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**HUMAN RESOURCES IN SRI LANKA'S INDUSTRIAL DEVELOPMENT -  
THE CURRENT AND PROSPECTIVE CONTRIBUTION  
OF WOMEN \***

Prepared by the

**Regional and Country Studies Branch  
Industrial Policy and Perspectives Division**

- 
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List of abbreviations

ARTEP	Asian Regional Team for Employment Promotion
ASEAN	Association of Southeast Asian Nations
CENWOR	Centre for Women's Research
CINTEC	Computer and Information Technology Council
CISIR	Ceylon Institute of Science and Industrial Research
COMPOL	National Computer Policy Committee
DCS	Department of Census and Statistics
EDB	Export Development Board
EPF	Employer's Provident Fund
EPV	Export Production Village
EPZ	Export processing zone
ESCAP	Economic and Social Commission for Asia and the Pacific
FDI	Foreign direct investment
FIAC	Foreign Investment Advisory Committee
GCE-AL	General Certificate of Education - Advanced Level
GCE-OL	General Certificate of Education - Ordinary Level
GCEC	Greater Colombo Economic Commission
GDP	Gross domestic product
GNP	Gross national product
IDB	Industrial Development Bank
ILO	International Labour Office
INSTRAW	International Research and Training Institute for the Advancement of Women
IPS	Institute of Policy Studies
ISIC	International Standard Industrial Classification
KIPZ	Katunayake Investment Promotion Zone
MFA	Multifibre Arrangement
MISA	Ministry of Industries and Scientific Affairs
MOFP	Ministry of Finance and Planning
MP	Member of Parliament
MVA	Manufacturing value added
NAB	National Apprenticeship Board
NERD	National Engineering Research and Development Centre
NFE	Non-formal education
NGO	Non-Governmental Organisation
NYSC	National Youth Services Council
ODA	Official Development Assistance
OECD	Organisation for Economic Co-operation and Development
SCX	Subcontracting Exchange
SIDA	Swedish Industrial Development Agency
SLFP	Sri Lanka Freedom Party
SLSI	Sri Lanka Standards Institute
TU	Trade Union
UGC	University Grants Commission
UNCTC	United Nations Centre for Transnational Corporations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNP	United National Party
WCIC	Women's Chamber of Industry and Commerce



## INTRODUCTION

### Aim and origin of the study

Industrialisation has been the cornerstone for development policies in many third world countries. However, plans and policies have largely neglected the fact that industrial transformation implies transformation also of human resources. This process - though constituting a challenge to the role of women - also provides new prospects for enhancing their position in the society and in the economy. Distinct policies are needed to seize these opportunities in the transition from traditional to new manufacturing activities and to ensure that women are provided with the skills required to fully participate in this process. Furthermore, it is important to monitor corresponding developments and to create full awareness of this issue among policy-makers at all levels. To this end UNIDO is assisting various countries in carrying out the required analyses and projections which can contribute to forming a basis for national policies to be designed. Fuller awareness about the current and potential participation of women in industry and the establishment of reliable data on the subject is indeed expected to significantly support countries in making full use of their human resources and in designing appropriate strategies for improving the integration and participation of women in industry.

To assist developing countries in obtaining a factual basis and develop an effective approach for further work in this field as well as achieving practical results, UNIDO launched a series of in-depth country studies in consultation with a number of countries. The Government of the Netherlands agreed to the funding of such initial studies in Zimbabwe, Nepal and Sri Lanka.

The studies report on the present and future potential for women's participation in the manufacturing sector and outline policy measures towards attaining general industrial development goals through the utilisation of the human resource potential represented by women. The more detailed design for each study was drawn up in close collaboration with the governments involved in order to secure a focus on each country's particular priority issues.

In the case of Sri Lanka, terms of reference were agreed upon with the Government as represented by the Ministry of Women's Affairs and Teaching Hospitals. The study was carried out in the first half of 1987 in close co-operation with the Centre for Women's Research (CENWOR). Modalities and progress of implementation were monitored by a Project Steering Committee on which - apart from UNIDO and CENWOR - the following ministries and institutions were represented: Women's Bureau, Ministry of Industries and Scientific Affairs, Ministry of Finance and Planning, Women's Chamber of Industry and Commerce and Sri Lanka Business Development Centre.

### Structure of the report

The study report presented here is basically structured along the following lines.

The first chapter presents some general observations with regard to the role and significance of human resource development in meeting the internal

and external challenges of industrialization in the late eighties. The second chapter deals more specifically with the situation in Sri Lanka by providing first, an overall view of recent industrial development trends and the economic and industrial policy approach and second, a brief account of the institutional framework for human resource planning. Chapter III turns to the role of women within overall industrial development by placing the issue into a broader regional Asian perspective.

Chapter IV, in a sense the study's analytical centerpiece, deals with the specific role of women in Sri Lanka's manufacturing industries. It starts with a review of the scope and impact of education and skill development with special emphasis on prevailing gender-gaps, proceeds to analyzing the patterns of female industrial participation at the branch level and finally summarizes the results of field research carried out in early 1987. The field survey provides a broad coverage of the various segments of manufacturing, including both formal sector (public industries, private industries, foreign investment under FIAC and industry-related institutions) and informal sector activities. In addition, specific priority areas have been selected for various reasons: Export Production Villages, representing an innovative approach to link rural producers to export markets; the handloom industry as a major employer of women which is to be revitalised; and women entrepreneurs who have recently gained in significance in various industrial branches.

Finally, Chapter V provides a synthesis of major trends, potentials and constraints identified in the study and presents policy recommendations geared at increasing the scope and effectiveness of women's participation in Sri Lanka's future industrialisation efforts. In a national workshop held by UNIDO and CENWOR on 16 June 1987 in Colombo these recommendations were discussed and agreed upon. A report of the workshop is available from CENWOR.

The present study was conducted and the report prepared by UNIDO staff in co-operation with the Centre for Women's Research, national and international consultants. The team of principal researchers consisted of Mr. Wilfried Luetkenhorst (UNIDO, Regional and Country Studies Branch); Ms. Swarna Jayaweera, Ms. Wimala de Silva, Ms. Malsiri Dias, Ms. Hema Goonatilake and Ms. Thana Samugan (all from CENWOR); Ms. Marina Thorborg (Scandinavian Institute of Asian Studies, Copenhagen); Ms. Lakshmi Perera (Women's Chamber of Industry and Commerce, Colombo), and Ms. Chandra Rodrigo (University of Colombo, Department of Economics).

Valuable contributions to specific issues of the study were further made by Ms. Savitri Goonasekera (Open University of Sri Lanka), Mr. H.R. Perera (Ministry of Industries and Scientific Affairs) and Ms. Dharma Wickramasinghe (Technical College, Dhiwala). Editorial work was undertaken by Mr. Paul Hesp.

The co-operation of all institutions and individuals involved in carrying out this study is gratefully acknowledged. Without their high dedication and great personal efforts the tasks foreseen could not have been accomplished in such a short time, considering the complexity of the exercise.

## I. THE CONTEXT: CHALLENGES AND TASKS AHEAD FOR HUMAN RESOURCE DEVELOPMENT

The ongoing process of industrial transformation in developing countries in general and in Sri Lanka in particular is accompanied by a corresponding change in skill requirements. Human skills required at any one stage of industrial development in a country for planning, promoting, operating and servicing industries will constantly need to be enhanced and adapted to enable the country's attainment of a higher degree of industrial development. Traditionally, employment planning in the 1960s and 1970s attempted to project requirements in terms of quantities of broad professional categories and could in many cases be based on trend developments and international comparative data. In most developing countries vast skill gaps existed in practically all professional categories relevant to manufacturing and human resource development for industry could thus be designed in an extensive form and on a very broad front pending, of course, availability of financial and institutional resources for training.

The recent worldwide economic recession and the connected crisis in industry in many developing countries not only meant a break in past trends but also a revelation of the industrial production growth complexity and uncertainty of basic assumptions and parameters which were previously taken as stable and/or predictable.

Human resources did not always receive the strong attention they deserved as crucial determinant of economic development. Specifically in the sixties and early seventies a widespread fallacy has been to explain economic development basically in terms of capital and technology inputs and to treat the concomitant development of human resources largely as a residual - as such considered more as a social concern than an economic variable. Meanwhile however, it has become widely accepted that it is human beings and the skills they command which are decisive to promote development and that investment in human capital can in fact yield higher returns than does real capital formation. (Of course, both types of investment should not be seen as substitutes but as effectively complementing each other.) This relatively recent awareness of the indispensable role of human resource development has been fuelled from a number of different sources.

Firstly, a major contributing factor has been the theoretical debate within development economics which in the late seventies turned markedly to redistributive issues and the meeting of basic needs. In this context the functional relationship between minimum levels of basic needs fulfillment (food, education, etc.) and enhanced productivity of the labour force - indeed a commonplace of classical economics - was firmly reestablished. The basic message was that a basic needs approach is not necessarily in conflict with growth-oriented policies; it may in fact even be among the latter's preconditions. Hence, as already spelled out above, Sri Lanka's excellent record on basic needs in terms of nutritional and educational achievement levels should be considered as a strong basis on which to build future industrial development efforts.

Secondly, on a more practical level, the successful experience of a number of developing countries, in particular in East Asia, has clearly

demonstrated the importance of a well trained and educated work force in accelerating industrial development. The Republic of Korea with its strong Five Year Plan framework for vocational training programmes is a case in point: "Korea's successful industrialization has been largely due to vocational and technical education by timely widespread provision of vocational training at secondary level. Hence changes in vocational education and training are always under review and constantly being adjusted to the needs of the rapidly developing industries" (Yoe Bae Kim, 1986).

Thirdly, the present financial constraints of development processes have to be taken into account (ESCAP, 1987). On the supply side, financial resource transfers have recently shown a stagnation in terms of real ODA flows. On the other hand, the capacity of many developing countries, including Sri Lanka, to absorb further financial inflows (unless in the form of grants) is severely limited by their already high levels of indebtedness. Accordingly, greater growth contributions than hitherto will in the future have to be made by domestic efforts, including human resource development.

Fourthly, and perhaps most importantly, there has been an increasing awareness that it is human resource development in general and skill formation in particular that more and more provides the competitive edge in industry (UNIDO, 1986 b). This point is of particular significance for developing countries such as Sri Lanka which are strongly involved in the international division of labour and heavily relying on direct foreign investment flows. As some of the pertinent recent trends in international trade and investment are found to have contributed to place human resource requirements in the foreground, they are briefly outlined below.

One essential point to be made in this context is that comparative cost advantages - now that trade flows are increasingly shaped by the exchange of skill-intensive goods on an intra-industry basis - have lost their 'political innocence'. The sectors of trade now gaining significance between industrialized countries and many developing countries are determined neither by the availability of natural resources ('Ricardo goods') nor by given relative factor endowments ('Heckscher-Ohlin-goods') alone. Rather, comparative advantages have become man-made, i.e. largely "arbitrary" (Cline, 1982 b). This implies that the patterns of specialization emerging in industrial trade are not determined ex ante by economic structural parameters, but have increasingly become the result of political intervention: In this sense, a nation to some extent chooses its own comparative advantage. This applies not only in the strict sense that specific lines of technological development are given priority and deliberately promoted (or subsidized). It also applies in the broader sense that, in view of the increasing significance of human resources as factor of production, a country's educational system and entire social infrastructure determine its overall competitiveness more strongly than ever before. It is in this sense that the level of human resource development can indeed provide the competitive edge, as mentioned above.

Turning in this context more specifically to recent trends in the international investment system it is clearly discernible that labour costs are rapidly losing in significance as a cost component and thus as an investment determinant. The world economy is characterized by an "uncoupling of manufacturing production from manufacturing employment" (Drucker, 1986, p. 775) emanating from the introduction of revolutionary technological innovations (such as microelectronics-led automation processes). It appears

that the first round of global industrial restructuring (largely based on labour-intensive manufactures with a low skill content) is increasingly being replaced by international restructuring which involves (i) a partial relocation 'back North' of automated, previously labour-intensive processes (textiles are a case in point) and (ii) a new international redeployment of skill-intensive production processes. Accordingly, in the attraction of foreign investment a premium is put now on the availability of cheap skilled labour and existing infrastructure allowing the efficient utilization of new production and communication technologies. The industrialization avenue of many developing countries in the sixties and seventies (low-skill manufacturing for exports) may become an increasingly narrow path in the future and countries like the Republic of Korea, Singapore or Brazil may again get the largest part of the investment volume. Hence, the hopes of many so-called second-generation newly industrializing countries to repeat the success of their predecessors may be vain (Mohs, 1985). In any case, from a human resource development point of view, the successful attraction of foreign investment will increasingly require "that the training of technical labour would be done rapidly enough, and on a large scale enough to foster a second stage of 'off-shore' productive decentralization from the North's industrial base" (Castells, 1986, p. 305).

At the same time this implies that unless the prevailing occupational gender stereotypes - largely assigning low skill jobs to women - can be changed, women stand to lose whatever the outcome may be: either by reduced inflows of foreign investment or by changing skill requirements which currently only a minority of female workers are able to meet.

Furthermore, with foreign investment in developing countries moving partly away from the export of simple consumer goods based on routine assembly operations and venturing into technologically more sophisticated production lines, it is the domestic market potential of host countries that tends to assume a greater importance among investment determinants. This means that in the future a strategy of multilocation will be favoured by many multinational investors over the former export-platform approach (Castells, 1986). For obvious reasons, a country like Sri Lanka with its small domestic market can only be expected to loose from such a shift.

From what has been said so far it emerges that investment in human capital is an essential complement of and indeed a precondition for physical investment. This applies in particular to more demanding types of foreign investment. While the prospects for Sri Lanka to increase the level of foreign investment inflows do not appear to be bright, the actual performance will be crucially determined by the successful upgrading of existing skills. In doing so, the solution can obviously not be to rely largely on on-the-job training activities by investing firms as the prior availability of skilled labour itself figures prominently among the investment incentives (Amjad, 1986, p. 32).

Moreover, human resources for industrial development should be seen not only in terms of the operational functions of manufacturing but also in relation to essential supporting functions for industry such as research and development, marketing (including export marketing), technological extension and productivity services, engineering consultancy, financial consultancy and government planning and administration. It is also important to note that, while these specializations pose extra demands on the formal education systems, many of their crucial facets can only be acquired outside the conventional education systems (UNIDO, 1986 b).

Within the multi-faceted issues covered by human resource development this study in what follows will adopt a selective approach and concentrate on those aspects that are more specifically related to the actual and prospective role of women in Sri Lanka's manufacturing sector. After an analysis of recent industrial development trends in Sri Lanka, the country's approach towards human resource planning will be briefly reviewed, both in terms of the type of employment projections available and in terms of the institutional machinery within which they are developed. Subsequently when reviewing the structure of female participation in detail (Chapter IV.) a broad approach will be adopted which includes among others education and training-related questions as well as an analysis of the role women are playing in industry-related institutions .

## II. INDUSTRIAL DEVELOPMENT AND HUMAN RESOURCE PLANNING IN SRI LANKA

### A. Industrial strategies, policies and performance

In this section a brief general review of Sri Lanka's recent industrial development is given with a view to pave the way for the subsequent analysis of the actual participation of women in this process as well as of the potential and the challenges to their role. To gain a fuller understanding of the latter it appears essential to take a broader look at the country's economy, in particular as regards major structural changes that have occurred in the recent past and the specific forces underlying them. Without this comprehensive view the factors influencing the country's future industrial development would be less easily discernible and adequate policy responses difficult to formulate.

During the late sixties and early seventies Sri Lanka was following an essentially inward-looking economic development approach which by strengthening import-substitution industries behind high tariff and non-tariff barriers sought to shield the economy from international competition and external shocks. However, the small absorptive capacity of the domestic market set effective limits to this strategy which, moreover, resulted in a highly import-dependent pattern of production. By the mid-seventies, industrial exports (excluding petroleum products) had remained insignificant, accounting only for some 5 per cent of total exports. This meant that foreign exchange earnings from manufactured exports were able to cover just 6 per cent of the industrial sector's import requirements (Athukorala, 1986, p. 71) and that in consequence of insufficient attention to the diversification of the country's export base, chronic shortages of foreign exchange emerged. At the same time, most of the import-substitution industries were characterised by a high capital intensity putting narrow limits on their employment contribution. Accordingly, the unemployment rate went up sharply to reach 25 per cent in 1977 whereas the growth performance deteriorated: GDP growth declined to reach only 2.9 per cent annually during 1970-77 while in the same period the annual real MVA growth averaged an even lower rate of 1.0 per cent (UNIDO, 1986a). This downward trend was partly to be explained by adverse external developments leading to an unprecedented decline in the country's terms of trade from 100 in 1970 to 55 in 1975. But it was at least as much the final result of an increasingly regulated economy in which public corporations and state monopolies proliferated and various rationing systems led to widespread scarcities and the emergence of black markets.

It appears, however, that Sri Lanka in the early seventies managed to combine an at least average growth performance (in comparison to other low-income developing countries) with an outstanding achievement in terms of the most common welfare indicators (Isenman, 1980; Herring, 1987). Hence, when measuring development by social indicators rather than by GDP growth<sup>1/</sup>, the country was far ahead of most other developing countries and even came to be regarded as one of the model cases of a basic needs oriented development

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1/ The well-known Physical Quality of Life Index (a composite basic needs index encompassing equally-weighted measures of literacy, infant mortality and life expectancy) put Sri Lanka at a level more than twice as high as that achieved by all low-income countries in the early seventies (Morris, 1979).

strategy. In the mid-seventies about one quarter of government expenditure was allocated to social security and welfare (including in particular the subsidisation of essential consumer goods). To what extent this created a trade-off between growth and welfare objectives (in terms of sacrificing the former to achieve the latter) is subject to controversy and will not be dealt with further here. It is important to note, however, that the new government in 1977 inherited not only an economy characterised by low growth and widespread scarcities and distortions but also by a comparatively high level of human resource development.

This is the background against which the new development strategy launched in 1977 is to be seen. Within an overall attempt to open the country's economy to international markets and competition and to achieve a deregulation of economic activity, a sweeping economic policy reform package was introduced. The most important reform measures included:

- liberalisation of imports by substituting tariffs for non-tariff barriers (only a limited list of import items remained under specific licensing requirements);
- introduction of a unified and floating exchange rate;
- promotion of foreign direct investment by establishing the required legal and institutional framework and offering strong investment incentives (GCEC was set up in addition to FIAC, as official authority for the approval of investments in the newly-established Investment Promotion Zones);
- removal of price controls (with the exception of only a few essential consumer goods);
- removal of state import monopolies and reduction of public sector involvement in industrial production;
- promotion and diversification of exports (under the 1979 Export Development Act the EDB was established).

The immediate and most obvious result of the new strategy was an impressive upsurge in the GDP growth rate which went up from 4.2 per cent in 1977 to 8.2 per cent in 1978. In subsequent years it declined again, however, ranging between 5-6 per cent in the early eighties, a level that - under optimistic assumptions - the economy may be able to maintain in the near future. After a few consecutive years of a very stable growth performance between 5.0-5.1 per cent (1982-85), the provisional figure for 1986, however, indicates a somewhat lower rate of 4.3 per cent (for 1987 about 3.0-3.5 per cent is expected).

Growth rates of manufacturing production have likewise increased (to 4.6 per cent between 1977-81 and 6.0 per cent between 1982-85) but, at the same time, have shown comparatively higher annual fluctuations, ranging from 0.8 per cent in 1983 to 12.3 per cent in 1984<sup>1/</sup>.

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<sup>1/</sup> This is largely to be explained by the high MVA share of the public sector oil refinery which was at times temporarily closed down for repair work.



As a result of the increased level of economic activity total employment increased significantly bringing down the rate of unemployment to 14.0 per cent in 1984 (MOFP, 1985). Looking at the sectoral distribution of GDP, however, it is remarkable that the manufacturing sector has so far not been able to assume the role of a leading source of growth assigned to it. Between 1977 and 1986 its share in GDP remained more or less constantly around 14 per cent, showing a slightly decreasing tendency (Table 1).

Table 1. MVA: Share in GDP and internal composition 1977-86  
(at constant 1970 factor prices)  
(percentage share)

	1979	1980	1981	1982 <sup>b/</sup>	1983 <sup>b/</sup>	1984 <sup>b/</sup>	1985 <sup>b/</sup>	1986 <sup>b/</sup>
Share of MVA in GDP	14.7	13.7	13.6	13.6	13.1	14.0	14.0	14.6
Composition of MVA	100	100	100	100	100	100	100	100
- Export-processing <sup>a/</sup>	35	29	30	27	26	26	26	24
- Factory industry	52	56	55	57	58	59	59	61
- Rural and informal industry	13	15	15	16	16	15	15	15

Source: Central Bank of Sri Lanka.

Note: Figures referring to 1982 onwards (when a new time series based on 1982 prices was introduced) have been converted to 1970 prices.

a/ Tea, rubber and coconut processing.

b/ Provisional.

The manufacturing sector's internal structure on the other hand has undergone substantial structural changes. The share occupied by the export-processing of tree crops declined by more than 10 percentage points to 24 per cent (1986). Accordingly, with rural and informal industry showing only a slight relative increase, it was the factory industry segment that achieved large gains, accounting for 61 per cent of all manufacturing activities now<sup>1/</sup>. Hence, factory industries, i.e. the more narrowly defined manufacturing production proper, has clearly become the backbone of the country's manufacturing sector. Its average growth rate between 1977-85 has been roughly 2 percentage points above that of total MVA. The projections presented in the Public Investment Programme 1987-91 (MOFP, 1987) further support this trend: While export-processing is expected to show only a very modest growth (averaging 1.2 per cent between 1986-91), the growth target for

<sup>1/</sup> According to the 1982 based time series this trend has been even more sharply accentuated, with factory industries accounting for 69 per cent of MVA in 1985.

the remainder of the manufacturing sector was set at 5.8 per cent, i.e. manufacturing per se is assumed to be the leading economic sector in Sri Lanka's future development.

There is no denying, on the other hand, that the post-1977 growth process - albeit more dynamic than in the pre-liberalisation period - has been characterised by a number of severe shortcomings, both in a macro-perspective and in relation to the nature of growth within the manufacturing sector.

To begin with, the liberalisation strategy resulted in an upsurge of imports without being accompanied by correspondingly high export increases. Hence, the merchandise trade deficit went up dramatically. Peaking at 24 per cent of GNP in 1980, it has since remained at a level between 10-20 per cent (with the exception of 1984). Due to the high importance of private transfers (worker remittances) and public transfers (official development assistance) the current account deficit has always been lower, however, accounting for as much as 7 per cent of GNP in 1986.

The result has been a declining domestic savings ratio and - in view of a relatively high domestic investment ratio of around 30 per cent in the early eighties - a widening savings gap. Moreover, the persistent need to finance high current account deficits in the recent past has led to the building-up of a sizeable external debt which in 1985 amounted to a total of 4.5 billion US \$ (disbursed plus undisbursed). Accordingly, the debt service ratio has risen sharply from 13.5 per cent in 1978 to 22.5 per cent in 1985. With exports expected to remain basically stagnant resp. to achieve only very modest increases while major commercial loan repayments are due, the debt service ratio will increase further to reach a level of about 30 per cent during 1987-88 (World Bank, 1986a, p.25). No doubt this obligation - though not exceptionally high when compared with some other developing countries - constitutes a heavy burden which effectively limits resources available for productive purposes.

The second major source of concern has recently been the country's budget situation. While the budget deficit was intended to be reduced from 14.4 per cent of GDP in 1984 to 10.3 per cent in 1986, it actually seems to have risen to a level of more than 16 per cent which is clearly unsustainable in the medium term. The major contributing factor has been defense spending in relation to the country's ethnic conflict, although external factors have had an impact as well (revenue shortfall caused by falling agricultural exports prices).

Turning now to some problematic aspects of the manufacturing sector's internal structure<sup>1/</sup>, it is remarkable and somewhat surprising in view of the stated policy objectives that public sector industries have continued to play a dominant role among the registered manufacturing enterprises, accounting for more than 40 per cent of total manufacturing output (1985). Efforts at increasing efficiency and competitiveness of public sector industries have met with only limited success so far (UNIDO 1986a).

Another disturbing characteristic of recent industrial growth is its specific sectoral pattern which shows a strikingly high branch concentration.

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<sup>1/</sup> Reviews of the country's recent industrialisation experience are given by Kelegama, 1986; Irvin, 1986; Herring, 1987 and Athukorala, 1986.

Just three out of nine industrial branches (food, beverages and tobacco; textile, wearing apparel and leather products; chemical, petroleum, coal, rubber and plastics products) generated as much as 85 per cent of total manufacturing output in 1986. Moreover, within the largest manufacturing subsector (chemical-related products, including petroleum), 80 per cent of output was contributed by just one enterprise, i.e. the public sector oil refinery.

