32.27	9,185	23.27	4,359	11.05
	F	65,868	100	3,365	5.11	13,745	20.87	19,556	29.69	17,462	26.51	11,740	17.82
GCE (A/L), Below degree, above GCE (A/L)	T	17,527	100	1,515	8.64	4,572	26.09	5,718	32.62	3,968	22.64	1,754	10.01
	M	6,757	100	720	10.66	1,818	26.91	2,297	33.99	1,402	20.75	520	7.70
	F	10,770	100	795	7.38	2,754	25.57	3,421	31.76	2,566	23.83	1,234	11.46
Degree and above and un-specified	T	5,130	100	844	16.45	1,203	23.45	1,443	28.13	1,064	20.74	576	11.23
	M	2,468	100	487	19.73	584	23.66	642	26.01	482	19.53	273	11.06
	F	2,662	100	357	13.41	619	23.25	801	30.09	582	21.86	303	11.38

Source :Sri Lanka Census of Population and Housing 1981, Vol.2, Part 1

Another set of data with some bearing on the assumption of a mismatch is that pertaining to the occupational expectations of the unemployed The data provided by the Central Bank's Socio-Economic and Consumer Finances Survey 1981/82 is reproduced below.

Table 15
Unemployed population by expected occupation and level of education

Expected Occupation	Percentages								
	No Schooling		Schooling					All levels	All Levels
	Illiterate	Literate	Primary	Secon-dary	Passed GCE 'O/L'	Passed GCE 'A/L'	Under-Grad.	Grad.	
Professional technical and managerial	0.0	0.0	3.0	10.5	34.7	46.9	85.7	75.0	21.1
Clerical and related	2.4	0.0	2.1	10.2	40.9	44.9	14.3	0.0	22.1
Sales and services	7.1	0.0	9.3	17.2	7.4	2.7	0.0	25.0	11.0
Agricultural workers	69.0	100	28.3	5.0	1.5	0.0	0.0	0.0	8.4
Industrial workers	21.5	0.0	57.3	57.2	15.7	5.5	0.0	0.0	37.2
TOTAL	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total number of persons	42	0	2	237	664	543	147	23	1,658

Source: Central Bank
Socio-Economic & Consumer Finance Survey 1981/82

There is a very clear mismatch between the profile of expectations in this table and the occupational profile of the employed workforce as set out in Tables 2 and 4. The profile of expectations indicates that expectations rose with educational level; whereas 57% of primary and secondary school leavers expect to move into blue collar employment as industrial workers, only 15% of the unemployed with the GCE 'O'Level prefer these occupations. Approximately 82% of them aspire to white collar employment, with a high proportion seeking technical and clerical work. There is no doubt that the types of occupations demanded by the new entrants with 'O'Level qualifications are those that are not only high in relation to income but also rank high in status and responsibility. This is not unusual as these new entrants would generally compare themselves with the old entrants of the preceding generation in whose time 'O'Level qualifications were less abundant and a large proportion of those with such qualifications could get into white collar occupations.

It is, however, necessary to distinguish between the stated preferences and the actual behaviour of new entrants when employment is available in an occupation that is lower in income and status than the preferred job. Many with 'O'Level qualifications have in fact accquired such jobs. This has already been demonstrated in the pattern of new employment discribed in page 00[4]. It could be argued, however,that these existing mismatches between preferences and available employment may promote frustration and discontent among those employed if they perceive a mismatch between their

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4/ In two surveys of job expectations and employment among rural youth carried out by Marga in 1973 and 1981, it was observed that 71% of respondents were not averse to self-employment in agriculture, or other manual and operative jobs provided the income was satisfactory. The range of incomes which made these jobs acceptable was moderate - Rs.200 to Rs.300 per month at 1973 prices (Marga Institute, **'Pattern of Job Expectations and Employment among Rural Youth,'** 1977, mimeo, **'Unemployment and Job Expectations among Rural Youth - A Case Study of Selected Households in Twenty Five Villages'**, 1981, unpublished.

qualifications and capacity and the work they are compelled to accept in the conditions prevailing in the labour market.

5. IMBALANCES IN THE LABOUR MARKET - A SUMMARY OF CONCLUSIONS AND POSSIBLE APPROACHES TO GOVERNMENTS

5.1 The General Imbalance: Some Special Characteristics

In a labour market where the total imbalance between the growth of employment and the expansion of the workforce is by far the predominant cause of unemployment, it is difficult to decide on the importance to be assigned to structural mismatches. The analysis of available data presented so far suggests that the structural mismatch can provide only a very limited explanation of unemployment.

- Given the expansion of education and the rapid rise in the levels of education in the workforce as a whole, it was inevitable that unemployment should also have grown fastest in the upper educational levels.