The textiles/clothing branch has been of paramount importance in Sri Lanka's post-1977 industrialisation drive: Textile, wearing apparel and leather products (ISIC 32) is the only branch of manufacturing having increased its share in total manufacturing between 1977-86. In fact, it more than doubled its share (from 11.2 to 29.2 per cent) and now generates almost one third of total manufacturing production value. Of even higher significance has been the role of the textiles/clothing branch in export performance. Again, in the period 1977-86 its share jumped from 2.2 to 28.3 per cent of total exports and from 39.3 to 71.2 per cent of industrial exports (excluding petroleum). This means that of all additional industrial exports (excluding petroleum) achieved after the introduction of the new industrial policy approach, 80 per cent have been in textiles/clothing. In fact, the export-output-ratio of clothing production was as high as 83 per cent in 1980 (Athukorala, 1986, p.94).

Obviously, a significant diversification of the country's export base has not been achieved so far. Non-clothing and non-petroleum industrial exports have continued to be of only marginal importance.

Two further trends are related to the increasing importance of textiles/clothing industries. Firstly, it has not been possible to increase the degree of processing as indicated by the constant value added-ratio of production (Table 2): Between 1977 and 1986 the share of MVA in the total value of production remained at approximately 38 per cent, largely due to the same ratio's decrease from 39 to 26 per cent in the case of textiles/clothing, which offset increases in some other branches.

Table 2. Share of MVA in production value, 1977/1980/1986 (percentage shares)

Branch of manufacturing	1977	1980	1986 <sup>a/</sup>
Food, beverages and tobacco	41.6	46.0	56.5
Textiles, wearing apparel and leather products	38.5	19.9	25.7
Wood and wood products	60.6	57.1	62.2
Paper and paper products	44.1	64.1	48.6
Chemical, petroleum, coal, rubber and plastic products	31.2	13.3	24.4
Non-metallic mineral products	61.1	52.6	54.4
Basic metal products	15.2	16.7	13.2
Fabricated metal products, machinery and transport equipment	35.7	47.9	63.5
Manufactured products (n.e.s.)	41.2	26.7	52.2
TOTAL	38.4	26.7	38.6

Source: Central Bank of Sri Lanka

a/ Provisional

Secondly, manufacturing production has become markedly more import-dependent (Table 3). While the share of imported in total raw materials stood at two thirds in 1977, it went up to close to 90 per cent throughout the early eighties (with the exception of 1982). Again, the trend in textiles/clothing has been among the major contributing factors. In this branch, 97 per cent of all raw materials used in 1985 came from external sources.

Table 3. Use of foreign raw materials in industry 1977/1980/1985  
(percentage of foreign raw materials to total raw materials)<sup>a/</sup>

Industry Group	1977	1980	1985 <sup>a/</sup>
Food, beverages and tobacco	30.0	68.8	20.0
Textiles, wearing apparel and leather products	63.7	93.0	97.1
Wood and wood products	40.9	23.8	10.3
Paper and paper products	66.9	59.9	63.3
Clemical, petroleum, coal, rubber and plastic products	93.3	96.0	98.3
Non-metallic mineral products	33.5	64.7	53.2
Basic metal products	100.0	100.0	100.0
Fabricated metal products, machinery and transport equipment	78.9	80.0	59.3
Manufactured products (n.e.s.)	47.3	72.5	...
TOTAL	65.9	89.1	89.0

Source: Central Bank of Sri Lanka.

a/ Provisional

b/ Estimates based on data obtained in respect of public sector industries.

On the basis of the analysis presented so far, the following conclusions can be drawn. While it is certainly true that (industrial) development is essentially a result of innovative action and hence the deliberate taking of risks <sup>1/</sup>, the vulnerability inherent in Sri Lanka's present industrial development strategy appears to be very high indeed. As a consequence of the lop-sided, largely textile/clothing-based pattern of recent industrial growth a new source of external vulnerability has been added to the traditional dependence on widely fluctuating raw material prices. It stems basically from three different factors.

Firstly, recent protectionist tendencies in developed countries have clearly focussed on textiles/clothing trade (as witnessed by the Multifibre

<sup>1/</sup> "The chief lesson of the success story of the export promotion strategy countries is not in the demonstration of the success of this strategy per se. Rather, it may be in the demonstration that economic success comes from taking risks, from recognising and seizing opportunities."  
(Bhagwati, 1984, p.30).

Arrangement) showing that the political acceptability of increasing market penetration ratios in these countries has relatively narrow limits (Cline, 1982a). This is a particularly relevant aspect in the case of Sri Lanka as the country's clothing exports are largely lacking in market diversification: some three quarters (73 per cent in 1984) are directed to the US market alone.

Secondly, in a medium-term perspective, the impact of the introduction of new technologies has to be taken into account. There are strong indications that at least part of the developing countries' comparative cost advantage in the textiles/clothing field will be eroded by a microelectronics-led process of capital intensification in industrialised countries. So far, the clothing branch has proven to be more "resistant" to such technological innovations than textiles production proper but revolutionary qualitative changes in this familiar pattern are already on the horizon and it may only be a question of time until their impact will be strongly felt.

Thirdly, foreign direct investment (FDI) has been playing a prominent role in Sri Lanka's recent expansion of manufactured exports. Wholly-owned foreign firms and joint ventures with foreign capital participation together account for approximately 50 per cent of all manufactures exports <sup>1/</sup>. In this context it has to be noted that FDI (with a cumulative total capital of more than US \$ 8 billion at the end of 1986) is highly concentrated in textiles/clothing (this applies to FDI both under GCEC and under FIAC). Moreover, the share of regional investment sources (Hong Kong, Singapore, Republic of Korea, Japan) is relatively high and the evasion of MFA quotas established in OECD markets has been a major investment determinant ('quota hopping'). This fact points to a comparatively high degree of footlooseness of much of FDI in Sri Lanka.

All in all, Sri Lanka's economy is now facing a situation in which the most powerful sources of recent growth (textiles/clothing and construction) appear to be slowly petering out. Clothing exports have lost much of their earlier momentum with growth rates that have tended to decrease recently. In 1985, clothing exports actually decreased for the first time in 10 years (by 2 per cent in dollar terms) although this may have been due to exceptional factors. In addition, the construction boom of the late seventies and early eighties - in fact a major supporting force of the high GDP growth - has levelled off now that the major public development programmes (the Katunayake Investment Promotion Zone, the Mahaweli power generation and irrigation project and the Public Sector Housing Programme) have been largely completed.

So far, we have largely dealt with selected performance elements of registered 'factory industries', i.e. above all with medium to large-scale manufacturing enterprises. An attempt will now be made to look more closely at the situation of small-scale and informal industries which, by and large, have been the ones adversely affected by the liberalisation strategy.

From the outset it needs to be stressed that exact data on Sri Lanka's small-scale and informal industries are hard to come by and the little evidence that is available does not go beyond the year 1980-81. A recent report on the subject has rightly stated that a "plethora of definitions naturally leads to a welter of confusion and renders the task of data

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1/ The exact share in 1982 was 46 per cent (Athukorala, 1984).

collection an extremely difficult one" (ILO-ARTEP, 1986, p.4)<sup>1/</sup>. As an in-depth analysis of the exact scope and structure of small scale/informal industries is not however the objective of this study, we shall confine ourselves to outlining some broad orders of magnitude. A first useful source to draw upon is the Survey on Manufacturing Industries, published by the Department of Census and Statistics. The latest available Survey, conducted in 1982, reflects the structure of the factory industries (i.e. excluding tree crop processing as well as rural and informal industries) in 1981. It shows that small-scale units (defined as those having less than Rs 5 million fixed capital including land and buildings) represent 82 per cent of all units and account for 30 per cent of employment and 15 per cent of MVA in this specific segment of manufacturing (Table 4).

Table 4. Contribution of small-scale industry to private sector and total 'factory industries' (1981)  
(percentages)

Item	Share in private sector (excluding GCEC)	Share in total
Number of units	89.7	82.1
Value of production	29.3	9.5
Value added	22.8	15.4
Employment	56.7	29.7
Fixed assets	25.8	8.9

Source: Department of Census and Statistics, Report on the Survey on Manufacturing Industries Sri Lanka 1981, Colombo 1985.

Combining small-scale factory industries with rural cottage and urban informal industries (the latter accounting for 15 per cent of total MVA; see Table 1) and excluding tree-crop processing, the resulting MVA share of all small-scale and informal industries in manufacturing proper comes to 32 per cent, i.e. about one third.

Relatively recent preliminary information on the sectoral structure of small-scale and informal industries is available from the 1983 Industrial Census<sup>2/</sup>. The Census includes a total of 104,866 manufacturing units out of which 99 per cent employ less than 50 persons. As this cut-off point corresponds broadly to the fixed capital-related small-scale industry definition (below Rs 5 million), it can be taken as leading to a fairly representative picture of the country's small-scale and informal industries.

1/ The following analysis draws to some extent on this source.

2/ The Census is still unpublished. Hence, data are in principle tentative in nature; they can be assumed, however, to give at least correct orders of magnitude. For details see Annex Table A-1 which was taken from ILO-ARTEP, 1986.

Not surprisingly it is a rather small range of agro-based and natural resource-based industrial activities in which most of these small units are concentrated: Food processing accounts for approximately one third of the total (food and beverages 23 per cent; tobacco 9 per cent) and textiles for another 18 per cent, which puts the combined share of these three branches alone at 50 per cent. The branches following next in relative importance are rubber products (9 per cent) and glassware (7 per cent).

By and large, the small-scale industries have been adversely affected by the post-1977 liberalisation for a number of reasons including direct competition from imported products (sometimes brought in at dumping prices) and indirect factors working to their disadvantage vis-à-vis larger companies. The latter included unequal access to imported inputs (heavy dependence on the intermediation of traders), limited capability for technological upgrading to meet import competition as well as the impact of rising finance costs in the wake of the liberalisation-related interest rate reform.

Only in very few areas have small and rural industries been able to benefit from the economic liberalisation. Obviously, this has been the case in the provision of tourism-related goods and services (such as handicraft items) and construction-related industry (bricks, tiles, carpentry, etc.). However, due to the drastic decline in tourist arrivals and the ending construction boom, prospects in both areas are relatively dim. Moreover, initial expectations to achieve induced growth via backward linkages from large-scale export production have not materialised, given the latter's high import preference<sup>1/</sup>.

The most seriously affected rural industry has undoubtedly been the handloom textiles sector which in the early seventies accounted for 16 per cent of all industrial units outside Colombo (IDB, 1971). The sector's most important activity was the production of sarong which was actively supported by various kinds of policy intervention, including price subsidies for cotton yarn supplies and protective import controls as well as an effective market reservation through denying powerlooms the right to produce sarong. With the lifting of all these support measures a rapid decline of handloom production has set in reducing the number of looms from about 110,000 to about 15,000 according to estimates of the Ministry of Textiles. At present, powerlooms have almost entirely taken over sarong production leaving the handloom sector "with a few minor items such as bed linen, curtaining, furnishing material, towels, sarees and very recently silk cloth, all of which have a very limited market, in addition to being subject to competition from imports." (ILO-ARTEP, 1986, p.24).

Hence, developments in the textiles/clothing branch are particularly illustrative of some of the structural changes in the Sri Lankan economy after 1977. What essentially has taken place in a macro-perspective is not employment creation but employment redistribution. Modern export-oriented jobs have been newly provided at the expense of traditional domestic market-oriented ones: For example, total textiles/clothing related employment in FIAC enterprises and GCEC enterprises stood at 43,000 at the end of 1985. On the other hand, it has been estimated that the employment loss in the handloom sector was as high as 40,000 between 1977-80 alone (Athukorala, 1986, p.99).

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1/ The share of local purchases in total raw materials imports of KIPZ enterprises has been as low as 4.9 per cent during 1978-85 (UNIDO, 1987).

It appears that this is in a nutshell what happened in the manufacturing sector at large. In one of only a few available quantitative attempts to ascertain the impact of trade liberalisation on the manufacturing sector, the Industrial Development Board found (i) that small-scale industries were more heavily affected than large-scale industries, (ii) that unapproved industries suffered large losses in production, investment and employment whereas approved industries experienced rapid growth and (iii) that the net effect for all industries was positive for production and investment but clearly negative (-6 per cent) for employment (Table 5).

To sum up, it appears that the current structure of Sri Lanka's industrial sector is of a precariously dualistic and vulnerable nature: The organised industrial sector, comprising approximately 3,500 industrial enterprises, is heavily dominated by petroleum and clothing, both in terms of production value and particularly in terms of exports. At the same time, some 200 large-scale enterprises (26 state industrial corporations and approximately 180 private establishments) account for nearly 80 per cent of total output (Perera, 1987, p.3). Finally, clothing which has proven to be the industrial sector's most dynamic branch in the recent past, is characterised by a strong reliance on foreign investment which to a considerable extent may be classified as footloose in nature.

On the other hand, both the small-scale industries within the formal sector as well as the informal sector rural and cottage industries seem to have declined recently in relative importance. Many of them were adversely affected by the liberalisation and have not so far been effectively linked to the expanding formal sector activities (despite the establishment of a Subcontracting Exchange under the IDB in 1980), nor have they been able to make substantial export contributions<sup>1/</sup>.

Table 5. The impact of trade liberalisation on the performance of manufacturing units (1977-1979)

	Approved Industries	Unapproved Industries	All Industries
A. Percentage distribution of firms according to nature of impact:			
i) Closed down/ adversely affected	24.4	30.0	28.8
ii) Benefitted	37.6	18.5	22.5
iii) Unaffected	38.0	51.5	48.7
	100.0	100.0	100.0
B. Percentage changes in selected performance indicators between 1977 and 1979			
i) Investment	+69.7	-20.9	+54.4
ii) Production	+20.5	-6.0	+12.8
iii) Profit	+39.5	-28.0	-1.6
iv) Employment	+7.1	-16.1	-6.0
v) Raw material use			
Local	-15.0	-16.1	-15.4
Foreign	+30.2	-27.6	+14.2

Source: IDB, A Study on the Effects of Liberalisation of Imports on Local Industries, (unpublished working paper), Colombo 1980.

1/ To enhance their export potential, the Export Production Village programme was launched in 1981 by the EDB. For details see section IV.C.2. below.



## B. Human resource planning in Sri Lanka

National human resource planning in the sense of systematically projecting requirements and availabilities to identify emerging human resource imbalances and devising corrective action does not exist in Sri Lanka. Although the employment issue has become a major priority over the years, human resource planning has curiously not been given a central position in development exercises.

In Sri Lanka, macro-level exercises projecting the labour force are few and irregularly spaced and, even where available, do not seem to constitute basic elements of a national human resource plan as such. For the first three post-independence decades, six exercises are on record - three prepared within the Planning Secretariat, Colombo; one by the Department of Census and Statistics (DCS, 1974) and two emerging from individual postgraduate research investigations abroad (Wilson, 1975; Abeykoon, 1976). In the late seventies and the eighties the initiatives assume a more ad-hoc nature despite the increasing policy concern for labour market imbalances. Apart from certain rough supply estimates which emerge as by-products of research investigations in related areas (Rodrigo, 1983; ILO-ARTEP, 1985), it has been possible to identify two individual projection exercises (Abeykoon, 1982; Rajapakse, 1986), a UNESCO sponsored projection (Korale, et al, 1983) and an estimate commissioned in late 1986 by the Institute of Policy Studies (IPS) located in the Ministry of Finance and Planning (Irvin, 1986). The IPS presentation also draws on an earlier exercise (1986) in the Planning Ministry which seeks to estimate the Labour Force, employment and unemployment, 1981-91. <sup>1/</sup>

The seventies were a decade of intense concern by policy makers over labour market developments, as reflected for example in the Crash Employment Programme 1970/71, the Five Year Plan (1972-1976) document and the President's own policy statement in June 1978 "...I place among our priorities, Employment first, Employment Second, Employment Third". Again, this was not accompanied by a concerted human resource planning approach at the national level.

Several factors contributed to this attitude. As already outlined in the preceding chapter, the late seventies saw national planning itself take a new turn. Disillusioned by the experience of the 10-year and 5-year national plans of the preceding years, the new government shifted to a new approach featuring investment programmes covering the public sector and only broad indicative suggestions for the private sector, within an overall macroeconomic framework mapped out for a five-year period ahead on a 'rolling' plan basis.

It is striking that although the output targets are set in advance, no visible attempt is made to work out in advance the employment implications of the envisaged aggregate and sectoral performance and to integrate them in a coherent national employment matrix. Both the Irvin study as well as a recent ARTEP report on Employment and Manpower Planning and Skill Development have stressed the need to establish a Manpower Planning Unit within the National Planning Division of the Ministry of Finance and Planning. The more urgent tasks of such a unit are identified as reconciling estimate pertaining to the labour force (size, structure, growth, etc.); monitoring current employment trends and identifying segments of the labour market where timely action is

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<sup>1/</sup> For a detailed review of these projections cf. Annex I.

required and devising mechanisms "to ensure that investment, output and manpower projections are adequately integrated into a single overall planning framework". (Irvin, 1986, p. 43). Some initiatives are on record in mid-1986 within the National Planning Division to generate employment demand forecasts, relating employment estimates to sectoral GDP growth targets.

Given the lack of systematic human resource planning it is not surprising that in Sri Lanka, functions and responsibilities in the area of human resources are dispersed over a number of Ministries and agencies. The broad institutional framework for human resource activities is outlined in Table 6 along with a brief indication of the major areas of operation/functions of each agency. Institutions whose human resource activities do not extend beyond the planning of their own staffing are excluded. In pursuance of their objectives various Ministries draw upon the activities of a number of operating Departments and Boards. The multiplicity of institutions is partly the product of historical evolution and ad-hoc decision taking.

As observed from Table 6, training is an area of activity cutting across a number of Ministries and State agencies. This involves in some cases (e.g. The Department of Telecommunications, Department of Railways etc.<sup>1/</sup>) training in order to impart the skills necessary for running the establishment/enterprise concerned and, in other cases (e.g. the National Apprenticeship Board) for the development of skills in general. The programmes include technical education, vocational training, apprenticeship training and in-service training. Apart from the State agencies there are also non-governmental establishments and organisations involved in various training and skill development activities (e.g. private polytechnics, computer firms etc.).

Currently, six different Ministries share the major responsibility for employment development and related human resource activity. These are the Ministries of Finance and Planning and Plan Implementation; the Ministries of Education and Higher Education; the Ministry of Labour; and the Ministry of Youth Affairs and Employment. With the government and the para-statal employing close upon one half of the total paid workforce, sector-specific or establishment-specific decisions within the state sector can indeed have a significant impact on the labour market. The two sub-sectors together employ over 50 per cent of the professional categories of doctors, engineers, scientists, technicians and several other sub-professional categories. Recruitment policies of the public sector thus determine the demand for a wide range of high and middle level employment.

In 1981 the Government employed as much as 19 per cent of all paid employees. The Ministry of Public Administration is responsible for human resource management for the government sector within the wider budgetary allocations and sanctions from the Ministry of Finance (i.e. General Treasury). Apart from the routine functions of hiring and firing, promotions, transfers and training, the Ministry is also entrusted with formulating plans for staffing state services. In practice, however, the latter function is rarely more than an assembling of cadre proposals submitted by individual Ministries. Mention may also be made of sector-specific employment planning or staffing aspects of individual Ministries such as Health (medical and para-medical staff), Education (teachers and teacher training), and Defence (armed forces), which involve large numbers and/or critical employment categories.

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<sup>1/</sup> These have not been included in Table 6.

Table 6. State agencies involved in human resource activities

Institution/Agency	1	2	3.1	3.2	4	Remarks
<u>Ministry of Finance &amp; Planning</u> National Planning Division Treasury Budget Division	X	X				National planning, control of State finances
<u>Ministry of Plan Implementation</u> Employment & Manpower Planning Division Employment Data Bank Department of Census & Statistics	X	X				Statistics, analysis, monitoring labour market trends (including foreign employment)
<u>Ministry of Youth Affairs &amp; Employment</u> Youth Employment Planning Division Small Scale Entrepreneur Development National Youth Service Council National Apprenticeship Board Graduate Employment Guidance Service	X	X		X		Job placement, training, self-employment promotion etc.
<u>Ministry of Education</u>			X	X		Educational planning, curriculum, educational statistics, teaching cadre etc.; non-formal education
<u>Ministry of Higher Education</u> University Grants Commission Technical Education Commission			X	X		Tertiary education (intake, courses, funds etc.)
<u>Ministry of Labour</u>	X	X		X	X	Remuneration, labour legislation, vocational training, industrial relations, foreign employment, labour statistics etc.

Note: 1 = Labour market information, statistics, forecasting etc.; 2 = Employment & Unemployment; 3 = Education & Training; 3.1 = Academic; 3.2 = Technical/Vocational; 4 = Welfare (remuneration, health etc.)

Several other Ministries too have their overall growth and employment promotion objectives (e.g. Ministry of Industries and Scientific Affairs, Ministry of Rural Industrial Development, Ministry of Women's Affairs and Teaching Hospitals) which have a bearing on the development and utilisation of human resources.

In Annex II the major areas and functions of the agencies listed in Table 6 are described in some detail. The evolution of the institutional machinery dealing with the major human resource activities is described in Rodrigo et al. (1986) along with the areas and functions acquired/handled by the key agencies in the course of evolution. The focus of this section is on the framework as it currently operates.

The change of Government in 1977 led to an overhaul of the institutional machinery. The Ministry of Planning and Economic Affairs was merged with the Ministry of Finance to constitute the present Ministry of Finance and Planning. While it retained the economic planning function, the subjects of Employment and Manpower planning and Regional Development were assigned to the Ministry of Plan Implementation. Two new programmes were assigned to the Employment and Manpower Planning Division, namely: the Job Bank Scheme and the Income Support Scheme. The Job Bank Scheme - also known as the Employment Data Bank Scheme - replaced the Employment Exchanges Scheme hitherto operated by the Ministry of Labour. Thus, over the years, the Ministry of Labour lost both the employment function (1970) and the employment service function (1977).

A subsequent reorganisation of Ministerial functions in 1978 led to further changes in the institutional framework. The employment function was integrated with Youth Affairs and placed under the charge of a new Ministry - the Ministry of Youth Affairs and Employment, established in 1978. This ministry was assigned the functions of graduate placement and the formulation and review of employment policies - both of which had earlier been handled by the Employment and Manpower Division of the Ministry of Plan Implementation.

Thus, the structure as it stands today is one of a wide dispersal of employment functions over a number of agencies, with insufficient coordination of activity and linkages. In the absence of a national integrated approach or a national economic plan in which an overall employment plan can assume shape, the functions of most institutions tend to get restricted to "the assessment of past and current employment situation and trends, review of employment and manpower policies, estimation of labour supply and possibly the forecasting of manpower based on past trends and the formulation of proposals and projects for intervention in respect of specific target groups" (Rodrigo et. al., 1986, p. 18).

In summing up what has been said so far on human resource planning in Sri Lanka it can be seen that (i) a coherent institutional framework has not yet been established and (ii) human resource planning has not been made an integral part of economic policy making. The situation is characterised by a fragmented institutional set-up which tends to create an unnecessarily high degree of overlapping functions and competences. Systematic projections of future employment requirements and in particular changing skill requirements are not carried out, at least not at the level of manufacturing sub-sectors where - in view of rapid intra-industrial structural changes - they would be most urgently needed. This may be largely due to the prevailing market oriented economic policy approach that is felt to be in conflict with the setting of

sectoral development priorities and targets from which human resource implications would have to be derived. However, it needs to be pointed out that market mechanisms are insufficient when it comes to dealing with the employment and skill consequences of industrial restructuring as in this area imperfect knowledge prevails and long gestation periods are needed to generate higher/differently skilled workers (Amjad 1986).

### III. THE REGIONAL SETTING: ECONOMIC PARTICIPATION OF WOMEN IN ASIA

This survey is intended: first, to give an overview of women in manufacturing in Asia, to focus on the women of Sri Lanka set in an Asian context (demographically, educationally and industrially); and second, to identify the possibilities for an increased participation and a more effective integration of women at all levels of industrial development. A section of this survey will focus on Asian women in the Export Processing Zones, which globally seen are becoming more and more of an Asian phenomenon and where women totally dominate the workforce.

With regard to measures of women's participation in production, it should be kept in mind that international classifications are derived from Western developed economies with other economic systems and structures than those of the developing countries of Asia. The predominance of household production, the large component of unpaid family labour, the smaller number of 'nuclear' households and the greater prevalence of various forms of extended families, migration back and forth between village and city, international migration, and different members of the family in rural and urban occupations demand a different categorisation and classification.

Biases also stem from the women themselves. Even when they are earners they may classify themselves as housewives or may be declared as such by their husbands. This might especially be the case in communities where women's participation in manual work outside the home is seen as lowering the family prestige. Biases may be further aggravated by the fact that statisticians, enumerators and interviewers often are male. All these factors tend to lead to an undercount of female workers.

The existing inadequacies and gaps notwithstanding, an attempt is made to place the working women of Sri Lanka in an Asian regional context.

#### The demographic setting

In trying to arrive at a picture of women's status in society, certain demographic variables are crucial such as sex-ratio, life expectancy, and infant mortality. The Physical Quality of Life Index (Morris, 1979) includes the latter two as well as the literacy rate.

#### Sex ratio

Worldwide there are 104-105 boys born to every 100 girls. The more inferior women's position is in relation to men in a society in the legal, economic, cultural and social spheres (according to Boserup (1970), this applies mainly to Confucian, Hindi and Muslim cultures), the fewer women of each age cohort survive in relation to men. This phenomenon, illustrated by the figures for China, India and Pakistan in Table 11, can either be countered by secularisation or aggravated by religious revivalist movements in the cultures concerned.

The women of Sri Lanka have attained the highest survival rate in South Asia; however, it is below that of the women of Southeast and East Asia, except for China (Table 7).

In a long-term perspective, Sri Lanka's sex ratio has improved during the last century, with a sex ratio of 114 men to 100 women in 1871, 111 men in

1953, 108 men in 1963 and 105 in 1971 (Women's Bureau of Sri Lanka, 1985). At the advanced level of the scale in Asia and the Pacific Japan has a sex ratio of 97 men to 100 women, followed by Australia, Indonesia and Thailand. With economic development life expectancy increases and in age cohorts of over 60 years women dominate. Hence in an older population there are more women. As Sri Lanka has a relatively old population its female population has increased accordingly.

Table 7. Sex ratio, life expectancy and infant mortality  
in selected Asian countries

Country	Year	Sex Ratio Male/Female	Life Expectancy at birth (1984) <sup>a/</sup>		Infant Mortality Rate (1984) <sup>a/ b/</sup> (Per 1,000)
			Male	Female	
		Column 1	Column 2		Column 3
Sri Lanka	1983	104:100	68	72	25
India	1981	107:100	56	55	90
Pakistan	1981	111:100	52	50	116
Bangladesh	1981	106:100	50	51	124
Thailand	1984	101:100	62	66	44
Malaysia	1979	101:100	66	71	28
Singapore	1984	104:100	70	75	10
Indonesia	1984	99:100	53	56	97
Philippines	1983	101:100	61	65	49
Vietnam	1979	83:100	63	67	50
China	1983	107:100	68	70	36
Rep. Korea	1984	102:100	65	72	28
Japan	1983	97:100	75	80	6
Australia	1983	100:100	73	79	9

a/ Columns 2 and 3 refer to 1984.

b/ Infant mortality rate is the number of infants who die before reaching one year of age, per thousand live births in a given year.

Sources: Col. 1: United Nations Demographic Yearbook 1984, New York 1986 (Vietnam: Thorborg, 1986a).

Col. 2,3: World Bank: World Development Report 1986. (Sri Lanka: UNICEF Country Programme, Situational Analysis of Children in Sri Lanka, 1987; figure refers to 1986.

#### Life expectancy

In Asia and the Pacific Japan has the highest life expectancy for women, followed by Australia and Singapore. At the low end of the scale are Afghanistan with 37.3 years, Campuchea with 44.9 years, and Bhutan with 45.1 years (UN, 1986). In Sri Lanka life expectancy is 72 years for women, on par with the Republic of Korea's rate and not far from that of the most developed ASEAN country, Singapore, and above that of Malaysia. Women survive men

longest (by more than 6 years) in the Republic of Korea and Australia. In Sri Lanka, Vietnam, Japan and the ASEAN countries women outlive men by 4-5 years, whereas in Bangladesh and India it is only one year. In Pakistan, however, men live 2 years longer.

#### Infant mortality

The degree of a country's economic and human development can inter alia be measured by how it treats its weakest groups, such as infants. If the infant is treated well and given appropriate attention and resources, the mother tends to receive the same.

Japan has achieved the lowest infant mortality rate in Asia. It is on par with the Nordic countries, which have attained the lowest rates in the world. In Asia the infant mortality rates of both Hong Kong and Singapore are below that of the U.S. rate of 1.06. In the region, only four countries have a lower rate than Sri Lanka, whereas the Republic of Korea and Malaysia are on the same level. All Sri Lanka's neighbours have considerably higher infant mortality rates.

#### The educational setting

The "Karachi Plan" of 1960 aimed at achieving "a system of universal, compulsory and free primary education of 7 years or more within a period of not more than 20 years (1969-1989)", for developing countries in Asia and the Pacific (UNESCO, 1960). Sri Lanka is the only country in South Asia to have attained this goal for women both on primary and secondary levels of education (Table 8).

On the tertiary level only the Philippines and Australia are more advanced, while Sri Lanka is even ahead of Thailand in terms of the share of women in total school enrolment at that level.

Given women's crucial and so far dominant role in child upbringing, women's literacy has a wider impact on the economic and social development of a given society than on just the literacy level (Boserup, 1970). It verifies the saying that if you educate a man, you educate an individual; if you educate a women, you educate a nation. Hence education of women is of strategic significance for any country that wants to develop.

The highest literacy rates of Asia are those of Japan. Otherwise, only the women of Thailand and the Philippines surpass the literacy rates of those in Sri Lanka and the Republic of Korea. The smallest difference in literacy rates between the sexes is found in the Philippines, which is also the country with the highest enrolment of women in tertiary education. Japan displays a slightly wider margin though barely a quarter of the females enjoy higher education. In contrast to Japan, Thailand, Singapore, Malaysia and Sri Lanka show a higher involvement of women in tertiary education although there is a wider gap in literacy rates between the sexes in these countries. Fewest women receive higher education in Bangladesh, while women make up a quarter of higher education students in countries such as Pakistan, India, China, Japan and Republic of Korea. The greatest discrepancy between male and female literacy rates is found in India (29.1 per cent) and China (28.1 per cent), whereas the rates of Bangladesh, Pakistan, Malaysia and Indonesia hover around 20 per cent.



Table 8. Literacy rates and female school enrolment in selected Asian countries

Country	Year	Literacy Rate		Female School Enrolment <sup>b/</sup>		
		Male	Female	Primary	Secondary	Tertiary
		Column 1		Column 2		
Asia <sup>a/</sup>	1984	n.a.	n.a.	43.0	39.0	33.0
Sri Lanka	1981	90.8	81.2	48.3 <sup>d/</sup>	51.9 <sup>d/</sup>	43.6 <sup>d/</sup>
India	1981	54.8	25.7	38.0	30.0	27.3
Pakistan	1981	36.0	15.2	31.0	24.0	25.6
Bangladesh	1981	39.7	18.0	33.0 <sup>e/</sup>	25.3 <sup>e/</sup>	13.6 <sup>e/</sup>
Thailand	1980	92.3	84.0	48.0	47.0	42.6
Malaysia	1980	79.6	59.7	49.0	45.0	36.3
Singapore	1980	91.6	74.0	47.0	50.0	38.0
Indonesia	1980	77.5	57.7	46.0	39.0	25.0
Philippines	1980	83.9	82.8	51.0	49.9	55.6
Vietnam	1979	90.5	78.3	47.0	50.5	35.0
China	1982	79.2	51.1	44.0 <sup>e/</sup>	39.0 <sup>e/</sup>	27.0 <sup>e/</sup>
Rep. of Korea	1970	94.4	81.0	49.0	45.0	25.0
Japan	1980	99.0	96.7	49.0	45.0	25.0
Australia	1980	n.a.	n.a.	49.0	49.0	43.8

a/ Asia excluding Arab States.

b/ Percentage of total enrolment.

c/ 1984.

d/ 1985.

e/ 1983.

Sources: UNESCO, Statistical Yearbook 1986, Paris 1986.  
(Japan, col. 1: Thorborg 1986a; Sri Lanka, col. 2: Ministry of Education and UGC, School Census 1985; China, col. 2: State Statistical Bureau, Statistical Yearbook of China 1984.)

The legacy of Confucianism might explain relatively high literacy rates for men and markedly lower ones for women in countries such as Singapore, China and the Republic of Korea (Thorborg, 1986a). The influence of Muslim and Hindi cultures could explain the wide discrepancies between men's and women's literacy rates in countries such as India, Bangladesh, Pakistan, Malaysia, and Indonesia.

While Sri Lanka has already achieved some of the main demographic characteristics of the more developed Asian countries in aspects mentioned above and is therefore far ahead of its South Asian neighbours and almost on par with most ASEAN countries, Sri Lanka is even more developed educationally and particularly in regard to universal and higher education for women. In this aspect Sri Lanka has attained the same level as the more advanced countries of East and South East Asia.

## The economic setting

### The economic activity rate

The economic activity rate of men and women in a country shows first how far a country has developed from the informal, subsistence level of development, second reveals which scopes the definitions have and third estimates the degree of women's measurable economic activity. The economic activity rate of women measures women's involvement in production as such outside the home in any setting, modern or traditional, by comparing the total economically active female population to the total female population of all ages. Globally seen roughly half of a given population would be of working age while the rest are below or above. A high activity rate can mean (a combination of) three things:

- the majority of able-bodied women of working age participate in productive activities and/or
- the scope of the definition is wider than in other countries and/or
- the country's formal sector is very large.

Table 9 shows that Thailand has the highest female activity rate - above 50 per cent - it is also the country in Asia with women spread over most types of work (Weekes-Vagliani/Grossat, 1980). Not unexpectedly Vietnam, due to war and ensuing lack of men, displays a high estimate of female activity. Being a planned economy with a policy of mobilisation of female labour further explains Vietnam's high standing as well as China's. Australia, however, is on a similar level, resulting from its high level of economic development. Bangladesh and Pakistan reveal the lowest rates in Asia, of 5-10 per cent, on line with those of the Arab world (ILO, 1986). Sri Lanka lags behind Malaysia and is on par with Indonesia in this aspect, although it is demographically ahead of Thailand and close to it educationally. In comparison to the advanced standing of Sri Lanka's women both demographically and educationally they lag markedly behind economically. This clearly shows that Sri Lanka has an unused economic potential in its female population. Considering their high level of educational attainment this underutilisation of women becomes even more worrying.

### Female labour force participation

All phases of economic transformation are currently going on in Asia, from pre-industrial society to industrial and from an industrial to a post-industrial one. The first phase is characterised by the majority of the population working in agriculture, the second by industry and the third by services and related fields; significantly, women as a group are the last to leave the least productive and therefore least remunerative activity: 4/5 of the female workers are still agricultural in India and China and 2/3 in Bangladesh, Pakistan, Vietnam and Thailand. In Sri Lanka and Indonesia roughly half of the female population is engaged in agriculture. The lowest shares are found in the most developed countries: Australia and Japan.

The first stage of industrialisation has usually been light industry. Women for example dominated paid employment in manufacturing because of the dominance of light industry in Japan in the early 1930's. This was also the case with China, where women made up 50 per cent of the industrial labour

Table 9. Economic activity rate<sup>a/</sup> and paid employment in manufacturing

Country	Year	Economic Activity Rate		Year	Paid Employment in Manufacturing: Women in % of Total Manufactur- ing Employment
		Male	Female		
		Column 1		Column 2	
Sri Lanka	1981	64.7	23.1	1984	37.8
India	1981	52.7	19.8	1983	9.6
Pakistan	1985	51.5	7.2		n.a.
Bangladesh	1983-84	53.5	5.4		n.a.
Thailand	1982	55.2	50.6	1979	44.0
Malaysia	1980	49.6	25.3	1976	45.0
Singapore	1985	59.8	34.3	1979	46.0
Indonesia	1982	57.9	23.2	1976	47.0
Philippines	1980	60.1	28.0	1976	47.0
Vietnam	1980-82	n.a.	47.0 <sup>E/</sup>		n.a.
China	1982	55.7	46.4	1983	40.3
Rep. of Korea	1985	46.3	29.3	1984	42.2
Japan	1985	60.5	38.6	1984	39.6
Australia	1985	75.2	45.7	1984	25.6

a/ Activity rate =  $\frac{\text{Total economically active female population}}{\text{Total female population of all ages}}$

E = estimate

Source: Unless otherwise indicated data are taken from ILO, Yearbook of Labour Statistics, 1986: Column 1 calculated from Table 1, Column 2 calculated from Table 5B.

Col. 1: Sri Lanka: Census of Population 1981.

Philippines, Vietnam: Thorborg, 1986a.

Col. 2: Philippines, Indonesia, Thailand: P. Phongpaichit, 1982, refers to the percentage of manufacturing labour that is female.

China: Calculated from Statistical Yearbook of China, 1984, State Statistical Bureau, People's Republic of China.

Japan: Statistical Handbook of Japan, 1985, Statistics Bureau, Management and Coordination Agency, 1985, Japan.

force in 1930 and 1932 respectively (Thorborg, 1980). Most of the ASEAN countries are still in their early to middle stages of industrialisation, moving from light labour-intensive female dominated industries to heavy capital-intensive male dominated industries. The Republic of Korea, which in the 1960's started its policy of export-led industrialisation, shifted from the promotion of light to heavy industry, particularly ship-building in the 1970's. Though heavy industry is capital-intensive and creates less employment in relation to the capital invested than light industry, male paid employment in manufacturing still grew by 50 per cent and female by 18 per cent during 1976-1984 in the Republic of Korea (ILO, 1986).

In 1960 women accounted for 21 per cent of the employment in industry in the developing countries, while their participation had increased to 26.5 per cent in 1980, with Asia witnessing the greatest increase (Paukert, 1984). Paid employment in manufacturing in Sri Lanka 1978-1984 decreased by 12 per cent for men while simultaneously it increased by 21 per cent for women. These trends might be explained by the fact that Sri Lanka is in its first stage of industrialisation with so far a concentration of development in light industry which traditionally is female dominated. With the diversification of industry from textiles to chemicals, non-metallic minerals, fabricated metal products, and "other manufactured products" now emerging in the EPZ and in FIAC-assisted projects in Sri Lanka it is hence of utmost importance that women are actively trained and channeled into these new avenues.

In most countries it is easier for women to obtain high professional positions than positions involving leadership and power. While the number of women in professional positions reflects a country's education of women, the number of women in leadership positions tends to mirror a society's traditional values vis-à-vis women. Only at an advanced degree of industrialisation when traditional cultural values break down, women move into leading administration and management jobs, such as in Australia and Singapore. With regard to Sri Lanka (Annex Table A-2), 8.2 per cent of the females in 1981 were employed as professional, technical and related workers, which reflects their high educational attainment. On the other hand, an advanced degree of industrial development is not sufficient; the impact of traditional culture and ideology can act as a hindrance, which might explain why there are so relatively few Japanese women in this category. The proportion of women may be high if, according to Boserup, women perform work outside the home in a strictly sex-segregated society, they work either in seclusion or in an all-female workplace. This phenomenon explains the high proportion of women professionals in Pakistan. With secularisation men would move into the women's sphere from the top. In this transitional period women would experience the worst of two worlds, with initially no expansion of their own job-market, but with their traditional top positions being blocked by men.

More women work in clerical work than in production now in countries such as Singapore and Japan, the latter still lagging behind, most likely for reasons explained above. (Annex Table A-2; production is combined with transport in this table.) Japan, however, is about to close the gap between these two categories, with a share of production workers increasing from 21.3 per cent to 26.5 per cent from 1960 to 1984 in comparison to 9.7 per cent and 23.9 per cent for clerical workers during the same time. In the rest of the region there are more women in production and transport than in clerical work, the ratios being: Indonesia 9:1, Thailand and Sri Lanka 5:1, whereas the Republic of Korea, the Philippines and Malaysia have one of 2:1.

Export Processing Zones

The first EPZ, Kaohsiung in Taiwan Province of China, went into operation in 1965. It was followed in chronological order by EPZs in the Republic of Korea, India, the Philippines, Malaysia, Indonesia, Sri Lanka, China and Thailand. Of an estimated 1.3 million people employed in EPZs in developing countries, almost 0.8 million were employed in Asia in 1986. The greatest number of employees in Asian EPZs and similar institutional arrangements is currently found, in declining order, in Singapore, the Republic of Korea, Hong Kong, Malaysia, Taiwan Province of China and Sri Lanka (see Table 10). These five economies account for 40 per cent of all employment in export-oriented industrial production in the developing countries (Kreye et al., 1987.)

Table 10. Total and female employment in Asian EPZs

Country	Year	Workers in EPZs in 1,000s	Year	Women Workers in EPZs in %
		Column 1	Column 2	
Sri Lanka	1987	45.0	1987	82
India	1986	17.0	1982/83	
Pakistan	1986	1.5		
Bangladesh	1986	4.5		
Thailand	1986	4.7		
Malaysia	1986	81.7	1979	75
Singapore	1986	217.0		
Indonesia	1986	13.0	1982	90
Philippines	1986	39.0		
Taiwan Province of China	1986	80.5	1983	80
China	1986	15.0 <sup>E</sup>		
Republic of Korea	1986	140.0	1982	77
Hong Kong	1986	89.0		

E = estimate

Sources: Col. 1: Unless otherwise indicated the data are taken from Kreye et al., "Export processing zones in developing countries: Results of a new survey", Working Paper No. 43, ILO, Geneva, 1987.

China: Currie, Jean, "Export Processing Zones in the 1980's", The Economist Intelligence Unit (EIU) Report No. 190.

Sri Lanka: G.C.E.C. - Greater Colombo Economic Commission.

Col. 2: Unless otherwise indicated the data are taken from ESCAP/UNCTC, Publication Series B., No. 8. "An Evaluation of Export Processing Zones in Selected Asian Countries", United Nations 1985.

Taiwan: Currie, Jean, No. 190.

Sri Lanka: Same source as Col. 1.

Textiles and electronics dominate among the industries in the EPZs. In 1975, 74 per cent of the employees of EPZs worked in those branches. There has been no marked diversification in the structure of production in the majority of EPZs since. Nearly half of the total labour force in Asian EPZs, over 300,000 workers, are employed in electronics factories. More than 70 per cent of the workers in the zones are women, in Asia over 80 per cent. Of them 75 per cent are between 14-24 years of age, and mostly unmarried, while 85 per cent of the Asian women are below 30 years of age, unmarried or married without children (Currie, 1985; ESCAP/UNCTC, 1985; Thorborg 1986b, 1986c).

Some sources indicate that productivity of monotonous machine and process directed work is considerably higher in developing countries than in industrialised countries. For example, productivity in Singapore is considered higher than in the U.S.A., but lower than in the Republic of Korea, Taiwan and Hong Kong. Other studies however maintain that there is no productivity difference between developing and industrialised countries.

The nature of technology has influenced the production organisation, making it possible to decentralise and use labour-intensive methods. By cutting the work process into a number of small segments, the learning process of the workers can be made very short and the productivity high, but the skill transfers are minimal. For instance the learning period was one day for the interviewed female EPZ workers in textile industry in Katunayake EPZ. If the majority of workers are young women that after a few years either marry away or are laid off, and left unemployed or channeled into other simplified assembly jobs the learning effect will be negligible. Among the expected advantages of many developing countries having established EPZs was skill transfer, transfer of know-how and technologies. With assembly type segmented work these transfers however have taken place only to a very limited degree.

Such know-how and skill transfer as takes place is generally carried out by male foreigners, and they, particularly in sex-segregated, patriarchal Asian countries, in order to avoid conflicts, prefer to teach their skills to other men. So women are most often left out of the learning process. Employees in supervisory and maintenance positions moreover are most often men and their terms of employment are often better than those of the female workers which tend to be laid off after 4 - 6 years.

Women workers in EPZs in developing countries learn few new skills, seldom acquire a minimum of technological know-how and usually find the roads to advancement closed to them as well. Trade union activities most often are curtailed or closely watched in the EPZs, even in developing countries with long trade union traditions such as Sri Lanka. Hence the main gains so far for women employees in EPZs in developing countries, according to most surveys, seem to be: a wage income (low as it may be) at their disposal, good health services, opportunities for after-work schooling, and on the social side a life outside the confines of the traditional family environment.

### Conclusions

In Asia Sri Lanka is unique in that it both educationally and demographically is at a much more advanced level than economically. This is so to an even higher degree for the women of Sri Lanka. The present policy of export-led industrialisation, however, makes insufficient use of the potential of well-educated women in positions demanding skill and leadership.

Given its well-educated labour force it seems wasteful to concentrate on an industrialisation policy that mainly creates the simplest types of assembly-type work for women. Singapore's policy of consciously creating and attracting more skilled work, although tailored to suit a relatively well-developed industrial economy, might be studied for measures that can be implemented in the Sri Lankan situation, as might programmes elsewhere that stimulate female entrepreneurship and the participation of women in management positions.

#### IV. THE ROLE OF WOMEN IN SRI LANKA'S MANUFACTURING INDUSTRIES

##### A. The current impact of education and skill development

As an intermediate institution between the family and the labour market, education has a critical role in determining the supply of skills. Its legitimization of credentials for employment and its socialization functions assist in channelling individuals to specific economic activities.

In Sri Lanka the system of free primary, secondary and tertiary education irrespective of class or gender since 1945 has promoted equal access of girls and women to general education. Nevertheless the influence of social norms has led to gender differentiation in the provision and utilization of vocation related education and consequently to imbalances between the supply of female skills and the demands of the labour market. Despite the fact that slightly more girls than boys are in secondary and in tertiary education institutions, the percentage of women in engineering and technical occupations has increased only marginally from 3.4 per cent in 1971 to 4.6 per cent in 1981. Socio-economic differentiation rather than gender affects access to education, except in the case of resident plantation labour and rural Muslims. National literacy statistics - 90.5 per cent male literacy and 82.8 per cent female literacy in 1981 - and educational attainment levels reflect the impact of educational participation over the years (Tables A-3 and A-4).

##### Educational participation

Age-specific participation rates in education in Sri Lanka are higher than in many other economically developing societies and urban-rural and gender differences in participation are minimal. 83.7 per cent of boys and 83.6 per cent of girls between 5 and 14 years, 41.2 per cent and 42.7 per cent respectively between 15 and 19 years, and 8.7 per cent and 9.0 per cent respectively between 20 and 24 years were enrolled in educational institutions in 1981 (Table 11).

Table 11. Age-specific participation rates in education, by urban/rural areas and by sex, 1981

AGE	TOTAL			URBAN			RURAL		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
5 - 9	84.4	84.5	84.2	86.6	86.4	86.9	83.8	84.1	83.6
10 - 14	82.4	82.9	81.8	85.2	86.4	84.4	81.6	82.1	81.1
5 - 14	83.7	83.7	83.6	85.9	86.4	85.6	82.7	83.1	82.4
15 - 19	41.9	41.2	42.7	46.4	44.9	48.0	40.6	40.0	41.3
20 - 24	8.9	8.7	9.0	9.7	9.4	10.2	8.7	9.1	8.7
5 - 24	55.8	56.0	55.6	56.2	55.3	57.3	55.7	56.3	55.2

Source: Census of Ceylon 1981.



Drop-out rates, however, are significant even at the primary level: 73 per cent of Grade 1 entrants complete Grade 5, 51 per cent complete Grade 8 and 24 per cent Grade 9 or 10. Inter-district and intra-district disparities exist with non-schooled and drop-out rates being relatively high among resident labour of Indian origin on plantations, rural eastern Muslim districts, in remote villages and settlements and in urban low income neighbourhoods (Ministry of Education 1981, 1984, 1985). Around 340,000 of a total enrolment of 3.5 million are reported to drop out between Grades 1 and 12. National drop-out rates are slightly higher among boys than among girls as reflected in the above-average presentation of girls in higher levels of enrolment (Table 12).

Table 12. Total enrolment in schools by sex and level of enrolment, 1985

Level	Total Number	Number of Girls	% Girls
Grade 01 - 05	2,221,457	1,067,860	48.3
Grade 06 - 10	1,294,112	664,348	51.3
Grade 11 - 12	132,688	76,501	57.7
Total	3,638,257	1,808,709	49.7

Source: School Census, 1985, Ministry of Education.

Between 5,000 and 6,000 students are admitted to the six universities every year according to available accommodation. The annual output of university graduates is between 4,000 and 5,000 and that of women graduates around 2,250, and it is unlikely that these figures will change substantially in the eighties (UGC, 1984).

#### Vocational aspirations and perceptions

Among the positive determinants of female labour force participation in Sri Lanka are parental aspirations for the highest level of education attainable for both sons and daughters and the wish reiterated in survey responses by around 90 per cent of secondary school girls in Grade 10 to be employed even after marriage. (Jayaweera 1976, 1979)

Several studies have found also that secondary school leavers in Sri Lanka aspire to professional and white collar jobs which are prestigious, lucrative or offer stability and security. Three surveys of vocational aspirations of Grade 10 girls in 1973, 1976 and 1979 showed that in all three years nine of the ten most popular vocations were in the service sector - teacher, doctor, nurse, clerk, stenographer, accountant, lawyer, air hostess and police. The tenth was engineering, a goal of ambitious boys and a lesser number of girls and a prestigious profession in Sri Lanka. Factory worker ranked among the ten least preferred vocations. (Jayaweera, 1976)

Aspirations had not changed substantially since the nineteen fifties (Green, 1952). Lack of recent surveys however precludes conclusions regarding changes in aspiration in response to the export orientation of the economy and the new demands for female labour utilization resulting from changes in the international division of labour.