- The available data also indicates that a relatively high proportion of the newly employed workforce has been those with G.C.E.'O'Level passes. They have been absorbed eventually in occupations of various types. Their occupational distribution does not lend support to the view that their stated job preferences prevented them from moving into the jobs that were available.

- It is true that the rate of unemployment rises progressively with the educational level but unemployment remains high for even those with primary level education, 14 % for the age group 15 to 29 years. If it is assumed that the job seekers who are at present at higher educational levels had dropped out of the school system earlier, unemployment for those with a lower level of education would have risen to much higher levels if not proportionately.

The main problem therefore is one of general imbalance, the imbalance between the growth of the workforce and the growth of employment. Within this general imbalance, however it is possible to identify imbalances of a special character that affect particular segments.

But before we proceed to these special imbalances it is necessary to examine some characteristics in the general imbalance that unusual for a country with as low a per capita GDP as Sri Lanka. Over the last 25 years, Sri Lanka has produced a workforce with educational levels much higher than the average for countries with comparable per capita incomes and the structures of production and occupation that go with these income levels. The analysis in the preceding section described how this situation produced a combination of factors leading to high levels of open unemployment. The imbalance that has emerged between educational levels and occupational structure in Sri Lanka has had some inescapable consequences for the way in which the workforce has related itself to the labour market. The educational levels have no doubt shifted the expectations of the workforce and directed its initial search to occupations ranking high in terms of income, status and responsibility. These are the occupations in the middle and upper segment of the occupational structure shown in Table 3. The conditions that eventually compelled them to adjust to occupations at lower levels are not normally conducive to job satisfaction, conflict-free industrial relations and growth of labour productivity. However, it would be necessary to make more detailed empirical investigations into the newly employed and the adjustments they make before such a conclusion is drawn. It can be argued that although there may be maladjustments in the initial period, the general increase in educational levels

for all types of occupation is likely to have a positive long-term impact on productivity. This is borne out by the trends in productivity for the national workforce as a whole. Furthermore, increases in wage levels for the low-income occupations may lead to relative adjustments in the status hierarchy of occupations, as has already happened in many skilled operative jobs.

5.2 The Disadvantaged Groups in the Labour Market

When we proceed to examine the specific imbalances within the general imbalance, it is possible to identify several groups among the unemployed who are specially disadvantaged in their search for employment. These include the female educated youth, the educated segment between the early school leavers and those who failed to obtain a pass in the G.C.E. 'A'Level and the segment of the urban educated. A combination of factors has singled out all three groups as specially disadvantaged for absorption to the employed workforce.

Table 16

Activity rates for females 15 to 39 years of age

Age	1971	1986
15 - 19	21	24
20 - 24	29	48
25 - 29	27	46
30 - 34	25	45
35 - 39	26	45

Sources: Census 1971 - Labour Force Survey 1985 - 86.

The activity rates of the female population have changed dramati-cally during the last 15 years. The young female job seekers have similar educational qualifications to the males but their chances of employment are significantly lower. This is due to factors are gender related and that arise both from the job preferences of these females as well as from biases on the demand side. The labour market, apart from its slow overall expansion due to slow economic growth, has not adapted fast enough to these changes in female activity rates. In the sectors that provide large blocks of employment, particularly activities that involve heavy manual labour and physical energy such as construction, materials handling and operation of heavy equipment, there is a pattern of preference among the employers that favours males. Even in service sectors studies have shown that employers often discriminate against women in their recruitment policies and in favour males on the grounds of overhead costs, regularity of attendance and related matters. Some of these biases are ingrained prejudices arising out of a socio-cultural environment that tends to discriminate against females. This in turn leads to a pattern of job preference among the females themselves for certain types of occupations that are female stereotypes and are considered socially desirable: dress-making, teaching, nursing, secretarial work and related service occupations. The educational system, which as a whole has not provided an adequate base for acquiring occupational skills, affects this disadvantaged female segment of the workforce more severely than males. Their socio- economic situation and family status give them less access to resources, even family resources. Thereby they have little opportunity to set up as 'own account' workers. The problems of mismatch in this group therefore needs special efforts.

The unemployed who leave school from the 8th to the 10th grade without the GCE 'O'Level qualification suffer from certain special disadvantages in terms of fitting themselves into the workforce. Increasingly the 'O' Level has become the minimum qualification for most types of jobs. The school-leavers from the 8th to the 10th grade are at a particular stage of imcomplete education.

They are between two categories, the early school- leaver who gets a job that is an informal type of apprenticeship and those who have passed the 'O'Level. Having failed to obtain the required certification they are likely to regard themselves as failures in a wider sense. In competition with those having 'O'Level qualifications they are likely to be left behind. They are therefore the group with the greatest difficulty in adjusting to the labour market in competition both with early school- leavers as well as those who are certificated. This group who leave school from the 8th to the 10th grade account for the largest proportion of the unemployed in the age group 15 to 29 1/M approximately 30%.

In a general situation of high unemployment, it is the urban workforce that suffers from the highest rates of unemployment 24% as against 16% for the total workforce. Youth unemployment in the age group 15 to 29 is 34% in the urban sector compared to 25% for the country as a whole. The rate of unemployment being higher in the urban sector than the rural is not an uncommon characteristic of the labour market in developing countries. Open unemployment is likely to surface more clearly in the urban sector where employment depends mainly on the organised formal sector and its growth. Although the urban informal sector provides a mechanism for absorbing the workforce at lower levels of productivity, it does not have the same absorptive capacity as the rural sector. The higher rate of urban unemployment, however, does not primarily arise from a mismatch. For employment in the urban sector the unemployed have to depend largely on employment opportunities in the organised sector public and private. These would come primarily from investment decisions taken by the enterprises in the organised sector. If serious mismatches exist, these enterprises will complain of a significant shortage of labour. This would in turn act as a constraint on investment and expansion. There is no evidence that this is occurring on a significant scale. Most entrepreneurs embarking on profitable ventures would not be dissuaded for lack of a workforce trained and ready for full production. They will train the workforce they need and the Sri Lankan workforce with its high rates of literacy would be easily trainable. There is evidence that some of the shortages that surfaced with the spurt of economic activity after 1977 were speedily overcome through accelerated training as in the case of construction labour and operators of heavy construction equipment and vehicles. The situation is, however, different for the urban small-scale and informal sector which consists of own account workers and owner proprietors. There has been little systematic effort to develop this part of the workforce and equip it with entrepreneurial skills and other resources.

In the present stage of the country's development, there is no doubt that the part of the economy that comprises the self- employed or own account workers, working proprieters and small-scale entrepreneurs will continue to be one of the most important providers of employment,besides being a dynamic sector contributing to the rapid growth of the economy. From past performance, however, it would seem that the educational development and the formation of values and aptitudes in the present system have not succeeded in producing manpower in adequate measure to develop this part of the economy to fully utilise its opportunities and potential. It is in this situation that it is possible to speak of a significant mismatch but this mismatch is not strictly one between the availability of jobs and the demand for them. It is a situation in which the potential for expansion in the small-scale and informal sector has to be exploited by the workforce who have to be both employer and worker. The schooling system and its educational content have often been blamed for it. However, the job orientation and the pattern of expectations that militate against self-employment and small-scale entrepreneurship are the products of a much larger combination of socio-economic, political and cultural processes in which the educational system is only one part.

In fact, if the other processes outside the school system had not operated in the way they did, the school system by itself may not have had any serious negative impact. These other processes include the state welfare system, political processes with their nationwide forms of patronage, the expansion of the state as a major provider of employment and economic policies and ideologies

antagonistic to the small entrepreneneur and private enterprise. In these conditions, wage employment, preferably under the state, became the aspiration of the majority of school- leavers. The reversal of this situation requires a strategy and a package of policies and programmes which cannot be discussed adequately within the limits of this paper. Many of the policy changes that have taken place in the recent past for promoting private enterprise have moved in the right direction.The specific mismatch referred to here,however, needs a subset of strategies and policies to strengthen the sector of self-employment and small-scale enterprise. This also means a macro-level strategy that consciously promotes investment and choice of technology in the medium and large-scale sector in such a way that it leaves space for the growth of small-scale enterprise and the informal sector. Again this raises issues regarding both the optimum mix for employment and growth as well as the mix of market and policy interventions.

5.3 The Contribution of the Educational and Training System

What is more relevant to the issues raised in this paper is the contribution the educational and training system can make to correct the imbalances that have been discussed. There has been no lack of concern on this account. The need to reorient the educational system and to impart to it an educational content that is vocational and occupation-oriented has been receiving emphasis for a long time. The educational experiment in the early 1970s although ill-fated was an attempt to provide a vocational content to formal education. The strategies currently proposed to deal with the problems of unemployment have placed high priority on the development of vocational skills and occupational training.

On a first assessment it appears that the vocational stream in the Sri Lankan educational system is quite small compared to many other developing countries that have similiarly expanded participation in formal education at the secondary level. Capacity for vocational training outside the formal school system has however expanded. But these include both formal as well as informal programmes institutionalised training and on-the-job training in workplaces. The component of institutionalised vocational training that takes in those who move out of the formal acadamic stream remains small. A better balance between the two seems essential when the structure of education in Sri Lanka is compared with that of other countries with similar proportions of school-going population at the secondary level. These asymmetries in the educationl system itself and its internal lack of proportion between academic and vocational and between secondary and tertiary (as was described earlier) have a bearing on the problems of growth and employment, and on the nature of the workforce that is being produced.