Aspirations tend to be heavily influenced by the behavioural expectations conditioned by socio-cultural norms and gender-role stereotypes reflected in the educational system and the labour market. Sri Lankan schools have a common curriculum from Grades 1 - 10, but gender differentiation is seen in the organization of and enrolment in practical or technical subjects. At the GCE (OL) examination in 1983, for instance, girls offered largely conventional 'feminine' subjects - home economics (99.8 per cent of candidates), and weaving (92.2 per cent) predominated, whereas subjects like radio mechanics (2.9 per cent), woodwork (0.1 per cent) and metal work (0.4 per cent) were of only negligible importance.

The arts-science dichotomy also has implications for higher level employment. In 1985, 70.4 per cent of student enrolment in the arts stream and 42.2 per cent in the science stream in Grades 11 and 12 were girls (Annex Table 4). In science classes girls tend to be concentrated in bio-science subjects as they lead to professions such as medicine and boys are an overwhelming majority in physical science courses.

The school curriculum thus reinforces gender differentiation introduced in child rearing practices. Student preferences in tertiary and vocational education are apt to be influenced by their experiences, and many girls are thus channelled to 'appropriate feminine' occupations and limited to a narrow range of skills that subsequently places them at a disadvantage in industry.

#### Vocational education

The sector in the education system that helps to accelerate the flow of skills into the labour market is vocational education. In Sri Lanka vocational education is not only the least developed component of the education system, but the gender gap is also widest in this sector. It is necessary, therefore, to examine current enrolment patterns in vocational education in order to identify measures that may be introduced to enhance the participation of women in manufacturing industry.

Technical education in modern institutions began at the end of the nineteenth century and currently courses are offered in eleven Grade I Technical Colleges, twelve Grade II Technical Colleges while four affiliated units offer courses at two levels - Technician Level Diploma and Certificate courses for students with GCE (OL) attainment and craft or trade level courses for secondary school drop outs with Grade 8 attainment. Tertiary level courses are offered in these institutions only in accountancy and commerce.

These institutions had a student enrolment of 18,047 in 1986, of whom 38.2 per cent were women (Table 13). It is significant that while 61.9 per cent of the men students were enrolled in technical and craft courses and 34.9 per cent in commerce courses, 22.4 per cent of the women students were enrolled in technician and craft courses and 69.7 per cent in commerce courses. Furthermore, it is seen from enrolment data in Table 13 that although the percentage of women in technical courses has increased since the early seventies, gender disparities are still wide and current enrolment patterns do not augur well for women's future participation in remunerative jobs in the manufacturing sector.

The National Apprenticeship Board was established in 1971 as the chief state agency for training for industry. It offers training programmes at technician and trade craft level, primarily in the urban environment, but in the village sector too. Technician level courses are geared largely to the

need for middle level personnel in technology, and craft level programmes provide training for skilled mechanical or manual employment. Since the end of the seventies training courses have been offered for employment in clerical and hotel related services as well. The numbers of women apprentices have increased from 20 in 1973 to 1,152 in 1986 and from 2.6 per cent of total apprentices in 1973 to 5.7 per cent in 1978, 23.6 per cent in 1983 and 24.9 per cent in 1986 (Table A-5).

Table 13. Enrolment in technical colleges, 1973/1986

Course	Total	<u>1973</u> Female	Share of Females	Total	<u>1986</u> Female	Share of Females
National Diploma in Technology	1,278	99	7.7	691	196	28.4
Technician Certificate	1,369	75	5.5	4,143	669	16.1
Draughtsmanship Certificate	-	-	-	775	510	65.8
Technical Trades	2,400	5	0.2	2,705	63	2.3
Crafts	-	-	-	49	18	36.7
Tailoring	-	-	-	99	89	89.9
Home Science	-	-	-	110	110	100.0
Agriculture	-	-	-	206	67	32.5
Diploma in Commerce, Accountancy	3,199	1,017	31.8	3,250	1,537	47.3
Certificate in Commerce & Business	-	-	-	5,445	3,263	59.9
English	207	62	29.9	574	365	63.6
<b>TOTAL</b>	<b>8,453</b>	<b>1,258</b>	<b>14.9</b>	<b>18,047</b>	<b>6,886</b>	<b>38.2</b>

Source: Technical Education Division, Ministry of Higher Education.

It can be seen from Table A-6, however, that the expansion in numbers is largely a response to the international demand for labour rather than to local needs. Hence the number of women trained for electrical, electronic and mechanical trades is still unconscionably small in contrast to those trained for textile and garment manufacture and for clerical, hotel and domestic services. In the apprenticeship programmes in manufacturing industry 80 per

cent of the women were in textile and garment manufacture in the seventies. In 1986, 86.1 per cent of village apprentices were trained in textile and garment manufacture, but the percentage had declined to 47.6 per cent in urban areas largely as a result of great access to training in the printing industry. It has to be noted also that women apprentices are enrolled in only 23 of the 105 trade/craft level programmes. They are conspicuously missing in expanding areas such as jewellery manufacture, T.V., bicycle and refrigerator maintenance, manufacture of agricultural equipment, telephone and switch board mechanics, carpentry and masonry.

Imbalances between education and employment led to the establishment in the mid-seventies of technical education units for school leavers and drop outs as a major component of the non-formal education programme conducted by the Ministry of Education. These units (of which there are currently about 600) are attached to secondary schools with practical education facilities and instructors drawn from the school and the community. Full-time and part-time courses are organized and around 80 per cent of those enrolled in 1985 had had a ten year education. Table 14 gives the enrolment in these centres in 1978 and 1986<sup>1/</sup>. The majority of trainees have been women - 78.7 per cent in 1978 and 69.3 per cent in 1986. Over 90 per cent of all trainees are in programmes that are geared to the industrial sector, but 94.9 per cent of women in industry related programmes - 10,964 of 11,553 - are enrolled in dressmaking and sewing courses alone. Women also constitute a majority in traditional 'feminine' courses such as coir and reed industries, handicrafts and floriculture, and in a relatively new area - draughtsmanship. A recent evaluation of this course showed that only a small proportion of women trainees were in wage or self employment - 13.6 per cent of the full-time trainees' sample and 16.5 per cent of the part-time trainees' sample (Ariyadasa, 1985).

An agency which has been involved in vocational training since 1957 is the Department of Labour. It has three large vocational training centres in Urugodawatte, Narahenpita and Marawila, a Foreman's Training Institute, District Vocational Skill Development Centres, and Mobile Training Centres in different locations on the island. The numbers and proportion of women trainees were small in the seventies - 5.3 per cent in 1973 and 29.2 in 1978 (Table A-7). Recently the number of women trainees increased so sharply in response to the demands of the export-oriented garment industries that the majority of the trainees in the Mobile Centres were women - 77.4 per cent in 1982 and 61 per cent in 1986. Enrolment data in Table A-20 show that 5,668 of the 5,828 women trainees, that is, 97.3 per cent were in industrial sewing or dressmaking programmes.

It cannot be said therefore that the training programmes of the Department of Labour have made a major contribution to equipping women to meet the demand for technicians or skilled labour caused by the exodus of trained skills to West Asia or by the expansion of development programmes in Sri Lanka.

Another traditional training agency, but with a largely rural orientation, has been the Department of Small Industries. In 1978, there were 344

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<sup>1/</sup> A major programme is to be implemented in 1987 with SIDA assistance aimed at increasing the number of technical education units to 1,000 within the next 4 years (Ministry of Finance and Planning, 1986a).

Table 14. Enrolment in nonformal education  
(technical education units), 1978/1986

COURSES	Total	1978		%	1986		%
		Female			Female		
Motor Mechanism	152	-	-	-	761	-	-
Air-conditioning and Refrigeration	-	-	-	-	34	-	-
TV, Radio Mechanics	564	10	1.8	823	82	9.9	
Electrical wiring repairs	89	-	-	1,303	39	2.9	
Lathe work, welding	-	-	-	547	-	-	
Watch repairs	15	-	-	17	2	11.8	
Photography	-	-	-	19	2	10.5	
Building trades	-	-	-	165	21	12.7	
Draughtsmanship	-	-	-	204	108	52.9	
Wood work/metal work	74	-	-	-	-	-	
Gem cutting	-	-	-	94	16	17.0	
Printing	-	-	-	70	03	4.3	
Carpentry	55	-	-	968	-	-	
Masonry	36	-	-	101	3	2.9	
Coir industry	-	-	-	42	33	78.6	
Reed & Hana industry	-	-	-	110	103	93.6	
Tailoring	-	-	-	48	7	14.6	
	2,003	1,909	95.3				
Dress making	-	-	-	9,497	9,479	100.0	
Industrial sewing	-	-	-	217	217	100.0	
Embroidery/lace work	-	-	-	1,243	1,243	100.0	
Batick printing	903	818	90.6	-	-	-	
Making nets	-	-	-	14	14	100.0	
	79	30	37.9	40	38	95.0	
Handicrafts	1,950	1,807	92.7	145	128	88.3	
Agriculture	102	65	81.5	30	7	23.3	
	-	-	-	21	18	85.7	
Animal husbandry/Bee keeping	87	15	17.2	19	8	42.1	
Home science/Cookery	500	500	100.0	17	17	100.0	
Hotel trade	-	-	-	224	31	13.8	
Beauty culture	60	60	100.0	26	26	100.0	
Stenography	501	426	85.0	855	584	68.3	
Business administration	65	53	81.5	-	-	-	
<b>TOTAL</b>	<b>7,235</b>	<b>5,693</b>	<b>78.7</b>	<b>17,668</b>	<b>12,244</b>	<b>69.3</b>	

Source: Non-formal Education Unit, Ministry of Education.

training-cum-production centres conducted by the Department and 2,365 or 73.6 per cent of the 3,128 trainees were women. The traditional demarcation into 'masculine' and 'feminine' industries was again visible, with women predominating in textiles and mat weaving, sewing, lace making, coir and ornaments and men in carpentry, wood carving and brass and copper ware.

The situation has not changed appreciably in the eighties. In 1984, centres in thirteen industries such as palm and reed ware, mat weaving, sewing, lace making, carpet and leather work and ornaments exclusively trained women, and there were exclusively men in wood carving, copper, brass and coconut ware and paper. Both men and women were engaged in coir, pottery, cane lacquer, bamboo, hana and wood work. Currently there are 307 centres in carpentry, coir, art line textiles, paper, leather, wool carpets and lace and 60.6 per cent of the 4,953 trainees-cum-workers are reported to be women (Table A-8). There has been a reported decline in participation in these centres from 5,303 in 1975 to 4,953 and the decline was sharpest in industries in which a large proportion of women are found, whereas numbers have increased significantly in carpentry in which around 5 per cent of trainees are women.

The Department of Small Industries has been brought under the Ministry of Rural Industrial Development and crafts and toys are under the Sri Lanka Handicrafts Board of the same Ministry. The Ministry of Textiles has 24 textile training centres (chiefly handloom) with 444 female trainees and one male trainee. Women trained in all these centres are largely self employed. The liberalization of the economy has adversely affected the marketability of their products and reduced their income. The misfortunes of the handloom industry are a clear illustration of the vulnerability of these 'domestic' industries to the pressures generated by the open economy and their own constraints in technical inputs. The women in these centres are chiefly rural school drop outs from low income families with seven to eight years of education who have no other skills for or avenues of income generation.

The National Youth Council was established in 1968 to provide training and employment opportunities for school leavers. In its early years its programmes were confined to men, but there was a large concentration of young women in training programmes in agriculture and crafts in the mid-seventies. In 1984, 252 or 32.9 per cent of 765 trainees were young women enrolled exclusively in handwork and agricultural programmes. In 1987, 680 or 49.4 per cent of 1,377 trainees were women, enrolled chiefly in sewing-related courses with a smaller number in agriculture and gem cutting (Table A-9). The Council is a unit of the Ministry of Youth Affairs and Employment which has a strategic role in increasing training and employment opportunities for school leavers and university graduates. The Ministry has a Placement Service which has in the last six years placed 11,798 university arts graduates in employment, chiefly in teaching jobs.

Other Ministries offer specific training geared to their own human resource needs, but the numbers of women benefitting from these courses are limited. The Ministry of Fisheries has a Central Training Institute and four Regional Fisheries Training Centres offering 17 courses, but no women are seen to be enrolled in these centres. The Mobile Fisheries Extension Training programme introduced as a pilot project in 1984 in fishing villages, however, has reached out to both men and women. The numbers of women participating were 79 of 641 (12.3 per cent) in 1983, 268 of 640 (41.9 per cent) in 1984 and 31 of 330 (9.4 per cent) in 1985<sup>1/</sup>. The Department of Rural Development

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<sup>1/</sup> Data provided by the Fisheries Training Unit, Ministry of Fisheries.

provided training in handicrafts and sewing in women's development centres in the mid-seventies. These centres failed to provide adequate training in employable skills and have since been phased out. Only 1.3 per cent of the trainees in the Institute for Construction Training and Development are women.

A major state agency that has emerged in recent years in the orientation of women to self employment is the Women's Bureau of Sri Lanka established in 1978 in the Ministry of Plan Implementation and functioning since 1983 as a Division in the Ministry of Women's Affairs and Teaching Hospitals. In 1983, 4,172 women were reported to have been trained chiefly in animal husbandry and agriculture, but only 18.9 per cent of these women were trained to engage in manufacturing industries (Table A-10). By 1986 the numbers of women trained had increased to 7,748 and 5,865 of them (75.7 per cent) are reported to have started income generating activities. Non-governmental organizations which have training and production programmes have likewise, with few exceptions, confined themselves to promoting conventional 'feminine' industries.

The change-agents programmes supported by the Rural Development Research and Training Centre and by NGOs have had some success in mobilizing women to function as self reliant groups in economic activities. On the other hand the Home Development Centres of the Accelerated Mahaweli Development Scheme reinforce concepts of domesticity in a home economics programme which is irrelevant to the real life situation of women farmers and economic producers and to their need for off-farm employment.

A new venture in the plantation sector is the Congress Technical Institute at Kotagala which has 120 trainees enrolled, 20 in each of six courses in motor mechanics, maintenance, electrical work, carpentry, masonry and weaving. Only the 20 weaving trainees and four of the 20 carpentry trainees are women.

#### High level human resource development

At the tertiary education level and in high level human resource development, the historical prestige of universities as the chief agents of socio-economic mobility has resulted in the relative neglect of non-university tertiary education institutions.

Faculty-wise distribution of university students in 1975 and 1985 indicates that women are underrepresented in engineering and science although they constitute over 40 per cent of the total university population (Table A-11). The Open University has a student population of 16,306 of which 37.5 per cent are women and 68 per cent of students reading for the science degree are women. But all other industry related courses are at technician level and only 19.4 per cent of students in courses at this level are women (Table A-12). Technical Colleges have tertiary level courses only in commerce. Private institutions reflect similar trends. In the Institution of Engineers 32 of the 175 students are women. A new private institution - the Institute of Technological Studies - has 5 women in a class of 40 preparing for a degree in computer science and none in technician courses in computer science and electronics.

#### Training capacity and utilization

Employment studies have shown that there is a strong need for expansion of training opportunities particularly in middle level skills as well as for

improvements in the quality of training (Korale, 1983). However, it has been seen from the foregoing review that even the existing capacity of institutions has not been fully utilized to train women to participate more extensively in industry. The low proportion of women in industry-related training in formal and non-formal training programmes except in textiles and garment manufacture and the difficulties experienced by the Women's Bureau and women's NGO's in promoting training and production in manufacturing industries, raise conceptual issues that are crucial in the context of the economic roles of women.

Raising the low number of female trainees should receive priority in future policy and programme formulation. While it has not been possible to ascertain the total number of training programmes and trainees, the number in large-scale formal and non-formal training programmes which are a substantial component of vocational education can be used to examine the situation (Table 15). The number of women enrolled in courses related to high level industrial employment is 2,994. At technician and craft levels 27,917 are enrolled in training programmes accounting broadly for 11 per cent of the 255,000 that leave or drop out from secondary schools annually.

Furthermore, it is evident from the summary presented in Table 16 that training opportunities for women in the manufacturing sector are very unevenly distributed over the branches and that attention needs to be focused on deficit areas if the participation of women in industrial development is to be enhanced. Currently, 92 per cent of women trainees in the manufacturing sector are in training programmes related to the production of textiles, garments and leather alone.

Germane to this issue is also the fact that in 1981 (Table A-13), 52.2 per cent of women with GCE Advanced Level qualifications in the labour force, 42.0 per cent of the GCE (OL) qualified and 33.5 per cent of the Grades 6-9 leavers were unemployed and that the unemployment rate of women has been more than double that of men since the seventies - 18.9 per cent male unemployment and 36.3 per cent female unemployment in 1973 and 7.8 per cent and 21.3 per cent respectively in 1981/82. (Consumer Finances and Socio-economic Survey, 1973, 1981/82). Age-wise data in Table A-14 show that the unemployment problem is most acute for school and university leavers at the point of entry to the labour market.



Table 15. Summary: Output of trained personnel, 1985-87<sup>a/</sup>

Institution	Total Number Enroled	Number of women enroled		
		Total	in industry- related programmes	in textile- related programmes
<b>1) High level</b>				
1. University	18,217	7,802	1,419	-
2. Open Univeristy	3,820	2,197	1,538	-
3. Technical College	3,250	1,537	-	-
Institute of Technical Studies	60	5	5	-
Institute of Engineers	175	32	32	-
<b>Total</b>	<b>25,522</b>	<b>11,573</b>	<b>2,994</b>	<b>-</b>
<b>2) Technical and Craft Level</b>				
1. Open University	12,486	3,910	1,519	-
2. Technical College	14,797	5,349	1,481	89
3. N.A.B.	4,633	1,152	802	466
4. N.F.E. Ministry of Education	17,668	12,244	11,553	10,964
5. Department of Labour	9,550	5,828	5,763	5,668
6. Department of Small Industries	4,953	3,000	3,000	1,874
7. Department of Textile (Handlooms)	445	444	444	444
8. N.Y.S.C.	1,377	680	595	556
9. Ministry of Construction	25,599	330	330	-
10. Ministry of Fisheries	NA	378	378	-
11. Women's Bureau	6,623	6,623	2,028	601
12. Institute of Technical	35	-	-	-
13. Engineering Institute	120	24	24	20
<b>TOTAL</b>	<b>98,166</b>	<b>39,962</b>	<b>27,917</b>	<b>20,682</b>
		40.7% <sup>b/</sup>	69.9% <sup>b/</sup>	74.1% <sup>b/</sup>

a/ Latest available data have been used as specified in Tables A-5 to A-12.

b/ Each percentage share refers to the total given in the previous column.

Source: Tables A-5 to A-12.

Table 16. Summary: Female enrolment in training programmes in the manufacturing sector, 1985-87<sup>a/</sup>

Training Institutions	Technical colleges	Nat. Appren- tice- ship Board	Non Formal Tech- nical Units	Dept. of Lab- our	Dept. of Small Indus- tries	Nat. Youth Serv- ices Council	Wom- en's Bur- eau	T O T A L
1. Food, Beverages, Tobacco	-	-	-	-	-	-	564	564
2. Textiles, Garments Leather products	177	505	11,111	5,668	2,892	556	1,464	22,373
3. Wood, cork products, furniture	2	8	-	-	108	-	-	118
4. Paper and paper products, printing	-	97	3	-	-	-	-	100
5. Industrial chemicals, chemical products, petroleum, rubber, plastic products	25	24	-	-	-	-	-	49
6. Pottery, china, glass tiles, bricks	-	-	3	-	-	-	-	3
7. Iron, steel, non-ferrous basic metal industries	-	-	-	-	-	-	-	-
8. Fabricated metal products, electrical goods, scientific instruments, photography	594	114	125	3	-	-	-	836
9. Optical, jewellery, toys	18	11	182	-	-	39	-	250
<b>TOTAL</b>	<b>810</b>	<b>759</b>	<b>11,424</b>	<b>5,671</b>	<b>3,000</b>	<b>595</b>	<b>2,028</b>	<b>24,293</b>

a/ Latest available data have been used as specified in Tables A-18 to A-25.

Source: Tables A-18 to A-25 and related data from the relevant institutions.

## B. Branch-wise patterns of female participation

### Development trends

As described in more detail in Chapter I.A., significant changes took place in Sri Lanka at the end of the seventies flowing from the liberalisation of the economy, the reliance on the strategy of export-led growth and the promotion of private enterprise, particularly in industry. This new policy approach has had a strong impact on industrial employment patterns in general and those of women in particular.

The most visible consequence has been the emergence of a strong though lop-sided manufactured export sector on the basis of a predominantly female labour force. As has been pointed out by Joeke (1985), the recent industrialisation of many developing countries has been as much export-led as female-led. This is not only true in the sense that existing export industries have drawn on female labour resources but more fundamentally in the sense that the process of international industrial restructuring as such has to a large extent been driven by the very existence of cheap female labour which could be utilised to reduce production costs in labour-intensive branches or processes of manufacturing.

In Sri Lanka like in many other developing countries a package of incentives including duty free import of inputs and tax holidays were offered to attract foreign and local investors to export-oriented industry. Specifically, two export-processing zones were established at Katunayake (1978) and at Biyagama (1983) under the authority of the Greater Colombo Economic Commission (GCEC). Although GCEC has in more recent years sought to diversify away from garment industries into branches like chemicals, non-metallic minerals and other manufactured products, the former have remained of overwhelming importance. This is particularly true when looking at the structure of employment rather than at the number of units: In early 1987 (Table 17), of the total employment provided by GCEC-assisted enterprises 75 per cent has been in textiles, wearing apparel and leather products (meaning in fact almost exclusively in garment production).

As has been a common feature in EPZs all around the world, women account for the lion's share in employment: 81.6 per cent (1987) in the case of GCEC enterprises. Branch-wise their employment share stood as high as 92.4 per cent in food, beverages and tobacco, 90.8 per cent in textiles, wearing apparel and leather products and 83.4 per cent in non-metallic mineral products. In turn, the share of females working in textiles, wearing apparel and leather in total female employment under GCEC was 83.8 per cent, i.e. more than 30,000 in absolute numbers.

The large private sector garment factories thus are heavily dependent on female labour, particularly to reduce labour costs. In the EPZs, young, unmarried, 'trainable' women, chiefly between 18 and 25 years, with a ten to twelve year education, are employed. Their low wages, dispensability, and absence of maternity benefit payments act as an economic incentive for investors. These women are employed chiefly in gender-specific, semi-skilled, low technology employment, e.g. as sewing machine operators, working in night shifts when necessary, and often in stressful conditions. Their wages are reported to be the lowest in export-processing zones in Asia and their productivity second only to Singapore. (Voice of Women, 1983)

Table 17. Employment in GCEC and FIAC industries

INDUSTRY	No. of units <sup>a/</sup> (1980-86)	GCEC			FIAC	
		Total employed (1987)	Female	% Female	No. of projects <sup>b/</sup> (1978-85)	Total <sup>c/</sup> employed (1986)
1. Food, beverage and tobacco	4	471	435	92.4	14	1,120
2. Textiles, weaving apparel and leather products	24	33,937	30,814	90.8	52	19,260
3. Wood, wood projects, furniture	3	24	1	4.2	7	175
4. Paper and paper products	1	-	-	-	-	-
5. Chemicals, petroleum, rubber and plastic products	17	1,655	915	55.3	35	2,598
6. Non-metallic mineral products	12	1,648	1,374	83.4	14	2,329
7. Fabricated, metal products & equipment, engineering	16	149	13	8.7	26	741
8. Other manufactured products	45	3,237	2,215	68.4	15	2,062
9. Construction	-	-	-	-	28	1,949
10. Services	7	3,926	1,000	25.5	103	5,573
11. Agriculture & animal husbandry	-	-	-	-	27	4,915
TOTAL	129	45,047	36,767	81.6	312	40,722

a/ Approved and contracted.

b/ Approved.

c/ Gender-wise employment data are not available for FIAC-assisted industries.

Source: Public Investment Programme 1986-1990, National Planning Division, Ministry of Finance and Planning and GCEC.

These women are largely from low-income rural and urban families and their employment has brought them income, status and economic independence and improved living conditions of their families but, at the same time, they are vulnerable to adverse working conditions and labour control and have few promotional prospects. However, the situation in factories outside the Zone is reported to be generally worse with respect to working conditions and remuneration; but employees are from a wider age range and unionisation offers some measure of support. (Goonatilake, 1986).

While most though not all GCEC enterprises operate inside the country's EPZs there is a second category of foreign investment which comes under the Foreign Investment Advisory Committee (FIAC). These are exclusively joint venture companies outside the EPZs. Total employment provided by these enterprises has been slightly more than 40,000 (Table 17). Again, textiles, wearing apparel and leather accounts for a major portion (47.3 per cent) but obviously the overall degree of branch diversification is relatively high as compared with the record of GCEC. Gender-wise employment data are not available from FIAC; a survey of 18 FIAC-assisted firms undertaken in the context of this study (see Section IV.C.1.3.) yields a female labour force share of 86.4 per cent.

Hence, it appears safe to state that Sri Lanka's manufactured export drive in the past decade has created additional female industrial employment in the order of 60-70,000 jobs.

The rationale for and the economic gains from this specific type of employment have been a subject of controversy ever since international industrial redeployment has started on a large-scale. The high macro-economic costs of providing these employment opportunities (investments in infrastructure) have been questioned as have been the quality of employment (working conditions) and the long-term viability of jobs (UNIDO, 1980a; 1980b) in view of the enclave nature of production in EPZs. It is not intended to repeat all the well-known arguments here. While some more specific observations will be made later on in presenting the field survey results, it appears in general that "neither uncritical applause of the 'achievement' of the number of female jobs created in these enclaves (without checking what the alternatives were), nor simple denunciation of these arrangements as 'exploitative' (without offering any alternative employment opportunity), can stand economic scrutiny." (UNCTAD/INSTRAW, 1985, pp. 23-24). However, in view of the extremely high branch concentration of female export-oriented employment in Sri Lanka and further considering the trends in international technology developments and related foreign investment flows outlined above (see Section I.), the vulnerability of this segment of female industrial development can hardly be overstated.

As to the trend in fully domestic investments, it is noteworthy that projects approved by the Local Investment Advisory Committees declined from 1,081 in 1978 to 207 in 1985. Of 557 proposals approved between 1981-86, garment industries numbered 101 (export) and 368 (local). The Small and Medium Industries Project in 1979 and 1982 provided access to credit for entrepreneurs organising labour-intensive industries using local raw materials. 27 per cent of the loans given between 1979 and 1986 were for food processing, with 40 per cent of all industries being in the Colombo and Gampaha district.

This expansion of the private sector in industry has been accompanied by a shift towards the privatisation of public sector enterprises through transfer of ownership as in the case of three tile factories, the creation of public companies with government shares as in the milk industries, porcelain and rubber, or transfer of management as in the four former large government textile mills. Efforts have also been made to improve efficiency and productivity in public enterprises as they contribute about 60 per cent of total industrial production.

In particular, Ministries which manage industries with a predominantly female labour force have been restructured. A special Ministry of Textile Industries supports both public and private sectors. A Technical Training and Services Training Centre and a Clothing Industry Training Institute provide technical assistance to the respective sectors. The four government textile mills at Thulhiriya, Pugoda, Veyangoda and Mattegama have had foreign managing partners in the eighties and in consequence their productivity and quality of output have increased. Employment has increased in two of the mills and declined in the other two between 1981 and 1986. The oldest mill in Sri Lanka, the Wellawatte Spinning and Weaving Mills, was closed down as its machinery was considered to be obsolete, thus displacing a large number of male and female workers.

The Department of Textile Industries in the Ministry oversees powerloom and handloom centres which are chiefly in rural areas. The policy changes introduced in 1978 marginalised these industries (see also Chapter I.A.) as their output failed to compete with imports and with the products of the revamped textile mills. 62 of the 72 powerloom centres were sold to the private sector and most of the handloom centres which together had around 23,000 looms were closed down. Efforts have been made in recent years to revive the handloom industry to produce output of better quality and 282 centres were reopened by 1986 and Design Centres organised to assist them. (Ministry of Textiles, 1986).

Through the Clothing Training Institute the Ministry has encouraged and supported garment manufacturing units, both large and small, of which about 350 are export oriented including 95 with foreign investment. The total value of garments and textiles exports has increased from Rs. 5 million in 1971 to Rs. 140 million in 1977, Rs. 3,000 million in 1981 and to Rs. 7,899 million in 1985. Employment generation has been largely a by-product of private sector garment manufacture.

The Ministry of Rural Industries has two main areas of industrial activity. Food manufacture has been promoted largely through private enterprises<sup>1/</sup>; Nestle's Lanka with foreign collaboration has a monopoly of the manufacture of milk foods.

The Department of Small Industries with its long history of fostering rural industries continues to promote artline textiles, coir, pottery, carpentry, and in recent years, leather goods, paper products, carpets, musical instruments and light engineering. The Sri Lanka Handicrafts Board supervises the training-cum-production of crafts while the National Crafts

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1/ In 1986 the operations of the National Milk Board were taken over by a public company (Milk Industries of Lanka Co. Ltd.) with shares held by producers and investing public.

Council and the National Designs Centre have been established to improve quality.

Small industries have always tended to be a poorly developed segment of industry in Sri Lanka. Marketability has been a major problem and the 'open market' since the late seventies has compounded existing problems. Efforts have been made in recent years to transfer technology to improve these industries. In the coir industry mechanical crushers, mechanical defibring of husks and chemical bleaching of fibre have been introduced and the production of the more remunerative white fibre encouraged. Some pottery centres have been given electrically operated kilns to produce quality articles. Foreign collaboration has been introduced in the production of musical instruments. Nevertheless, these innovations have affected only a minuscule proportion of men and women. An issue that has to be examined more closely is the possible displacement of women from traditional industries as a result of new technology and mechanisation.

The Ministry of Industries and Scientific Affairs manages 10 public corporations - leather, plywood, paper, chemicals, ceramics, tyres, hardware, salt, mineral sands and mining and mineral development - and nine other industrial establishments. Some of these establishments are being turned over to the private sector and there appears to have been a slight decline in employment in these corporations. Other industrial corporations such as those dealing with gems, pharmaceuticals, steel and fisheries are under different Ministries.

The most important recent innovation in the informal sector has been the establishment of Export Production Villages (EPVs), an initiative of the Sri Lanka Export Development Board. These EPVs are intended to gear agricultural and rural industrial production to export by creating markets for village products, and thereby to increase village employment and income opportunities. The first Export Production Village was opened in Dambadeniya in the north west in 1981 and there are currently 32 such villages which have EPV (People's) Companies established under the Companies Act of 1982, with shareholders and directors and tax holiday incentives. These EPVs cover three areas of economic activity:

- (i) agricultural produce,
- (ii) processed agricultural products such as white fibre, yarn ekels, cashew, papain, palmyrah products,
- (iii) manufactured or assembled products - wooden handicrafts, reed tea packs, handloom textiles.

A quality Control Centre has been established at Mahakandara. The Dambadeniya EPV won the Presidential award for exports in 1985 and the Katugampola EPV the award in 1986. Women have been involved traditionally in the village economy. Export Production Villages have capitalised on this participation and initiated activities to increase the economic productivity and income of these women. (See the case studies in Section II.C.2. of this study.)

#### The participation of women in manufacturing industries - an overview

The Status of Women Study of 1979 found that the perceptions of many public and private sector employers were that women should be excluded from technical and skilled employment involving handling machinery and from

managerial jobs in industry and other sectors. Such views were in consonance with their image of women as weak, passive and subordinate. The majority of employers had also said that priority should be given in employment to men as 'bread winners' and that there were gender-differentiated 'suitable' jobs for women. In the view of profit-conscious employers, women were useful as docile labour, but their reproductive functions and relative immobility were perceived to increase costs of production. (Jayaweera, 1979).

These assumptions as well as the narrow range of women's skills have tended to confine the majority of women to semi-skilled and unskilled labour at the bottom of the skill pyramid. Recent developments have not changed the situation. Trends in female labour utilisation in 'world market' factories have shown that the new demands from employers have been for low-cost semi-skilled female labour. It has been seen, as in the case of the handloom industries and in traditional industries that are being mechanised, that women are more vulnerable to external pressures. Despite the need to replace the exodus of skills to West Asia<sup>1/</sup> and to meet the demands for technological development, most women are being channelled, by the vocational and educational process and by push and pull factors, into the lower levels of the employment structure and to jobs that provide little job satisfaction and few opportunities for upward mobility.

Developments in manufacturing employment are only partially reflected in labour force statistics as such data pertain largely to the formal sector in employment and to 'gainful' employment, and thus exclude the large numbers of women in the informal sector.

The Census of Industry carried out in 1982-83, for instance, covered all large-scale and medium-scale industrial establishments and a representative sample of small industries. It found that 87 per cent of the establishments covered were small units in which less than five persons were employed. These small manufacturing units accounted for only 30 per cent of the total employment computed in the survey and contributed less than 10 per cent of output, value added, expenditure or remuneration. Regrettably, the preliminary report does not provide gender-wise analysis of statistics and such data is still being processed for the final report. But its data indicate that there are three distinct sub-sectors in which it is necessary to examine the situation of women:

- (i) large and medium-scale manufacturing industries,
- (ii) small manufacturing units, and
- (iii) the amorphous informal sector of the economy.

Unfortunately there is a lack of adequate quantitative data relating to both (ii) and (iii).

According to national census data in 1971 and 1981, the percentage of women in the total labour force in manufacturing industry declined from 29.3 per cent in 1971 to 23.0 per cent in 1981 (Table 18). Female labour force

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<sup>1/</sup> For details on the sex and skill distribution of worker migration see Annex-Tables A-17 and A-18 showing that skilled female workers are of only marginal importance among all migrants for employment.



Table 18. Employment in manufacturing industries by sex, 1971/1981

INDUSTRY	1971			1981		
	Total	Female	Share of Females	Total	Female	Share of Females
1. Food	44,261	4,386	9.9	58,521	8,010	13.7
Beverages	3,324	146	4.4	8,873	208	2.3
Tobacco	24,403	8,928	36.6	13,452	4,102	30.5
2. Textiles	99,285	69,570	70.1	74,553	36,109	47.1
Wearing apparel	18,793	6,314	33.6	46,328	28,842	62.2
Leather products	793	140	17.6	1,686	737	46.7
Footwear (Leather)	3,317	489	14.7	5,022	762	15.2
3. Wood and cork products	37,851	1,198	3.2	46,775	1,028	2.2
Furniture	33,555	586	1.7	23,870	160	0.7
4. Paper and paper products	2,065	165	7.9	5,822	437	7.5
Printing, publishing	12,631	407	3.2	13,896	800	5.8
5. Industrial chemicals	1,381	121	8.8	2,266	338	14.9
Other chemical products	3,304	934	28.2	7,591	1,210	15.9
Petroleum refineries and products	900	42	4.7	3,167	171	5.4
Rubber products	4,919	598	12.2	7,484	951	12.7
Plastic products	551	162	29.4	767	241	31.4
6. Pottery, china & earthenware	5,240	2,003	38.2	15,898	5,767	36.3
Glass and glass products	957	87	9.1	835	90	10.8
Other non-metallic mineral products	14,144	1,984	14.0	30,170	3,172	10.5
7. Iron and steel basic industries	5,110	46	0.9	7,460	165	2.2
Non-ferrous basic metal industries-	40	-	-	612	-	-
8. Fabricated metal products	6,006	171	2.8	19,984	496	2.5
Machinery except electrical	2,821	176	6.2	2,237	169	7.6
Electrical machinery and apparatus	2,030	235	11.6	3,240	312	9.6
Transport equipment	521	22	4.2	2,884	148	5.1
Professional and scientific goods	430	31	7.2	836	139	16.6
9. Other manufacturing industries	10,773	349	3.2	12,202	1,120	9.2
<b>TOTAL</b>	<b>339,405</b>	<b>99,290</b>	<b>29.3</b>	<b>416,829</b>	<b>95,842</b>	<b>23.0</b>

Source: Census of Ceylon 1971, 1981.

participation rates in the manufacturing sector declined slightly from 12.2 per cent to 11.3 per cent during this decade. It is significant that urban participation rates increased from 14.0 per cent in 1971 to 20.4 per cent in 1981 while rural rates declined from 11.9 per cent to 9.2 per cent, indicating that the macro-policies outlined above had a strongly differential impact on urban and rural women.

Obviously the expansion of export-oriented factory industry in Colombo and its suburbs resulting from local response to the international division of the labour market increased female labour utilisation in urban industries. Likewise the collapse of traditional local and, particularly, rural industries in a new competitive open market has deprived women of a major income-earning activity which had been their 'forte'.

Women, however, are still concentrated in conventional feminine industries and the main difference in the scenario of the eighties is the phenomenon of 'worldmarket' factories and migration of employment to oil rich West Asian countries. It is significant, however, that while there was an exodus of male skilled labour to West Asia, very few women are in production activities and that by 1981 women constituted 76.8 per cent of migrant unskilled labour seeking employment in domestic service.

Branch-specific trends in female participation are reflected in Table 18 which gives gender-wise employment statistics in the nine 'divisions' of the manufacturing sector in 1971 and 1981 based on Census data.

The Public Investment Programme of the Government points out that "the structure of industrial production indicates heavy dependence on three product categories, namely food, beverages and tobacco; textile, wearing apparel and leather products; and chemicals, petroleum, rubber and plastic products". The statistics presented show that women's involvement is highest in the manufacturing sector in the second category (textile, garments and leather) and is significant in tobacco industries, pottery, chine and earthenware and in the manufacture of plastic products.

While the proportion of women in food manufacturing has increased from 9.9 per cent in 1971 to 13.7 per cent in 1981, their participation is yet relatively low while their involvement in beverage industries is insignificant. It is apparent, however, that there is considerable potential for women to be engaged in food processing and related industries and that there are currently gender-specific employment gaps that call for a stronger policy and programme focus. Participation has declined in tobacco industries but a significant proportion of women are involved in small-scale beedi industries.

In textile and garment manufacture a clear illustration of recent trends is that the proportion of women in textile manufacture has declined from 70.1 per cent in 1971 to 47.1 per cent in 1981, while that of women in garment manufacture has increased from 33.6 per cent to 62.2 per cent over the same period. These figures highlight:

- (a) the debacle of the handloom industry in the face of import competition as well as competition from the products of the large textile mills in Thulhiriya, Pugoda, Veyangoda that were modernised, and the consequent loss of income-generating activity for thousands of rural women, and

- (b) the rapid increase of garment factories employing largely female labour both within the export-processing zone established in 1978 and outside since the mid-seventies. Due to the same factors, leather products have also been a significant growth area in the employment of women.

The employment of women in chemical, petroleum, rubber and plastic products is not very high, except in the last category. This is a division in the manufacturing sector in which the potential for women's participation appears to be under-utilised.

The non-metallic mineral products division has a significant proportion of women in pottery, china and earthen-ware (36.3 per cent), but less participation in other non-mineral products such as glass, cement, bricks and tile asbestos. In the fabricated metal products, machinery and equipment division, women are found largely in the manufacturing of professional and scientific goods such as optical goods, particularly in the private sector, and to a lesser extent in the manufacture of electrical goods. Obviously, both the imbalance between secondary education, vocational training and employment and the small proportion of electronic industries in the export-processing zone (unlike in other Asian Zones) have limited the number of women in industries in this division.

The low proportion of women in other manufacturing industries such as jewellery manufacture and in paper and printing industries are issues of concern in the context of expanding industries. The lowest female participation rates are in wood and cork products and furniture and in iron and steel industries. The total labour force in wood and furniture manufacture is very large (second only to textiles and garments and food manufacture) and opportunities therefore appear to be extensive.

Recent data calculated by the University of Industries and Scientific Affairs through extrapolation of a sample of 5,000 establishments taken from the 1983/84 Census of Industries tend to confirm the lop-sided pattern of female participation in manufacturing (Tables 19 and 20). While they point to a much higher overall level of female participation for 1985 (33 per cent) in private sector manufacturing as compared to 1981<sup>1/</sup> they reveal that just 5 out of a total of 28 three-digit ISIC-groups (textiles; wearing apparel; food manufacturing and rubber products) account for as much as 80 per cent of total female employment in manufacturing. Moreover, it is evident from a comparison of these data with those given in Annex-Table A-15 that female manufacturing employment is at a much lower level in the public sector: Between 1975 and 1985 it increased from 11.6 per cent to 13.4 per cent in all public sector manufacturing corporations.

A stronger branch diversification of female employment has evidently not taken place in the course of recent industrial development. As shown in the above analysis, the participation of women in most manufacturing industries is still low and a significant increase is seen chiefly in export-oriented

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1/ It is not entirely clear, however, to what extent this is attributable to a de facto rise in participation or to different methodological approaches.

Table 19. Employment in private sector manufacturing industries by sex, 1985

ISIC	Industry	Employment (absolute numbers)			Share of females
		Male	Female	Total	
31	Food, beverages, tobacco	175,674	55,476	231,150	24.0
32	Textiles, wearing apparel, leather	50,430	117,672	168,102	70.0
33	Wood and wood products	46,700	2,562	49,262	5.2
34	Paper and paper products, printing and publishing	12,774	6,582	19,356	34.0
35	Chemical products, petroleum coal, rubber and plastic products	61,917	16,460	78,377	21.0
36	Non-metallic mineral products (except petroleum and coal)	59,212	11,279	70,491	16.0
37	Basic metal industries	4,787	268	5,055	5.3
38	Fabricated metal products, machinery and equipment	37,711	6,656	44,367	15.0
39	Other manufacturing	12,060	10,696	22,756	47.0
<b>TOTAL</b>		<b>461,265</b>	<b>227,651</b>	<b>688,916</b>	<b>33.0</b>

Source: Ministry of Industries and Scientific Affairs. (Based on a sample of 5,000 establishments from the 1983/84 Census of Industries undertaken by Department of Census and Statistics.)

garment, leather and 'other manufacturing' industries. Characteristic for the disadvantaged position of women are:

- (a) the narrow range of skills among the female population relative to the demand for high and middle level personnel and for skilled labour in industry, and to recent trends in expansion, particularly in food, beverage, wood, chemical, mineral, non-metallic, metal and electrical industries, and
- (b) the high unemployment rates of women - 36.3 per cent in 1973 and 21.3 per cent in 1981/82. (Consumer Finances and Socio-economic Survey 1973, 1981/82) and
- (c) the 'invisibility' and marginality of women in the informal sector in official data, plans and programmes.

The economic activities women engage in are characterised by low levels of skill and technology and lack of infrastructural support. They are often primary or sole income earners in the unstable slum and shanty environment in urban centres, occupied with food preparation or sale, home-based industries, petty trade or domestic service. With regard to female entrepreneurship in manufacturing, this is overwhelmingly concentrated in the informal sector, and total numbers are rather small (Marga, 1978, 1986).

Table 20. Branch concentration of female employment in private sector manufacturing industries, 1985

ISIC	Industry	Female employment	
		Absolute numbers	Share in total female employment
321	Textiles	83,343	36.6
322	Wearing apparel	33,026	14.5
311	Food manufacturing	32,540	14.3
312	Food manufacturing	17,787	7.8
355	Rubber products	15,160	6.7
Sub-total		181,856	79.9
Remaining 23 ISIC groups		45,795	20.1
TOTAL		227,651	100

Source: Table 19.

In small industries in the formal and informal sectors few women seem to have benefitted from technological or organisational changes. In the coir industry, on the coast, for instance, women are engaged in the lowest, hardest and most time consuming tasks in filling, emptying and cleaning husk pits, hammering soaked husks, and drying and cleaning fibre and spinning ropes often by hand. These women are generally school drop outs and their income is reduced by their dependence on middlemen. A significant proportion are primary earners in their families (Risseeuw, 1980). The vulnerability of women to recent changes is seen in the collapse of the handloom sector in the face of competition from the modern sector.

Self-employment has sometimes been perceived as the panacea for all employment-related ills in economically developing societies. In consequence, the internationally supported model of income generating projects geared to self-employment has been promoted during the UN Decade for Women by state agencies such as the Women's Bureau, non-governmental organisations and international and bilateral agencies. Many of these ad-hoc self-employment projects have been found to suffer from a lack of resources, technical inputs, quality control, institutional support and markets, and to generate little income for the disadvantaged participants (Skjonberg 1982, Jayaweera 1985). The projects that have been successful have been chiefly in agriculture, animal husbandry and retail trade. Self-employment in manufacturing industries has been chiefly in domestic industries with their unstable markets. On the other hand, women entrepreneurs who have access to resources have been encouraged by the Women's Chamber of Industry and Commerce and the Sri Lanka Business Development Centre to use their initiative, skills and supportive networks to launch into new and remunerative enterprises. (See the case studies presented in section IV.C.5. of this study.)

### C. Some case studies of female participation

Whereas in the previous sections the emphasis has mainly been on the overall framework and preconditions for the participation of women in manufacturing, in what follows the results of field research carried out within the context of this study will be presented.<sup>1/</sup>

The focus has been put on the level and characteristics of female industrial participation, on training and promotion aspects, on working conditions and on the major constraints facing their employment in industry.

Formal and informal sector activities have been used as the basic dividing line. In the former differentiation is made between public sector enterprises, private sector enterprises (domestic firms), foreign investment (under FIAC) and industry-related institutions. Subsequently, the concept of Export Production Villages (EPVs) as a new institutional approach to link rural industries to export markets is analyzed. As will be seen, the organizational set-up of EPVs puts them essentially between formal and informal industrial activities; accordingly, they have been classified as belonging to the semi-formal sector. This analysis is followed by a section on informal sector industries.

Two specific areas have finally been singled out that cut across the formal/informal sector classification approach. These are firstly the handloom sector which (as already broadly shown in previous sections) is a major employer of women and, after its virtual collapse in the late seventies, is now being revitalized, and secondly women entrepreneurs whose role is analyzed in the final section.

#### 1. Formal sector

##### 1.1. Public Sector Enterprises

###### Introduction

###### (a) Public sector large enterprises

National policies and recent developments pertaining to public sector manufacturing enterprises have been spelled out already in the overview of women in the manufacturing industry in Section 1.2. The purpose of the field study has been to ascertain, within the constraints of the time available, the impact of these policies on public enterprises and the current situation of women employed in these enterprises. Thirteen large state enterprises, one in each of the 9 ISIC Manufacturing Divisions, and one additional enterprise each in divisions where according to Census data more women are employed (Food, Textiles, Industrial Chemicals and Rubber, Pottery and Clayware) were purposely selected for interviews of management personnel and employees (Table 31).

The survey confirmed the uncertainties confronting the public sector in a period following the transition in national policies from direct to minimal intervention in the manufacturing sector. Many of the enterprises appear to be relatively impoverished and to be beset with internal problems. The

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<sup>1/</sup> The field research was carried out in March/April 1987.

Table 21. Women employees in selected large-scale public sector enterprises

<u>Manufacture</u>	<u>Enterprise</u>	<u>Grade</u>	<u>No. of Females</u>
1. Food	Ceylon Fisheries Corporation Fish Processing Unit, Mutwal	Unskilled Labour(casual)	None
	Sugar Corporation, Factories at Kantalai, Hingurana and Sevanagala	Unskilled Labour(casual)	Not available
2. Textile	National Textile Corporation, Factories at Veyangoda, Thulhiriya, Pugoda, Mattegama	Skilled Labour	Not available
	Silk and Allied Products. Development Authority	Technical, Scientific Skilled Labour	130 200
		Unskilled Labour	Not available
3. Wood Products	Plywood Corporation, Factories at Gintota, Katubedde, Amparai		None
4. Paper	National Paper Corporation	Technical, Scientific skilled, unskilled	128
5. Industrial Chemicals, Rubber etc.	British Ceylon Corporation	Skilled	57
	Sri Lanka Rubber Manufacturing Corporation		None
	Rubber Research Institute	Scientific	26
6. Pottery Bricks, Tiles	Ceylon Ceramics Corporation	Skilled and Unskilled	428
	Vijaya Tile Factory	Unskilled	30
7. Basic Metal Industries	State Hardware Corporation	Unskilled	5
8. Fabricated Metal Products	Colombo Commercial Company		None
9. Other Manufac- tured Goods	State Gem Corporation	Skilled Labour	15
		TOTAL	<u>1,029</u>

situation had been further aggravated by external factors such as changing tariff policies, competition from imports and the prevailing high interest rates. Policy decisions have been taken to close economically unviable enterprises or sections of such enterprises, such as the tile production unit of Vijaya Tile Factory (VTF). Negotiations have also been held with the private sector for management contracts and accordingly the Textile Corporation at Pugoda (TC), another study location, has opted for private sector management.

#### (b) Small industries

As traditionally there has been gender differentiation in participation in these industries, the survey was limited to small industries in which women are engaged. The sample was limited to 8 centres which produced handlooms, wool carpets, coir products, jute products, carpentry, ceramics, palmyrah products and handicrafts. They were located in the rural sector of Colombo District and a suburb (carpentry) and in the southern, central and northern regions. The small industries sector appeared to stagnate as a result of the impact of liberalisation policies and the influx of imported consumer articles since the late seventies (see also Chapter II.A.). Efforts are currently being made to resuscitate these industries and revamp some of them to compete in export markets, but the prospects are as yet unclear.

#### Participation of Women

Table 21 presents data relating to the participation of women in production related jobs in the selected large enterprises. There are no women in large enterprises in food, wood and fabricated metal industries. In all other industries female employees were relatively few and were employed in labour grades. Even in such grades, specific tasks such as those of boiler operators, fitters, maintenance and machine operators were not assigned to women. However, it would be wrong to assume that women did not participate in manufacturing tasks usually defined as 'heavy'. For example, female employees at the Vijaya Tile Works are an essential part of a team of 20 labourers assigned to produce 12,000 tiles a day and they contribute equally to the production process.

Five enterprises indicated an increase in the numbers, four a decrease and the rest no change in numbers. One of the enterprises showing an increase in the number of female employees in manufacturing grades is the Silk and Allied Products Development Authority. With the expansion of activities to cater to export orders, the number of female reelers and weavers has increased from 51 in 1985 to 98 in 1986. On the other hand, the Plywood Corporation which started in 1976 with approximately 100 female employees in manufacturing grades today has none.