Recent surveys of capacity indicate that the technical and training capacity in the total system, both state and private, can provide for the training of about 117,000 persons in courses of varying duration 80,000 under state programmes and the rest in the private sector. The range of occupational skills covered in these schemes is very extensive more than 100 skills and crafts. Most of this capacity exists outside the school system, although it does have a small component of vocational training. These capacities seem to be adequate if we take into account only the new entrants to the workforce. It could not, however, look after the backlog of unemployment. If vocational training and occupational skills are considered a pre-condition for the absorption of the unemployed within a period of approximately 5 years, training capacities may have to be doubled. But the estimate of needed capacity will have to take into account several factors. There has to be, first, a reliable estimate of new entrants to the workforce who need such vocational training. A considerable number will be absorbed without the training imparted in these institutions. In fact they are now being so absorbed. Many service sectors will not require the type of vocational training envisaged in these programmes. There are many occupations where the skills and know-how have to be acquired on the job from the inception, and

what is required for them is a minimum formal education as the best criterion of the capacity to learn on the job. Before expansion of capacity is undertaken, a close study has to be made as to why some institutions are not working to capacity while others such as the National Apprentice Scheme have a demand which cannot be fulfilled. The latter appears to be a form of subsidised employment, attractive to both employers and trainees. This, however, is not to criticise the scheme but to draw attention to some of its features which need to be better understood and incorporated into the expansion of training capacity.

What is more important, however, is the training itself and its orientation. As stated earlier the diversity of skills covered is very wide. The institutions have functioned long enough to assess the market demand for these skills. Therefore it is possible to assume that the mix of training will on the whole facilitate employment. Some aspects, however, need comment. The present programmes for vocational training do not focus specifically on the needs of target groups where the mismatch is most pronounced. For example, the schemes for females are heavily biased towards the stereotyped jobs-dress-making, home science, lace-making, flower-making. These may certainly satisfy existing demand but they are likely to leave out a large number of females who are able to compete with male counterparts in other skills and occupations. For this purpose a greater promotional effort is needed. This has to be aimed both + at directing females towards a more diversied choice of occupations as well as removing the biases that exist in the recruitment for employment.

The supply of skilled and trained manpower will no doubt by itself contribute to the employment of job seekers, but vocational training as a means of reducing unemployment will have limited value in conditions of high general unemployment for the reasons already discussed. The absorption of the trainees will eventually depend on the pace at which new jobs are created. There is no clear evidence that the lack of appropriately skilled manpower is a major deterrent to the creation of employment in the organised sector. As stated earlier most firms will train the workforce they need. On the other hand the lack of entrepreneurial manpower at the small-scale level is probably the main deterent to the creation of employment in the self-employed sector and in small-scale enterprises. Many sectors of the economy contain the potential for self-employment and small-scale enterprise. The realisation of this potential needs a workforce that can seek, identify and use these income-earning opportunities. But neither the knowledge, information and aptitudes acquired through the present educational and training systems nor the prevailing infrastructure which provides access to resources are of much help to new entrants to the workforce who seek self-employment or to be small-scale entrepreneurs. The training system has to contain a component that goes beyond imparting skills for wage employment. While occupation-linked training is a necessary condition for 'own account' employment and small-scale entrepreneurship, it is not a sufficient condition. The aptitudes and the orientation that promote initiative and enterprise will have to start within the formal education system itself. The significant part of the mismatch appears to arise from the lack of human resources with the capacity to create jobs.

The system for the development of human resources as a whole, including formal education, has then to adapt itself better to train, educate and orient a part of the new workforce for self-employment and entrepreneurial activities. This has to be matched with an infrastructure that ensures an adequate and appropriately directed flow of financial resources and technological knowhow. The package that helped the small-scale farmer has lessons for any intensified programme for small-scale entrepreneurial development as envisaged here . But in order to cater to the educated unemployed, the profile of entrepreneurial activities has to be specially developed to satisfy some of the legitimate expectations of this group. We have seen how the stated preferences of the educated unemployed moved sharply away from agriculture. Their perception of agriculture was associated with the low-income traditional farming to which their education had little relevance. However, in the context

where farming was transformed into a small-scale enterprise and offered prospects of relatively high income, where it included the inputs of modern technology and posed challenges for the application of scientific knowledge, the response of the educated youth has been positive. The programmes of entrepreneurial development would therefore have to contain these characteristics.