#### Perceptions and attitudes of managers

It was clear that the management personnel in these enterprises had not addressed themselves specifically to issues relating to women in manufacturing industries and their views and attitudes were rather hazy except with reference to the implications of protective legislation. Some of the employers expressed the view that attendance is not good among married employees as they stayed away to look after children.



All employers admitted that there was no discrimination in employment practices but invariably males were preferred in view of the perceived need to protect females from "heavy and dangerous tasks" of manufacture. In fact, the managers admitted that they had "nothing against the employment of women" or they "never considered women not necessary", yet had to conform to traditional recruitment practices. Some of the managers pointed to the advantages of employing females as they can "stay longer in one place doing delicate work". Three of the employers expressed some fears regarding the extension of maternity leave for 3 months, saying it could be a problem for production as they were profit-oriented. Two employers however stated that maternity leave, or even an extension, would not constitute a problem.

In general, managers could not envisage future prospects for women in industry or even for their enterprises considering the problems they were confronted with in terms of unprofitability, loss of markets and poor management. The employment opportunities for both males and females would increase only with better demand for the manufactured products from international markets. In the present industrial context, the situation seemed bleak and prospects for increasing employment would remain poor unless corrective policy action was taken at the national level.

#### Women workers in state enterprises

47 women in the large enterprises, five each from the nine industries in which women were employed and two from the Plywood Corporation Colombo Office (labour grades) and 40 women in small industries (five in each production centre) were interviewed.

There is a preponderance of women in the age group 20 - 35 years. Older women (over 40 years) were in the Ceramics Corporation, Vijaya Tile Factory, B.C.C. and the State Hardware Corporation while a 14 year old girl had been recruited as an unskilled labourer to wrap yarn at the Handloom Centre. Enterprises engaged in textile production, weaving and production of intricate and delicate objects such as handicrafts and polished gems preferred young recruits. 49 per cent of the women workers in large enterprises and 71 per cent in small enterprises are unmarried. The larger proportion of the samples, 77 per cent in the large enterprises and 86 per cent in the small industries, are skilled workers but only 30 per cent of the workers in the large enterprises had GCE OL/AL qualifications while over 50 per cent of the women workers in small industries had at least the GCE (OL) (See Table 34). It is apparent that the small industries tended to absorb rural secondary school leavers who could not find alternative employment opportunities in the "modern" industrial or service sector. A distinctive characteristic of the employees was the number of educated women engaged in labouring tasks for which many had no special training or aptitude. Their male counterparts had better opportunities for employment in technical and supervisory grades. Many of the women expressed concern over their inability to obtain a position in keeping with their educational background but were reluctant to consider a change as they were well aware of the limited demand for employment at the national level.

#### Recruitment/training/incentives/promotions

A majority of the enterprises subject to the study had no formal scheme of recruitment. It was customary to recruit young females, resident close to the factory premises, with an average education of 8 - 10 years and recommended by the members of parliament of the area. Training was generally done at one of

the training institutes of the enterprise followed by on-the-job training or on-the-job training only. In the small enterprises the situation was different with 20 of the 35 respondents having undergone a vocational training, in a training centre maintained by the Department of Small Industries or the Department of Labour. Some of the training courses pursued were unrelated to the present tasks. None of the females in the large or small enterprises acquired new skills other than those required for the tasks they were presently engaged in. In fact there were no opportunities to obtain such skills. Knowledge was improved on-the-job. Most employees had not worked elsewhere and only three had had similar jobs earlier in the private sector.

Most women workers had sought employment to increase family incomes. Whatever the monthly wages of the female workers, a majority contributed a fair share to family income. This factor greatly enhanced the value of the job. Ten respondents in the large-scale group and 4 in the small-scale group turned their full earnings over to the family. Only one respondent was able to save her wage for building a house.

#### Working conditions and facilities

In the large enterprises (with the exception of the casual workers in the State Hardware Corporation), the employees were eligible for a regular salary and other allowances. The allowances were usually for exceeding work norms or for over-time work. In the case of the small enterprises regular salaries were paid only to a minority while the others enjoyed allowances on a piece-rate. With the exception of 13 employees at the Textile Corporation, Pugoda, BCC, Ceramics Corporation and the Gem Corporation who have a monthly income of over Rs. 1,500, the earnings of others ranged from Rs. 300 - Rs. 1,500 and hence were in keeping with the payments for labouring tasks in private sector enterprises. All enterprises having permanent employees both male and female provided a variety of incentives ranging from a cup of tea and food to incentive payments for production above an accepted norm. Two enterprises, the Textile Corporation and the Ceylon Ceramics Corporation, had incentives for attendance. Table 25 (page 64) gives an overview of income levels.

A marked difference was noted in the facilities available in the small enterprises as compared to those in the large enterprises. Employees in the small enterprises were seen to be working under extremely unfavourable conditions, lacking basic recreation facilities and as casual workers were ineligible to statutory leave regulations, including maternity leave.

The employees normally spent 9 hours at the work place with 1 hour usually being kept for intervals for tea and lunch. With the exception of a few employees who had heavy household duties, the rest were able to get to work on time. During the working hours these employees were expected to maintain work norms. The majority of the workers in both sectors were satisfied with the work norms and felt the norms reasonable. 12 employees in the large enterprises and 2 employees in the small enterprises expressed the view that the work norms were unreasonable. The reasons were linked to the lack of time to complete the assigned tasks. Trade union or related activity was non-existent among the employees of small enterprises. With the exception of two employees at the Handloom Centre, no one had initiated any labour procedures to better her position. The two employees had initiated a request for an Employer's Provident Fund (EPF) payment through correspondence.

However, their initiative had no results. In the large enterprises, with the exception of the State Gem Corporation, State Hardware Corporation and the Sri Lanka Rubber Manufacturing Corporation, trade union activity for the labour grades was permitted. Accordingly, 31 employees held membership in trade unions. Trade union activity had helped the members to increase salary scales, to get compensation and other welfare measures. At the Silk Factory, trade union activity had enabled the employees to get nursing intervals as a statutory obligation for the employer. At the BCC, 4 of the employees had participated in a strike and in protest meetings to demand job security and better welfare facilities. At the Vijaya Tile Factory, 4 of the employees had obtained compensation through a demand presented by the trade union.

The decision of the Ministry of Industries and Scientific Affairs to close the tile production section of the Vijaya Tile Works resulted in the loss of employment to female workers. As uneconomical public sector enterprises continue to be closed down, workers both male and female face retrenchment. In the case of VIF, the women were entitled to compensation of Rs. 20,000. All of them are now negotiating for the release of EPF. The employees at BCC expressed concern over the future of their jobs as the enterprise continues to run at a loss. However, the female workers did not express any fears of loss of employment due to factors such as mechanisation. It was as yet not a perceived threat to these workers. Generally, female employees in labour grades do not demand industrial rights due to fear of losing employment. Many of them are unaware of protective legislation available to them. The situation has however changed considerably in recent times with increased trade union activity and national level advocacy for benefits for women in the labour force.

#### Constraints and needs

Nightwork and health problems did not surface as major problems for this group of public sector employees. Night work for female employees was not a common practice since prevalent labour legislation imposed controls on the employers to ensure safety and protection to those females compelled to do night work. In three of the large public enterprises night shifts were done and ten employees had opted for it.

Only a minority of the employees in both large and small enterprises admitted work related health problems, resulting from dust, physical strain and accidents.

As society expects women to be almost exclusively responsible for domestic tasks, the satisfactory combination of economic and domestic roles is a constraint to effective participation. The reasons for difficulties were lack of extended family support to assist in household duties, taking care of infants and sick family members, lack of co-operation of family members and having to neglect household duties to maintain work norms. Those who had no difficulty in combining roles often had parents or relatives to attend to household duties. Some of them had the additional advantage of living close to the work place.

Some respondents in both groups (11) said they were not able to report for work on time because they had to combine roles. Three of these persons had transport problems. It was not usual for these female employees to take leave often.

Where gender-related problems were concerned it was apparent that the female employees in the labour grades did not find much difference in the treatment they received from their employers. The 8 employees in the large enterprises who did feel that they were discriminated against felt that the females were being given more than a fair share of work as compared to the men, and less opportunities for training and for promotion. Only 5 respondents in the large enterprises and one respondent in the small enterprises felt that being a woman in industry was a disadvantage for such reasons as lower pay scales and difficulties in performing heavy work.

With the exception of 12 respondents in the large enterprises and 4 in the small enterprises, the rest expressed satisfaction with their jobs. Most of those who expressed satisfaction were appreciative of the fact that they had a job at all. A few mentioned specific factors contributing to job satisfaction, such as having a training for the particular job and living close to the factory. Dissatisfaction arose mainly as a result of low wages. The other reasons mentioned were lack of permanency, unreasonable work norms and fatiguing work. Suggestions for improvement included: better wages and contractual priorities, improved facilities (including leave), improved management and production facilities, equal opportunities (including promotion) with men.

#### 1.2. Private sector enterprises

An important element of the liberalised economic policy since 1977 has been the promotion of private enterprise through the liberalisation of imports of capital goods and raw materials, tax incentives and the promotion of exports. Consequently there has been a noteworthy expansion of the private sector, in terms of the number of industries approved, capital investment and employment generation. In recent years, the policy of privatisation of non-viable public sector enterprises has further contributed to the expansion of the private sector.

#### Participation of women

Tables 22 and 23 present data on the participation of women in selected large and small private enterprises, respectively. Of the 18 large and 12 small enterprises selected for the study, 5 did not employ women, 4 in the former category and 1 in the latter. The Ceylon Tobacco Company, a well known transnational company which employed women earlier, had stopped recruiting women when the company expanded and introduced two shifts, because it was illegal at the time to employ women in night shift. The Ceylon Glass Company does not employ women because of the harsh working conditions, namely the excessive heat generated from the furnace. The Jinasena Group of Companies, where the Administrative Manager is a female, stated that the pump manufacturing work that involves loading and unloading of raw materials was too heavy and unsuitable for women. The reason given for not employing women in the manufacture of pianos in the Harmonics was 'difficult' and the difficulty was not specified. The only small enterprise in the sample that does not employ women is the Co-operative Industries, where the manufacture of steel involves heavy work which, according to the management, is not suitable for women.

Women constitute a high proportion in the majority of the enterprises, both large and small. The vast majority of females, however, are in labour grades while the skilled and semi-skilled employees are found in fields traditionally associated with women, such as weaving, spinning, and sewing.

Table 22. Women employees in selected large-scale private sector enterprises

Enterprises	Grade	Number of Females	Share of females in total (per cent)
1. Ceylon Meat Products	Supervisors	5)	26
	Labourers	21)	
2. Lanka Canneries Ltd.	Asst. Production Managers	7)	51
	Labourers Grade III	20)	
	Casual Labour	24)	
3. Ceylon Tobacco Co.		No females	0
4. Polytex Garments Ltd.	Sewing Machine Operators	1623)	2948
	Helpers	1316)	
5. Samson Manufact. Ltd. P.S.I.	Skilled Labour		79
	Unskilled Labour	275	
6. E.H. Cooray & Sons	Helpers	12)	15
	Cleaners	3)	
7. Woodplex Ltd.	Carpentry -		47
	Crosscutting	30)	
	Plaining/Finishing	10)	
	Packers	7)	
8. Penpals Ltd. K.G. Industries	Pen Assembling	5)	64)
	Stamping, packing	64)	
9. Upali Newspapers	Word Processing Typesetting	20	10
10. Chemical Industries Co.	Making Tea		3
	Washing-cleaning		
11. Moldex (C.V.Bhatt)	Machine operators		62
	Packers		
12. Jinasena Group of Co.		No females	0
13. Lanka Optical Industries	Optical lease sector	23)	30
	Foremen	7)	
14. Harmonics		No females	0
15. Ceylon Glass Co.		No females	0
16. Mascons Ltd.	Making tea bags	150	n.a.
17. Navaloka Polysaks Ltd.	Cutting & sewing	300	56
18. Pent House	Technicians	4)	27
	Skilled Workers	8)	
	Semiskilled workers	15)	

Table 23. Women employees in selected small-scale private sector enterprises

Enterprises	Grade	Number of Females	Share of females in total (per cent)
1. Country Style Foods Ltd. (SMAK)	Supervisors	4	50
	Labourers	182	90
2. Nikado Co. Ltd.	Labourers	150	75
	Supervisors	4	80
3. Gehantex Industries	Weavers		
	Packers	275	92
	Tea Bag Packing	10	100
4. Silk Factory Kandawala	Spinning	22	100
	Weaving	22	100
	Removing gum & dyeing	5	100
5. Nedlanka Ceylon Ltd.	Sawing	60	100
	Checkers	29	91
	Helpers	27	100
	Packers	12	75
	Electricians	0	0
6. Lady Carpenter	Carpenter-permanent	1	33
	Carpenter-casual	1	20
7. Anton Wickramasinghe Ltd.	Machine operators	0	0
	Casual labourers	15	
8. Sheik Industries	Labourers	108	65
9. Seimon Brothers	Cleaning bottles	0	0
	Filling bottles	12	100
10. Co-operative Industries	Steel Labourers	No females	0
11. Metalix Engineering Company Ltd. Light Engineering Products	Labourers-permanent	10	13
	Machine operators	0	0
	Formen	0	0
	Electricians	0	0
12. Crest Gems Ltd. Jewellery	Machine operators/trainees	35	70

Apart from garments, female machine operators were found only in leather and plastic goods. Even the relatively simple machines in the light engineering enterprise and in the envelope manufacturing factory were not operated by women. According to the management personnel in the latter industry, the machines had broken down due to improper handling by women. They added,

however, that women could have handled the machinery with more training. There was a small number of supervisors who had been promoted from skilled labour.

The only non-traditional area of skills acquired by women was found in Woodplex Ltd., where about 80 per cent of the workforce engaged in mechanised furniture manufacture are females.

Six enterprises recorded an increase in women's employment since 1975, ranging from 40 per cent to 200 per cent due to an increase in production. Two of these enterprises, Polytex Garments Ltd. and Mascons Ltd., manufacture garments and tea bags, respectively for the export market. Only in one enterprise in the sample (E.H. Cooray and Sons Ltd., furniture producers) has the mechanisation of the production process receded the recruitment of women; the decline in recruitment was 75 per cent.

#### Perceptions and attitudes of managers

The views and attitudes of the management personnel on female employment were, on the whole, extremely positive. Many managers commented that women were better workers than men, particularly in intricate and monotonous work. According to The Woodplex Ltd., their success was fully due to the high participation rates of women. The only negative feature identified by managers of some of the large enterprises was the reluctance on the part of women to work in night shift. A female production manager of the Canneries Ltd. confessed that she preferred to recruit males, even though women are better workers, because women do not like night shifts and occasional overtime work (which the management is compelled to introduce in the harvest season), due to domestic and transport problems.

Managers of 7 of the 11 small enterprises described women employees as "more hard working and better than men". Additional comments included "more reliable", "more accurate", "more loyal", "more conscientious", and "neater". Another positive aspect which they considered important is the "disciplined" nature of female employees and some managers commented, "ideal for repetitive work", "suitable for monotonous work". One enterprise, SMAK, stated that women could be paid less and that the less educated ones are more loyal than the more educated ones. Sheik Industries believed that although women work harder than men, it is not profitable to employ women owing to maternity and other leave facilities.

Metalix Engineering Company and Seimon Brothers held that heavy work was not suitable for women. The female carpenter who had 7 male carpenters working under her strongly believed that carpentry is not the type of work that women should take to because it involves rather strenuous activities such as sawing of timber. She added, however, that modern machinery should be introduced, in order to enable more women to venture into this avenue of employment.

#### Women workers in private industries

Sixty women from 12 large enterprises and 40 women from 8 small enterprises were interviewed (5 from each enterprise).

An overwhelming proportion of females was found in the age group 20 - 35 years. 53 per cent of the female workers in large enterprises and 65 per cent of the female workers in small enterprises are unmarried.

It is to be noted that 60 per cent of the female workers in the skilled and semi-skilled labour grades in large industries have GCE OL/AL Examinations, while it was only 40 per cent in the case of small enterprises (see Table 24). Furthermore it is obvious that, although the aspirations of most of these young women were for white collar jobs, they take to factory work as a 'phase' job through financial necessity to support themselves or their parental families. (The employees, both married and unmarried, contribute a significant proportion of their wages to family income.) Many, however, are compelled to continue in factory work, owing to their inability to find employment to match their educational qualifications.

Table 24. Educational levels in survey sample, by enterprise type (per cent)

Educational level	Public Sector		Private Sector	
	Large	Small	Large	Small
No schooling	4.3	0.0	0.0	2.5
Grade 1	-	-	0.0	2.5
Grades 2 - 5	6.4	7.5	5.0	5.0
Grades 6 - 8	19.1	12.5	20.0	22.5
Grades 9 - "O" level	40.6	15.0	15.0	27.5
"O" level/SSC	17.0	27.5	45.0	32.5
"O" - "A" levels	2.2	12.5	10.0	5.0
"A"	10.6	12.5	5.0	2.5
Total	100.0	100.0	100.0	100.0

Source: Field survey

NB: Figures may not add up to 100 due to rounding.

#### Recruitment/training/incentives/promotions

No enterprise in the sample had a formal scheme of recruitment. The more popular form of recruitment was through employees at the factory. This form of recruitment was adopted by 18 enterprises while 7 enterprises recruited those females recommended by the M.P. of the area. Most of those who sought employment had an average education of Grade 8 - 10. None of the enterprises had a special training scheme. All recruits were trained 'on the job' except for a few in the case of weaving. There are no opportunities to acquire new skills other than those that they need on the job.

Promotional prospects available were limited. Those in labour grades could be promoted as machine operators and in rare cases, the latter are promoted as supervisors. Nearly 60 per cent of the employees in large enterprises and nearly 80 per cent in small enterprises earn less than Rs. 1,000.

#### Working conditions and facilities

All employees, both in large and small enterprises, are paid daily, whether they are permanent or casual employees. Incentives offered by enterprises, both large and small, ranged from a cup of tea and production incentives to annual bonuses. Large establishments tend to provide much better facilities than the smaller ones.



Two large establishments and three small establishments did not provide any leave facilities, neither maternity nor other statutory leave of 42 days. Certain enterprises among these provided 14 days to 21 days of leave. It is to be noted that 7 of the 12 large establishments gave recently legislated maternity leave of 3 months. One of the large enterprises appears to have adopted an ingenious device to meet their labour demands and circumvent government labour regulations. Trainees are recruited and given a training for about one to one and a half years, after which they are encouraged to take sub-contracts to manufacture the company's products. Thus the enterprise does not have to pay EPF and other statutory facilities for about 60 per cent of the workforce (trainees are not provided any of these).

Only 3 of the large establishments and none of the small ones had trade unions. Of the 15 respondents from the three large establishments, 11 were trade union members. Trade union activities, according to the employees, had enabled them to get salary increases, incentives and/or bonuses. One factory which terminated workers' contracts during the off season had to stop the practice on trade union demand. There was a case of an employee who was assisted by the trade union when he was under interdiction.

It is to be noted that none of the employees of enterprises without trade unions had awareness of the need for a trade union. In spite of the low salaries and the absence of maternity and other statutory leave, the majority of employees stated that they were well looked after and that they did not find it necessary to establish a trade union.

#### Constraints and needs

Forty-five employees in large establishments and 35 employees in small establishments had no night work. Out of the 11 in large establishments who reported that they had night work, 6 expressed dissatisfaction with transport available to them. All 5 employees in small establishments who were engaged in night work revealed their dissatisfaction with transport facilities. It may be noted here that jobs with night work were mentioned as inappropriate for women, by employees both in large and small establishments.

Only 25 per cent of the respondents complained of any health problems. The more common complaints included chest pain and allergies. It was observed that protective measures were taken in only a few establishments. In certain establishments, no precautions were taken against even the most obvious health hazards: in one particularly dusty plant, the employees did not wear the masks given to them by the management.

A majority of the married employees including those with children appear to combine fairly successfully the roles of worker and mother/wife, but employees with very young children found it more difficult to do so. Some employees who did not have children found household tasks physically exhausting after factory work. Although husbands knew that their wives had tedious jobs, all except two wanted them to work to increase the family income.

Most employees did not perceive any gender-based discrimination at work. Only 8 out of 60 women stated that there are disadvantages in being women in industry as they cannot do heavy work.

Respondents made the following suggestions that may help to improve their situation and prospects: (i) insure better remuneration, (ii) improve training facilities and provide these without cost, (iii) improve transport

facilities and (iv) promote self-employment and provide loan facilities to encourage self-employment.

### Conclusions

For a majority of the women, economic difficulties ranging from extreme poverty to need for an additional family income had been the motivation to work as common labourers in industry. All were aware of the unemployment situation in the country and the restrictions on employment of females in labour grades in large industries. As such, each of them felt they were extremely lucky to be employed.

In general, the women were willing to put up with poor working conditions and facilities. The situation in the small enterprises was considered deplorable with workers deprived of statutory legislation; pay and allowances were poor, especially in the public sector. The factory premises were often lacking in basic amenities such as a canteen and rest room.

The situation was appreciably better in the large-scale industries, with the public sector enterprises having somewhat better facilities for female employees than the private sector firms. A special advantage of the public sector firms is the extra number of public holidays.

In the large-scale public industries, the women interviewed received the highest wages: no less than 38.3 per cent of the sample earned more than Rs. 1,400/month, with over 10 per cent earning more than Rs. 2,000 (Table 25). Whether this is due to a better financial incentive system in the large-scale public sector firms or to the somewhat better opportunities for promotion in the public sector was not established by the survey. In the public sector training facilities and the distribution of tasks also tended to be somewhat better organised. Wages were lower in the public small-scale sector which employs many casual workers. Although the overall situation is definitely worst in the small-scale sector (public and private), the situation in these enterprises is mitigated somewhat by the more informal working arrangements and the more relaxed atmosphere.

Table 25. Wage levels in survey sample, by enterprise type (per cent)

Wage level	Public Sector		Private Sector	
	Large	Small	Large	Small
(No salary received yet)	-	5.0	-	-
Rs. 500	8.5	42.5	6.7	15.0
Rs. 500 - 600	19.1	42.5	10.0	20.0
Rs. 601 - 700	4.3	2.5	3.3	20.0
Rs. 701 - 800	6.4	-	8.3	15.0
Rs. 801 - 900	-	2.5	11.7	2.5
Rs. 900 - 1,000	2.2	-	18.3	5.0
Rs. 1,001 - 1,100	4.3	5.0	16.7	5.0
Rs. 1,101 - 1,200	8.5	-	15.0	5.0
Rs. 1,201 - 1,300	6.4	-	3.3	7.5
Rs. 1,301 - 1,400	2.2	-	3.3	-
Rs. 1,401 - 1,500	10.6	-	3.3	-
Rs. 1,501 - 2,000	17.1	-	3.3	5.0
Rs. 2,001 - 3,000	10.6	-	-	-
Total	100	100	100	100

Source: Field survey

NB: Total may not add up to 100 due to rounding.

It is obvious, that the majority of female employees in all types of factories were educationally over-qualified for the type of work they did. The larger part of the workers is educated at Grade 9 level or above; in the large scale private sector a majority even had "O" levels or above. Combine this with the fact that training facilities for women are on the whole inadequate, and the conclusion that a human resource is not used properly presents itself. In many cases, the workers themselves came up with suggestions for improvements, but these are unlikely to be implemented unless action is undertaken at the national level.

### 1.3. Foreign investment under FIAC

#### Introduction

A number of studies have been carried out on companies in the Export Processing Zone (EPZ) of Sri Lanka. (Voice of Women, 1983; Ramanayake, 1984.) Some of these have focused on women's role in manufacturing and on how to fuller use women's potential.

So far equivalent surveys have not yet been made on firms under the Foreign Investment Advisory Committee (FIAC). This investigation is an attempt towards filling this gap. In studying women's situation this survey will focus on labour force, education, training, organization and work conditions.

The field survey of firms under FIAC was undertaken in March 1987. Of the 18 (out of 152) companies investigated, 13 were based in rural areas, 2 in urban and 3 situated in a suburban environment. Out of 13 factories in the countryside 5 were placed in industrial estates close to the EPZ. Nine projects were in Textiles, 5 in Chemicals, 2 in Other Manufactured Products and one each in Food and Agriculture. The investigation is evenly distributed between those countries that collaborated with most projects in Sri Lanka. All countries with more than 2 projects in Sri Lanka are represented in this survey.

#### Labour force

The firms in this survey employ 15 per cent of the labour force of firms under FIAC. The percentage shares of women working in the different kinds of manufacturing is similar, though somewhat lower, to those of the EPZ (Table 26). So far there exist no gender wise employment data for FIAC-assisted industries. A total of 41 women were interviewed. One was a manager, 3 were administrative staff, 10 supervisors and 27 workers. The majority of workers were in the age range of 18 - 26 years, and had not worked anywhere else.

#### Education

Most factories had laid down minimum educational requirements. Nine firms required as a minimum 7 completed grades, whereas 7 companies demanded GCE-level. The highest demand was made by an electronic company requiring A-level. Regardless of the work people were recruited for, rural factories demanded less education than the urban firms surveyed. They normally employed workers from 9th grade; if they employed older women, the 6 or 7th grade. In rural factories the greatest discrepancies in education between women workers could be found. Some had not completed school while others with A-levels did the same type of assembly work because there were no alternative jobs.

Table 26. Female employment under GCEC and FIAC, by branches

	EPZ	Total	FIAC
	(end of 1986)		Field Survey
No. of units	119	152	18
Employment	45,047	40,722	6,086
Female employment total	36,767	n.a.	4,757
% of a) total	81.6		78
b) textiles	90.8	n.a.	86.4
c) chemicals	55	n.a.	40
d) other manufactured products	68.4	n.a.	74
c) food industry	92.4	n.a.	85

Sources:

1. FIAC list of "Projects Engaged in Agriculture and Manufacturing Industry including Textile Projects in Operation" approved from 1977-1986.
2. Public Investment Programme 1986-1990, National Planning Division, Ministry of Finance and Planning and GCEC.

Note: Source 1 above lists 152 projects in operation 1977-1986, while source 2 mentions 312 projects, 1978-1985. As projects not yet in operation are of less interest the former figure is used.

Almost half of those interviewed had GCE O-level in arts; 12 workers and 6 supervisors, and almost a quarter had reached GCE A-level in arts up to 3 pass: 7 workers, 1 supervisor and a typist. The highest educational level attained by the workers in this survey was GCE A-level in Science, up to 1 pass, by a worker in an electronics industry, who was paid the highest beginning wages as well.

In the samples of educational attainment of women working in and outside of the EPZ and in FIAC-assisted units the higher educational level of EPZ workers than of those outside the zone applies as well to those working in enterprises under FIAC (see Table 27).

Recruitment of work force

The decision to locate a factory outside Colombo, in rural areas, was generally influenced by local members of Parliament (MPs). This also led to a preference for workers from their rural constituencies; in some cases there were actual restrictions against outside labour. Generally, the number of workers recommended by an MP would far exceed the number needed. Otherwise, recruitment tended to be informal, though higher level staff would be informed about vacancies through the newspapers.

Training

Apart from textile factories, in-plant training was the rule. In all firms under investigation there were some possibilities for promotion. But whatever the educational background of a worker, it was almost impossible to be promoted to a staff position. Only women workers in the products control department had this opportunity. When women were employed in less traditional

Table 27. Educational levels of female workers in FIAC-assisted industries

Educational Attainment	EPZ		Outside		FIAC	
	No.	%	No.	%	No.	%
1. Grade 5, 6 & 7	-	-	7	14	1	3
2. Grade 8 & 9	3	6	11	22	1	3
3. Grade 10 Arts	6	12	5	10	4	10
4. Grade 10 Science	2	4	-	-	-	-
5. GCE OL Arts	19	38	23	46	18	45
6. GCE OL Science	4	8	-	-	2	5
7. GCE AL Arts - passed in 1 - 3 subjects	3	6	2	4	9	23
8. GCE AL Arts - passed in 4 subjects	9	18	2	4	1	3
9. GCE AL Science - passed in 1 - 3 subjects	2	4	-	-	1	3
10. GCE AL Science - passed in 4 subjects	2	4	-	-	3	8
TOTAL	50	100	50	100	40	100

Sources: FIAC: this survey.

EPZ, outside EPZ: information from GCEC (confined to Colombo and neighbouring districts).

Hema Goonatilake, Sarith Goonasekere, Soma Jayakody, "Work, Conflict and Consciousness: The Case of Women Factory Workers in Sri Lanka", draft, Colombo 1986.

types of work, e.g. on computers, the situation was somewhat better, either because foresighted female staff supported promotion or because foreign managers preferred introducing women to new techniques because they were more willing to learn and more co-operative.

There are indications that due to the greater variety of production processes the learning period is more extended in FIAC-assisted units than in EPZ-industries. The learning time of all EPZ-workers in textiles interviewed was one day, while it was at least 2 weeks for those in FIAC-assisted units in the same industrial branch.

#### Worktime

The one-shift system dominated totally with 14 out of 18 firms using it. One company had a 2-shift work time for all, whereas 2 others used 2-shift for women and 3-shift for men. Only one mill employed 3 shift for all. Three out of four enterprises using multiple shifts were in textiles.

Only 1 out of 18 companies had a 40 hour week; this electronics company also paid the highest wages. Six had a 45 hour week (Monday through Friday). On a regular basis most hours were worked in textiles and agriculture; the lowest wages were also found in these branches.

Only one factory had a general three-shift system for both men and women, night shifts for women being introduced after the abolishment of restrictions on such work. There was a special rest room for women coming from night shifts. One rural firm stopped night shifts for women because women were also expected to do domestic work and therefore were unable to rest sufficiently after night shifts<sup>1/</sup>. In two factories, a three-shift system for men and a two-shift system for women was in operation. As this meant that men were more productive than women, staff preferred to give training and promotion to men. Where shifts were equal for men and women, these problems did not occur. The two-shift system however involved a transportation problem for women workers. Transport problems were also a reason for introducing a five-day work week with long hours in some factories - this saved the employees a return trip on Saturdays.

Working hours (including overtime) were longest in the textile industry, particularly in the countryside and at locations (e.g. industrial estates) where many lodgers (workers living in dormitories) were employed. During production peaks, extra overtime was common in the textile industry. The working hours were shortest in new industries, such as electronics and electronic ceramics. The long overtime in rural factories was partly a result of workers' requests (especially lodgers), as overtime implied a considerable increase in income. The long working hours however also led to increased absenteeism and a higher labour turnover rate.

#### Wages

Wage rates are highest in the chemical industry, in electronics and electronic ceramics, while they are lowest in textiles. The wages range for new employees in textiles was Rs. 450-739 and for skilled workers it was Rs. 800-1,500. In some chemicals firms the initial wages were similar to those of skilled workers in textile industries (Table 28). The highest initial wages are found in electronics.

#### Trade unions

Out of 18 companies only 2 had a Trade Unions (TU), 1 had a workers' committee, and another after managing to dissolve the TU instituted a management committee. These 4 companies surpassed the rest of the firms in this survey in regard to relations between workers and management, and also in terms of working conditions.

The company with a workers's committee was also the only company in this survey with a female manager. This manager stimulated a dialogue with the female workers, and favoured women in promotion. It was the only company where women in the administration were in charge of the computers and were trained to use them.

The factory with a management committee was a Japanese one and was run wholly along Japanese management lines, with all of the workers in production groups in constant dialogue with the management. Besides that, all workers spoke Japanese, had been with the mother company in Japan for extended periods, and continuously had Japanese technicians working with them. As also

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<sup>1/</sup> The three-shift system is common in the EPZ. It is disliked by both men and women.

Table 28. Wage levels in FIAC-assisted industries

Type of industry	Wages in Rs./month (March 1987)	
	Beginner	Skilled and semi-skilled Worker
Textiles	507	900
Electronic ceramics	750	1,400
Textiles	556	800
Food	550	1,000
Chemicals	567	1,200
Textiles	507	1,500
Textiles	450	825
Chemicals	810	1,300
Textiles	550	800
Textiles	650	1,200
Textiles	739	1,120
Textiles	600	1,400
Textiles	700	1,000
Chemicals	750	1,800
Agriculture	705	1,200
Electronics	1,080	2,050

Source: Field survey.

both the work week was relatively short (45 hours with Saturdays off), wages were relatively high (starting from Rs 750, most earned Rs 1,200) and job satisfaction seemed high. In the other factories, the management appeared to have an exclusively negative view of any sort of workers' representation.

#### Social conditions of workers

All the women interviewed had in one way or another helped to support their immediate family. One young woman living with her parents handed over the whole salary to her mother which she saved for her and only kept for herself what was needed for the busfare. With one exception all mothers of those interviewed worked at home, whilst their fathers were engaged in small-scale business, fishing, agriculture, etc., worked as clerks, workers or drivers. Women workers expressed satisfaction with their work in the Japanese managed factory, which also had airconditioning, not because of production requirements, but because it made people feel better and produce more.

#### FIAC-assisted and EPZ units

The study of FIAC-assisted units established that in relation to EPZ units:

- The composition of the labour force and the proportion of women in the different industries are similar, the latter somewhat lower in FIAC units than in the zone;
- the educational level of the FIAC units' workforce is slightly lower, but still higher than elsewhere outside the zone;

- the 3-shift system is hardly used;
- the existence of a functioning TU contributes greatly towards constructive relations and better work conditions in an enterprise.

#### 1.4. Industry-related institutions

Industry-related activities are many-faceted. This survey, however, limits itself to the role and participation of women in planning, management and administration, research and quality control, dissemination of information, marketing, loan schemes and trade unions.

#### Major institutions providing support services

With the thrust of successive governments since the 1950s towards the establishment and expansion of local industries, the State set up several institutions to provide the major support services for industry. Within the State Ministries concerned with the development of industry, such as the Ministries of Industries and Scientific Affairs, Rural Industrial Development, Textile Industries, Fisheries, Coconut Industries, Agricultural Development and Research, Finance and Planning, Higher Education and Trade and Shipping are Departments, Corporations and Institutes (Table 29) which have been established to provide support services for industry. In 1960, i.e. during the time when a firm commitment to industrialisation was first evinced by the government, the Ceylon National Chamber of Industries was established by private sector industrialists to serve national as well as individual needs. A recently established institution important for women is the Women's Chamber of Industry and Commerce (WCIC). Consequent to the export oriented and privatisation policies of the present government, both State and private sector institutions have been set up to meet the wide range of support services required by modern industry. In addition to these institutions large industrial enterprises have their own in-house facilities for activities such as training and maintenance. At the same time they make use of the specialised institutions, both government and non-governmental, for services requiring more complex professional assistance.

#### Participation and role of women in industry-related activities

##### Planning and administration

Census figures for 1971 and 1981 indicate a four-fold increase of female participation in the administrative and managerial occupations. Nevertheless there has been little change at the highest policy making levels. None of the ministries concerned with industry has a woman minister, deputy minister, secretary or additional secretary. The highest level at which a woman functioned was as senior assistant secretary. With the focus on women's affairs the trend within the last decade is to include a woman on governing boards. Yet except for Salu Sala, which has a woman chairman, and the National Craft Council and National Design Centre none of the institutions which come within the scope of these ministries have women on their governing boards. The same holds good for the old established private sector companies. The situation is somewhat different in the institutions which have been recently set up. For instance the Sri Lanka Business Development Centre, established with a high level of professionalism, has two women on the governing board. When the second level of management is considered it is seen that there is a higher proportion of women. But the gender difference is still very marked.



Table 29. Major public institutions providing services to industry

Ministry	Institution	Services provided (XX = main activity)												
		1	2	3	4.1	4.2	4.3	5	6.1	6.2	6.3	7	8	
Industries & Scientific Affairs	Ceylon Institute of Science and Industrial Research	XX	X	X	X	X		X	X					
	Sri Lanka Standards Institute		XX	X	X	X	X		X					
	National Engineering Research & Development Bank	XX	X	X	X	X	X	X	X					
	National Institute of Business Management	X		XX		X	X							
Rural Industrial Development	Industrial Development Board		X	X	XX	X	X	X	XX	X	X	X		
	National Craft Council		XX		X	X	X					X		
	National Design Centre		X	XX		X	X		X					
Textile Industries	Textile Training & Service Centre	XX	X	X	X	X		X	X	X				
	Clothing Industries Training Inst.	X	X	XX					X		X	X		
Coconut Industries	Coconut Research Board	XX	X	X	X	X		X	X					
Agricultural Development & Research	Soya Bean Research Institute	XX	X		X	X	X					X		
Fisheries	National Aquatic Resources Authority	XX	X	X		X	X		X					
Trade and Shipping	Export Development Board	X	X	X		X	X		X		X	XX		
	Sri Lanka State Trading Corp.			X								X		

Technical notes: 1. Research; 2. Quality control and development; 3. Training; 4. Dissemination of information; 4.1. Extension services; 4.2. Information services; 4.3. Publicity and education; 5. Maintenance of machinery and instruments; 6. Advisory services; 6.1. Technical; 6.2. Managerial; 6.3. Financial; 7. Market promotion/marketing; 8. Credit.

Corresponding to the national picture of employment in all activities, the greatest influx of women in these organisations is into the middle grades of employment - professional, technical and related work - and into the secretarial and clerical grades where women predominate. The employment of women in the minor grades is minimal.

The picture that emerges, therefore, in both public and private sector organisations providing support services for industry is that - barring those organisations exclusively run for the benefit of women - in other organisations' female employment at the highest and at the lowest levels is so low as to be almost negligible. A sprinkling of women is found at the second level of management and the bulk is found in the middle grades of employment, especially in the clerical service.

#### Research and quality control

Industrial research (including quality control) is the main function of six of the institutions surveyed (Table 30). Four of them serve sectoral needs while the National Engineering Research and Development Centre (NERD) deals exclusively with engineering research. The research institution which serves industry as a whole is the Ceylon Institute of Science and Industrial Research (CISIR). Therefore the distribution of women within this organisation was analysed in more detail to ascertain the current trends in the participation of women in research (Table 30 and Annex Table A-16).

Table 30. Women in different categories of employment in the technical sections of CISIR, 1980/1986

Category	1980			1986		
	Total	Female	% F	Total	Female	% F
Director	1	-	-	1	-	-
Deputy Director	1	-	-	1	-	-
Heads of Divisions	15	3	20	10	2	20
Research Officers and Assistants	89	26	29	53	17	32
Technical Assistants	81	28	25	91	49	54
Clerks/Typists	20	18	90	42	37	88
Minor and Workshop Staff	69	-	-	57	-	-

Sources: For 1980 - Annual Report CISIR - 1980

For 1986 - Communication with Personnel Section of CISIR

Study of the research areas in which women were engaged showed that in 1980 there were only few women employed in those areas which required a background in physics and engineering but there was high participation in research areas which are based on the biological and social sciences. By the end of 1986 the situation had changed slightly in that a few women were employed in divisions where earlier there were none.

During the period 1980 to 1986 there was a general decrease, regardless of sex, in the numbers employed at CISIR as divisional heads and research officers - there being a greater decrease of males than females. Hence though the total numbers of females decreased, yet their proportion in relation to males increased (Research Officers) or remained the same (Heads of Divisions). At the middle level technical assistant grade both the numbers

and proportion increased. Female employment in the engineering services, in the clerical services and in the minor grades remained substantively the same - very high in the clerical grades and none in the other two services.

The situation at the CISIR was compared with that in the Sri Lanka Standards Institute (SLSI), where work is more of an applied technical nature (Table 31). The same trends were seen in both institutes as regards employment of women as technical assistants, clerical hands and minor employees. In both institutes the greatest influx of women has been as technical assistants - the numbers having doubled at CISIR and trebled at SLSI. A popular explanation of this phenomenon is given in terms of stereotyped ideology regarding females - that they are nimble with their fingers and are good at tasks which require patient repetition. A more obvious explanation may be that it reflects the negligible gender differences in educational participation at secondary school level. The situation at the level of graduate employment was, however, very different in the two institutions. Regardless of gender there was a marked decrease of research officers at the CISIR, while at the SLSI the intake of scientific officers had more than doubled. This raises the question as to whether the difference is due to the difference in the nature of the work at the two institutes (the expansion of private industry may offer CISIR research officers with work experience directly related to industry more rewarding opportunities for employment) or to less fundamental organisational differences.

Table 31. Women in different categories of employment at the Sri Lanka Standards Institute,<sup>a/</sup> 1980 and 1986

	1980			1986		
	Total	Female	% Female	Total	Female	% Female
Director/Director General <sup>b/</sup>	1	-	-	1	-	-
Heads of Divisions	8	1	12.5	8	2	25.0
Scientific Officers	33	11	33.3	88	34	38.6
Technical Assistants	14	6	42.8	53	18	33.9
Clerks	13	7	53.8	48	24	50.0
Stenographers	4	4	100.0	5	5	100.0

Source: Administration Division, SLSI.

Note: No women in the minor grades in 1980 and 1986.

a/ Up to January, 1984, the institution was known as The Bureau of Ceylon Standards.

b/ After January, 1984, the head of the institution was designated Director General.

Since participation of women in engineering research is minimal at CISIR, the position at the National Engineering Research and Development Centre (NERD) was also studied. At NERD there was not a single woman among the 40 engineers employed and only one of the 60 technical assistants was a woman. But all three draughtspersons were females. Since there is unemployment among

women engineers the question arises as to whether they dislike industry related research or whether there are institutional deterrents to their employment.

In addition to the research in state sponsored state institutions, research activities in areas directly or indirectly related to industry are also carried out in universities. At the University of Moratuwa, which is the chief institute for engineering studies at the undergraduate and postgraduate levels and has close links with industry, the heads of three departments in the Faculty of Engineering are women and the number of women students has shown a marked increase.

State-sponsored research institutions service industry in both the public and private sectors. The universities are also increasingly co-operating with industry. In addition, ministries, government departments and large companies have research facilities for in-house purposes, and the multi-national companies are able to draw on the resources of the parent body and regional centres as well. The increase in the establishment of research institutions and organisations both by the state and private sector during the last decade would evince that there is a growing recognition of the importance of research for successful enterprises as well as of the need for services as regards data gathering and processing, feasibility studies, surveys etc.

#### Dissemination of information

Information and technical knowledge required for the development of industry is provided through three main channels - extension services, information and library services, and mass media techniques.

#### Extension

A unit which comprises almost exclusively women and is directed towards servicing women is the Farm Women's Extension Programme within the Ministry of Agriculture! Development and Research. This unit, however, is geared towards agriculture and welfare rather than industry. Extension work, involving field work, has been a male-dominated area because of cultural norms and social attitudes acting as constraints to the mobility of women. But the trend today is for more and more women to be engaged in extension work both as supervisors and as extension officers, particularly in the State sector. Programmes for rural industrial development necessarily have to function in rural areas. Hence the Department of Small Industries and the Industrial Development Board have established regional offices and centres where women are also employed at all levels.

#### Information and library services

The Ministries and institutions servicing industry have information divisions or units. Many have technical libraries. These are areas where female employment is not only high, but where women are predominant at the professional levels. The directors of information at three key institutions servicing industry, the Ceylon Institute of Scientific and Industrial Research, Sri Lanka Standards Institute, and Industrial Development Board, are women. The Trade and Shipping Information Services, which also serves the Export Development Board, is also headed by a woman. At the National Engineering Research and Development Centre and National Institute of Business Management women are in charge of the libraries. Similarly, in three of the major banks important for industry - the Central Bank, the National

Development Bank and the People's Bank - the librarians are women. The gender pattern of employment in the Information Services divisions and in libraries reveals a reversal of the usual gender division of labour. Women are clustered at the professional grades. The unskilled grades (library attendants) are almost exclusively male.

### Media programmes

With the expansion of the private sector, advertising has gained in importance. The development of TV provides young photogenic women employment opportunities in commercial advertising. Behind the scenes there is also an increasing female work force. Zenith, e.g., a major advertising agency which undertakes industrial advertising, is headed by a woman and 75 per cent of the workers are women.

### Marketing

In the State corporations established for marketing, the chairman of Salu Sala (textiles) is a woman and there are women on the governing boards of Laksala (handicrafts) and Co-operative Wholesale Establishment - CWE (general goods). Besides the institutions especially established for marketing, government departments and private organisations geared to industry have their marketing divisions. In these some women are employed as heads of sub-divisions and at executive levels. In market research as in other forms of research participation of women is high. It is in sales work, however, that women have a high profile. Between the census years 1971 and 1981 the proportion of sales workers in the economically active female population had increased from 2.1 to 3 per cent. Nevertheless women are not employed as sales or medical representatives in private companies. The reason which has always been given is that women are unwilling to do field work, and particularly so today, in view of the disturbances prevailing in the country. Women are predominantly sales girls in shops and in other sales outlets. At the beginning of this decade the itinerant sales girl vending household goods from door to door was a common sight. But after the ethnic disturbances they have disappeared from the scene.

With the export drive the development of marketing skills has become a crying need. Study courses in marketing and related subjects are available at university level. Specialised work on marketing can be done at The Post Graduate Institute of Management, University of Sri Jayewardenepura. Institutions such as The National Institute of Business Management conduct courses and seminars on marketing. Service organisations do so too. The Sri Lanka Institute of Marketing, besides its programmes to develop marketing skills particularly in relation to the export market, has also the long term goal of professionalising the subject. With the stress on exports the Export Development Board has become a key institute. The intake of women to this institution has increased markedly and women serve at the deputy director and assistant director levels in the marketing division.

### Loan schemes

Loan schemes and other forms of financial support are essential particularly to the small scale entrepreneur. Two major loan schemes have been put into operation by the State to meet the needs of industry - the Small and Medium Loan Schemes below Rs. 4 million and the loans for the bigger industrialists ranging from Rs. 4 to 60 million. The National Development Bank, specifically created to provide credit to industry, is the key

institution. The large loans are channelled through this bank, while it collaborates with other banks for the Small and Medium Loan Scheme. Since normally the project assets are the security for these loans there are no legal barriers for women to obtain such loans. But the Tamil women who have married under customary Tesawalamai law suffer disabilities regarding the right to contract.

Besides banks, other government institutions grant small scale financial assistance as well. The National Crafts Council is legally empowered to provide financial and other assistance to organisations engaged in design, production and sale of handicrafts, an area in which large numbers of women are employed. The schemes of the Export Development Board which provide production incentives and assistance apply equally to males and females.

### Trade unions

Many women are members of trade unions, but their involvement in trade union activities is very low and so is their representation at decision-making levels within the unions. This is attributed partly to family and child care responsibilities and partly to cultural norms and values relating to forms of behaviour expected of a woman.

The Ceylon Mercantile Industrial and General Workers' Union (CMU) originally covered only the mercantile sector but now covers industry as well. The Jatika Sevaka Sangamaya, another large federation of trade unions, functions largely in the State and semi-government sectors and is politically linked with the ruling United National Party. The Conference of Public Service Trade Unions (COPSTU), presently with 30 affiliates, has a membership drawn from the professional, middle and upper levels of the public service. Except in CMU which has a woman secretary, women are not highly visible at the executive levels in trade unions. Even in COPSTU which draws its membership from areas of employment where there is a very high influx of females, there are no women office bearers and only one woman serves in the Council. All 3 trade unions mentioned above have a women's wing. Here too, female involvement is low. The activities of these divisions are directed mainly towards consciousness raising, labour education and welfare activities. Commitment of women to trade union activities is minimal and is reflected in the fact that so far no female trade union leader of national importance has emerged.

A noteworthy exception to the passive role played by women is the strike conducted at Polytex Garments and considered the longest strike by women in recent times. An outcome of this was the establishment of a Women's Centre which now functions in the export processing zone. It has strong trade union links but is not itself a trade union. Nevertheless its activities are very similar to the activities of women's wings in trade unions. Within the EPZ with a female work force of over 80 per cent, no trade unions exist although there is no legal prohibition of their formation.

Worker education, which is a traditional trade union activity, became institutionalised under State sponsorship with the establishment of the Institute of Workers' Education at the University of Colombo. This institute provides courses in Labour Education at the diploma (non-postgraduate) and degree levels as well as courses in Technology and Development. 80 per cent of the admissions are selected by trade unions. Around 25 per cent are women students, an index of the low participation of women at decision-making levels in trade unions.

## Conclusions

With the development of industry the support services have also expanded. Consequent to the privatisation policies of the present government the private sector is playing a more important role in providing these services.

There is an increasing intake of women into such organisations, particularly into the areas of research, information and library services and advertising. But there are no women at the ministerial level or at the level of secretary in any of the ministries connected with industry. With one exception there are no women at the highest administrative or managerial levels in the State-sponsored institutions and in the old established firms and multinational companies. Employment of women is also very low in occupations requiring an engineering background and in the lowest occupational categories. In trade union activities, except in rare instances, the involvement of women is low.

The impact of the present ethnic disturbances and legislation regarding increased maternity leave appear to have an adverse effect on employment of women in the private sector. Nevertheless, the expansion of industry-related activities appears to have benefitted women in terms of increased opportunities for employment.

### 2. Semi-formal sector: Export Production Villages

The Export Production Villages recently established in Sri Lanka are an off-shoot of strategies to promote export-led growth in the context of the liberalised economic policies introduced in 1977. While traditionally export-oriented industries in Sri Lanka have been confined to the plantation and urban sectors of the economy, the Ministry of Trade and Shipping and its Export Development Board formulated an innovative programme in 1981 to incorporate the rural sector in the export economy by creating direct links between the rural economy and export markets overseas. The objectives of the programme are to increase exports through village-based production, to direct some of the benefits expected of the export-oriented economy to the village sector and thereby to increase productivity and employment opportunities and to promote entrepreneurship and higher living standards in rural Sri Lanka.

The operation of the scheme is contingent on feasibility studies to identify potential export markets and the creation of linkages between villages and specific exporters in the formal sector of the economy. Provision is made under the Companies' Act No. 17 of 1982 for Export Production Village (People's) Companies to be registered with a minimum of 50 shareholders from village residents. Each resident buys at least ten Rs. 10/- shares and no one can hold more than 10 per cent of the total share capital. The Export Development Board functions as a catalyst, paying exporters a cash grant of 2 per cent on purchases made from Export Production Villages (EPV), and 2 per cent of the export earnings to EPV (People's) Companies. Furthermore, exporters are granted a five-year tax holiday. A Board of Directors of 3-10 members is responsible for the management of each EPV enterprise. Hence, the twin thrusts of the EPV approach are export promotion through the provision of incentives to entrepreneurs as in the two Export Processing Zones, and participation by the traditional village-based informal sector as opposed to the foreign-dominated large-scale production in the EPZs.

The first EPV was opened in Dambadeniya in the Kurunegala District in 1981 for the promotion of a traditional industry, reed ware. A total of 32 EPVs

were reported to have been organised by the end of 1986. Production is concentrated in three areas:

- (i) agricultural produce, e.g. vegetables, fruits, flowers, spices;
- (ii) processed agricultural produce, e.g. coir, palmyrah, papain; and
- (iii) manufactured or assembled products which are limited currently to reed ware, handlooms, wood crafts, electronics and umbrellas.

A Quality Control Centre has been established recently and Presidential Awards are made to the best achievement in exports.

The EDB does not envisage further increases in the number of EPVs as marketing outlets have first to be identified. Its present priorities are to consolidate existing EPVs and to ensure that they function effectively within the framework of the export-promotion strategy.

Official reports and exhibitions have underscored the success of some of these enterprises, but no studies have been made as yet of their impact or of the participation of women. The two EPVs engaged in 'modern sector' industries were selected for this study. Both are located in the rural sector in Colombo District. The EPV in Godagama, in the Homagama electorate, assembles electronic equipment for radio, television and computers - a major concern of world market factories though not in Sri Lanka as yet. The EPV in Attidiya assembles umbrellas, a non-traditional consumer article. In-depth interviews were conducted with ten producers selected non-randomly in each village and with management and supervisory personnel.

#### Organisation of production

##### (a) The Electronics Export Production Village

The Electronics Export Production Village established in 1984 was linked with an exporter, ESJAY Electronics, which started its operations in 1983. The exporter firm negotiates for orders or contracts with firms in USA, UK and Japan, obtains materials from the corresponding overseas-based industrial enterprises, and ships the assembled equipment - radio frequency chokes, transformers, and computer tape heads - to these companies according to export schedules. Its factory at Godagama is located currently in two private houses and has minimal equipment and a small permanent staff of one factory manager, a supervisor, three quality controllers and three machine operators.

The EPV, although an independent unit with its People's Company and Board of Directors, is in fact an appendage of ESJAY's production, providing the company with a workforce that undertakes the less complex assembling operations. The factory manager, supervisor and quality controllers, members of ESJAY staff, oversee the work of the village shareholders-cum-workers and the manager is responsible for their on-the-job training. The manager and supervisor (who is the only woman at management level) are members of the Board of Directors of the EPV (People's) Company, while the other six members consist of one shareholder and 5 local level officials (such as the Gramodaya Chairman and the Chairman, Consolapo) resident in the locality. The EPV has appointed a shareholder-worker as an 'assistant' in charge of disbursing materials and checking finished products.

ESJAY Electronics was set up by the entrepreneur after the collapse of a previous venture in the same district. The factory manager, the supervisor



and around 30 workers had become ESJAY workers and were the nucleus of the EPV's initial workforce. The total workforce of around 70 in 1984 has, however, declined as the irregular supply of materials threatened the stability of ESJAY and consequently of the EPV, and workers sought other employment avenues in the public or private sector. Currently it is reported that there is a workforce of 52, consisting of 7 permanent staff (3 men and 4 women) and 45 EPV workers (3 men and 42 women). Tasks that include delicate operations using instruments and machinery as well as manual work requiring dexterity are allocated according to skill and aptitude and payment is on a piece-rate basis. Among the interesting organisational features of the enterprise is the fact that while about 5 workers restrict their production activities to the small factory, around 40 take some of the simpler tasks, such as winding, home and about 7 work exclusively in their homes, thus creating an amalgam of factory-based and home-based production.

#### (b) The Umbrella Export Production Village

The Umbrella Export Production Village established in 1984 is linked with Mackie and Sons Ltd., a long standing firm in the field of manufacturing local umbrellas and importing foreign umbrellas. In the new liberal economic environment, Mackie and Sons obtains materials - black and coloured print cloth, the umbrella structure and thread - regularly from Taiwan Province of China, and exports the assembled products to France, Switzerland and USA. In the early years Mackie and Sons subcontracted the sewing of the umbrella cloth and the assembly of umbrellas to the EPV. Dissatisfaction with the quality of the sewing, however, led the company to undertake the sewing in its own factory in Colombo and sub-contract only the assembling process to the EPV workers who are paid on the basis of piece rates per umbrella. Mackie and Sons distributes materials and collects the umbrellas daily and three women on the firm's staff work full time at the EPV office, checking the quality of the work, as the umbrellas are exported to a competitive overseas market.

The Board of Directors of the EPV (People's) Company consists of one woman, a former Municipal Councillor, and five male officers of state institutions such as the Transport Board, who live in the neighbourhood. The woman member is de facto manager of the enterprise and she is assisted by a 'supervisor' of around 20 years of age who is a daughter of a shareholder and who is paid by the Export Development Board. Her functions are to distribute materials, receive the finished products and maintain records. The EPV office is located in a private house. EPV workers also assist the supervisor in rotation on a voluntary basis. The number of shareholders-cum-workers has increased from 104 women and one man in 1984 to 277 women and 9 men in 1987. 283 are home-based workers who are expected to collect their materials and hand over the umbrellas at the office in the morning. Only three women who have domestic problems work in the office. The Umbrella EPV is thus essentially an employment venture for home-based piece-rate workers.

#### Profile of women piece-rate workers

Both EPVs have a female dominated workforce and a male dominated Board of Directors. As in 'world market' factories, the Electronics EPV Manager expressed a preference for employing young unmarried women, although about 15 per cent of the present workforce are married. His perception of married women workers was that their family commitments prevented them from meeting production targets. In the purposive samples, the ages of the women in the electronics industry ranged from 19 to 42 and the mean age was 25 years. In

the Umbrella EPV ages ranged from 14 to 70 with the mean age being 34 years. 30 per cent were married in the Electronics EPV and 70 per cent in the Umbrella EPV sample. The educational level of the women workers in the Electronics EPV was higher than in the Umbrella EPV. Half of the former had GCE (OL) or (AL) with 2 or 3 subjects, and the others are secondary school drop-outs. In the latter EPV one worker is a primary school drop-out, only 2 have GCE (OL)s or (AL)s and one is a Grade 10 student. While the characteristics of the Electronics EPV workers approximate to those of women workers in factories in the EPZ, the Umbrella EPV appears to provide opportunities for income generation to many older women who are not usually recruited for factory employment.

In both EPVs, women workers tend to be from families with few economic resources. The married women respondents said that they sought a means of income generation as the wages of their husbands, who are transport, service and industrial low level workers, cultivators, labourers, or unemployed, are inadequate to meet living costs. The young unmarried women also had economic difficulties and had to earn to meet family needs. The possibility to combine domestic and economic roles is perhaps a major factor that attracted the workforce to the Umbrella EPV. Several of the married women had been employed earlier in garment, cigarette and other factories in the formal sector and had been compelled to give up their jobs with increasing child care responsibilities.

The level of technology and skills required for assembling umbrellas is lower than that required for the different operations in the Electronics Village where precision and concentration are of paramount importance. Rejection by the quality control staff is common, particularly in the earlier stages of participation in both enterprises.

Home-based work does not avoid the monotony of repetitive tasks characteristic of assembling industries, and the women have long working hours, ranging from 4 to 10 hours for economic activities and from 3 to 8 hours for household chores and child care. The majority of women in the Electronics EPV tend to take work home after 5 p.m. and continue working till 11 p.m. The umbrella workers spend two hours in the morning during school hours queueing up in the office to get their materials and to check in the umbrellas. In the afternoons, after school hours, they assemble umbrellas from 2 p.m. to 5 p.m. and again after their young children are asleep, till 11 p.m. The only relief is that they have the assistance of members of their family - husbands, parents, siblings and children - resulting sometimes in disguised child labour. No one, however, in either EPV wanted a change of occupation, a recognition, perhaps, of the fact that more remunerative alternative avenues of employment are not accessible or practicable in their circumstances.

#### Output and income

Income is related to output in piece-rate work. Rates of payment in the Electronics EPV vary with the complexity of the job, and usually range between Rs. 22 and Rs. 40 per 1,000 units. Incomes are approximately between Rs. 300 and Rs. 2,000 a month with minimal work related expenses. The average income this year has been around Rs. 700 a month, which is currently about the same as that of an EPZ factory worker, but flexibility in working hours has ensured wide differences in output and income. In the umbrella EPV, output varied from 20 to 60 umbrellas a day and payment is at the rate of Rs. 1 per umbrella

so that daily incomes could be as low as Rs. 20. Monthly incomes range from Rs. 300 to over Rs. 1,000. In both villages, married women reported that they contributed 40 per cent to 60 per cent of the household income, and many unmarried women between 10 per cent and 30 per cent.

Industrial production in EPVs depends on export demand, availability of materials and production capability. The Electronics Company (ESJAY) had to close its factory for three to four months at a time when supplies of materials were irregular. The Company has invested in some machinery and in local materials costing about Rs. 10,000 and, according to its records, pays about Rs. 40,000 a month to workers. It was not possible to acquire reliable information regarding the level of profits.

The Umbrella EPV is reported to have a total daily average output of at least 3,000 umbrellas. Mackie and Sons pays the EPV around Rs. 90,000 a month as piece rates payment. The wage of Rs. 1 per umbrella, which is tantamount to Rs. 2 to Rs. 3 per hour in the case of most women, appears to be one of the lowest wages paid anywhere in the formal or informal sector. In neither village have profits been distributed among shareholders yet as envisaged in the EPV programme.

The main problems of women workers were difficulties in satisfying qualitative work norms and conflict between domestic responsibilities and work output. In the Electronics EPV, they were also concerned about the instability of supplies of materials and consequent loss of income. Some women workers perceived themselves to be more disadvantaged than men workers in their lack of time and mobility especially at night. Strong dissatisfaction, however, was not voiced, which may be partly due to the absence of unionisation.

#### Constraints and issues

The mode of production in Export Production Villages is sub-contracting or "putting out" to piece rate-workers. The Electronics EPV operates on a level between formal factory organisation and home-based work as a small sub-contracted unit of production. The Umbrella EPV utilises a relatively large export-oriented industrial establishment and home-based workers. The EPVs thus have characteristics of both formal and informal sectors and may hence be categorised as a semi-formal manufacturing activity.

While there are differences in technology and skill levels, these villages, through the intermediary of a local entrepreneur collaborating with foreign firms, are an integral part of the international division of labour and the global sourcing strategies of multinational companies just as 'world market' factories within and outside export-processing zones. The Umbrella EPV, for instance, in its links with a more industrialised Third World country is an illustrative example of recent tendencies in the operation of the international labour market. Taiwan Province of China on the supply side and highly industrialised countries on the demand side both use urban industry and village participation in the periphery for export production. The instability of the Electronics EPV and the rapid expansion of the Umbrella EPV reflect the vicissitudes of the global economy. In the context of international economic relations, the home-based piece-rate workers in the two villages, particularly in terms of remuneration, lack of protection and supportive services, constitute the bottom layer of a vertical process of international sub-contracting.

This is not to deny the positive features of the villages, however. The EPVs are an outcome of a national policy to increase employment opportunities and incomes in the rural sector through export-oriented production. Their positive impact is seen in the access women in low-income families have had to incomes that have helped to sustain the family. The EPVs have achieved this without 'sweat shops' but by adapting traditional skills to the manufacture of new products (umbrellas) or introducing new skills (electronics) and by combining quality control and consciousness with flexibility, permitting women both to fulfill their domestic responsibilities and to engage in economically productive activities at their own pace. The EPVs have also clearly increased the country's foreign exchange earnings and industrial production.

The shortcomings basically stem from the system of piece-rate work and home-based production. An unrealistic concept of 'supplementary earners', the absence of a 'worker identity', and the lack of bargaining power resulting from poverty and individual relationships with a powerful employer have led to the low rates of payment, long working hours, utilisation of family labour and especially child labour within the home, and lack of ancillary welfare measures. The local exporter utilises cheap labour with minimal overhead costs and investment in machinery and tools and without providing welfare facilities including maternity benefits. Thus production targets during peak periods can be achieved while labour can be dispensed with in slack periods with relative ease.

It is apparent that national strategies are needed to maximize the benefits of EPVs and to eliminate the adverse aspects of their production relations. It has been suggested that the bargaining power of piece rate workers can be effectively increased by enabling them to join trade unions in the major industry to which they are linked (Bhatt, 1987). The Export Development Board (EDB) is a catalyst in EPV production. Both the EDB and the Boards of Directors of EPVs can promote social justice and improved standards of living through intervention and bring piece rate workers within the purview of labour legislation.

### 3. Handloom industry

#### Introduction

The handloom industry in Sri Lanka has a critical role in strategies to increase the participation of women in manufacturing industries, both as a traditional stronghold of women over many decades as well as an area that has been particularly vulnerable to external forces released by recent policy changes.

The industry was organized island-wide as a state initiative in the 1940's. The distribution of a thousand handlooms and subsidized yarn in the sixties gave momentum to the expansion of the industry. Co-operative societies and weaving centres burgeoned and weavers' societies were even formed, under the supervision of Mothers' Unions. The number of weavers is said to have increased from less than 4000 to over 60,000. In the seventies, the Government Weaving Supply Corporation acquired the monopoly in purchasing and distributing raw materials and government protection was provided through a subsidy scheme for raw materials, a fixed price scheme and restriction of imports. Handloom products, however, mainly consisted of poor quality sarongs.

With the introduction of changes in economic policies in 1977 and in particular the liberalization of imports, the removal of protection and primacy to market forces, the local handloom industry could not compete with superior low-price imported textiles and its virtual collapse ensued. While looms had been underutilized in the seventies as a consequence of instability in yarn supplies, lack of consumer demand led to the closure of several hundred centres at the end of the seventies and in the early eighties. The situation deteriorated further in the eighties with the re-organization of the large state textile mills under foreign management, the improvement in the quality of their products and their popularity in the local market.

Only 26 of the 327 centres run by co-operative societies are reported to have survived. It has been estimated that only 30,000 of the 110,000 handlooms continued in operation (Economic Review, 1980), and the output of even the survivors was 'unsalable'. At least 40,000 weavers, the great majority of whom were women, lost their livelihood. The handloom industry has thus been in a struggle for survival over the last ten years and many women have lost a traditional income source.

### Production

Handloom production in Sri Lanka is based on three types of weaving - plain, design and intricate design, but the majority of weavers are presently encouraged to weave plain fabrics. Products are household linen, carpets, fabrics for clothes (sarong, shirting, sarees), grey cloth and cheese cloth for export, bandage and gauze cloth for health services, and in recent years, ready-made garments and natural silk fabrics.

Since 1977 import of dyes, chemicals and accessories are possible. Cotton yarn is now available from local textile mills, particularly from the textile mill under the National Textile Corporation in Maltegama. Two yarn dyeing-houses at Katubedde meet the demands of the handloom centres of the Department of Textile while the Sri Lanka Silk and Allied Products Authority supplies local raw materials for the new natural silk industry. Since 1978, import of yarn is permitted for export orders and is undertaken by the Association of Lanka Handlooms (Export Ltd.), a joint venture with 40 per cent government shares and 60 per cent private shares. Nevertheless the small weaver encounters difficulties in getting supplies of processed yarn, and the high price of yarn from the local textile mills relative to the subsidized prices in India makes it difficult for Sri Lankan producers to compete with low-cost products in the local and foreign markets.

The major problem in the handloom industry continues to be marketing. Absence of market research, lack of adequate distribution channels and competition from local mill output and imported textiles have reduced the marketability of handloom products in the local market, and thereby the incomes of producers.

The current focus on export promotion has, however, stimulated handloom production by large- and medium-scale entrepreneurs, and small-scale entrepreneurs with access to resources. Twenty to twenty five units now cater to the export market and high quality handloom fabrics are produced for the Western market. The total volume and value of exports have fluctuated and have tended to be dependent on items such as handloom batiks and readymade clothes of handloom materials. Less affluent small-scale manufacturers and self-employed women are constrained by their lack of access to local or export markets.

### Participation of women

Handloom weaving became in practice a 'feminine' industry in the sixties. While reliable statistics are not available, it is evident that the overwhelming majority of 'trainees' and producers in centres and a high proportion of the self-employed and entrepreneurs involved in the handloom industry are women.

Incomes of these producers are among the lowest for skilled labour. Supervisors and trainers have fixed salaries, pensions and regular working hours and weavers in successful private sector enterprises are reported to earn around Rs 1,200 a month. The majority of weavers, however, engage in the laborious tasks for eight hours a day, in a working environment that lacks basic sanitary or other facilities, for a payment of about Rs 10-20 a day, which is less than half of the wage of an unskilled casual labourer. Monthly incomes were found in surveys to range between Rs 50 and Rs 450. Young female secondary school learners, therefore, tend to join the powerloom sector, export-processing zone factories or seek employment as housemaids in West Asia, and the handloom industry is thus compelled to draw on the less educated labour force or on those who want to combine part-time work in weaving centres with child care responsibilities.

### The current situation

Despite the euphoria generated by the new economic policies, the debacle of the handloom industry became a policy concern and the Department of Textiles under the newly created Ministry of Textile Industries was entrusted with responsibility for revamping the industry. The Department initiated a scheme in 1982 for re-opening 450 handloom weaving centres on the basis of three per electorate. By 1986, 282 centres had been re-established, taking over some of the buildings, machinery and personnel of the cooperative societies and providing employment for 5,504 employees.

It is estimated that the Department of Textile Industries and the Department of Small Industries currently own 2,000 handlooms, each with a capacity of 18 metres a day, and that there are approximately 40,000 handlooms in the co-operative sector with a capacity of about 55 million metres per year. Three hundred units in the private sector, with at least 25 handlooms, are registered with the Department of Textiles. However, optimal utilization has yet to be made of the potential.

Current plans for the expansion of the handloom industry offer scope for increasing the participation of women if adequate returns are ensured for their labour inputs and if skills are progressively upgraded. The Export Development Board in its National Export Development Plan envisages expansion of handloom exports to Europe, USA, Australia and West Asia, and plans to organize the industry in manageable units, modernizing looms, and providing the development of high quality yarn, new designs and technical skills. The Department of Textile Industries intends to restructure 60 centres for the production of natural silk to meet the increasing demand for natural silk fabrics in overseas markets. Leading exporters hope to capitalize on the skills of women in weaving and embroidery. The small independent weavers however continue to feel the lack of incentives and credit needed to expand their activities.

### Institutional framework

Institutional support for both public and private sector producers, however, has increased in recent years with the establishment of Design Centres, Dying Centres and warehouses, and the provision of looms and technical guidance. Management of public sector handloom industries rests with several state Ministries/Departments. The Department of Textiles provides raw materials and market channels (e.g. the Handloom Emporium) and manages nearly 300 production centres staffed by trained textiles demonstrators. The Director of Textiles is also the Deputy Commissioner of Co-operative Development for co-operative textile societies, and Assistant Directors at district level are chairpersons of district based Boards of Co-operative Societies. The Department of Small Industries has 75 Artline Centres which are reported to produce high quality handloom fabrics. The Export Development Board's Scheme of Export Production Villages includes a Handloom village at Katugampala. The Departments of Social Services and Federation and Child Care also train blind men and women and residents of orphanages in weaving.

Although there is a long tradition of skill development, training is confined to 30 centres organized by the Department of Textiles, the Artline Centres under the Department of Small Industries, training centres of co-operative societies and on-the-job training in the private sector. In the public sector, in particular, the training programme appears to lack professionalism. While policies purport to promote entrepreneurship, training programmes are exclusively technical-skill oriented and do not include managerial and entrepreneurial skills, quality control and marketing know-how.

Some non-governmental organizations such as the women's voluntary organization - the Lanka Mahila Samiti, include handloom weaving among the income generating activities they promote for women. The private sector has responded to incentives and entrepreneurs, among whom are several women, have formed private companies which are linked to the Women's Chamber of Industry and Commerce (see section II.C.5. below).

#### 4. Informal sector

##### Introduction

In the undervalued informal sector of economies in developing countries the least visible production occurs in the micro-scale home-based activities of the poorer strata of the population. In the still largely agrarian economy of Sri Lanka, women in low-income families have been traditionally active participants in domestic agro-based industries which are the 'poor relations' of industry in a modernising society. As a well-documented study of women in the coir industry in a rural area is available (Risseeuw, 1980), the field data in this section are largely from the informal sector in the metropolitan district of Colombo. It was estimated at the end of the 1970's that around 20 per cent of the labour force in the city of Colombo was in the informal sector (Marga, 1978). As in other developing societies, it is likely that the informal sector in Colombo and its suburbs has expanded with inflation and the consequent decline in real wage rates of small industries and with increasing income disparities. In consequence of their greater vulnerability to unemployment and their domestic responsibilities, women have become important participants in this sector of the economy.

Much of the informal sector activity in the commercial city of Colombo is necessarily in retail, petty trade, services and in food preparation for sale, and the numbers engaged in manufacturing industries are relatively small (Marga 1978, 1986). As industrial activity is concentrated largely in the suburbs of the city, the majority of women respondents in the field study (14) are from these suburbs, together with three women from a low income area in the city, Kolonnawa, and three women engaged in agro-based industries in the contiguous Kalutara district. The purposive sample of 20 women engaged in home-based production can be grouped in four areas - (i) sewing (5), (ii) joss sticks (5), (iii) agro-based industries - coir-cum-rubber mattresses, reed work and beedi (5), and (iv) paper-based industries (3), lamp wicks (1) and pottery (1). Sixteen of them are self-employed ('own account' workers or entrepreneurs) and four are engaged in piece rate work for home-based enterprises in the neighbourhood.

### Production

The production processes are simple but time consuming, and profits are relatively low.

- (i) Of the five women engaged in sewing as an economic activity, one buys cloth from wholesale shops in Colombo and sews children's and women's clothes including dresses, skirts and saree blouses. These garments are sold to shops in Colombo or in the neighbourhood or are supplied to individuals who place orders. Four are involved in an interesting spin-off activity of the garment industry that burgeoned in the suburbs of Colombo (outside the EPZ) in the late seventies and in the eighties. These women buy stocks of small remnant 'cut pieces' of cloth, directly from garment factories such as Velona, Hidramani, Mayura and Maxim, or from wholesale traders in Maharagama and Pamunuwa in the suburbs who appear to have a thriving business in the sale of these remnants. These pieces are joined and articles such as pillow cases, bed sheets, chair covers and even children's underwear are turned out and sold chiefly to traders who come to their houses. On occasion husbands have sold them at their workplaces. There is evidence that this enterprise is a popular activity in and around Maharagama where successful women entrepreneurs too have garment factories or small scale industrial sewing units (Marga, 1986).
- (ii) The manufacture of joss sticks has been a home-based enterprise by women for some years in another suburb. Of the five women in the sample, four are self-employed, buying stocks of sticks or bamboos to make sticks, the paste mixture and sandalwood powder from small shops, and selling the finished product to shops. The fifth is provided materials free by a neighbouring household and is paid on a piece rate basis per stick.
- (iii) The production of coir-cum-rubber mattresses is a family industry in one household in the sample. The woman participant is responsible for drying the coir, making the mattress covers from empty 'sugar bags' purchased for the purpose and sewing up the end of the mattress once the mattress has been made by her father and brothers assisted by a second woman who lives in the vicinity. The latter cleans the coir, makes the mattress with layers of coir and rubber (latex) and steams it, and is paid per piece.



The home-based production of mats, bags and other household articles from reed is a traditional 'feminine' agro-based industry. The two women in the sample from Kalutara district buy stocks of reed from middlemen who purchase the reed from land owners, dye and dry the reed and turn out articles woven in traditional and varied designs. One of them sells the article produced at the weekly fair and sales vary from good to poor. The other sells to individual householders in response to orders. Beedi is an agro-based industry that is largely controlled by middlemen. The women in the sample acquired the skill in childhood working in an enterprise in a household in the neighbourhood. After marriage she has embarked on beedi wrapping in her own home, buying the materials from the middlemen and selling her output to the same middlemen.

- (iv) In the last group, three women engaged in simple enterprises in paper-based production of consumer goods - buckets, paper bags and envelopes. Two of them are piece rate workers who are given materials - paper and other materials - to make buckets used for festivities in one case and bags of different size in the other. They are paid per 1,000 buckets and per bag. The third is assisted by her brother to buy paper from the State Paper Corporation, to make envelopes, prepare papckages and sell them wholesale to shops. The fourth woman makes lamp wicks from cut pieces of cloth bought from a garment factory and sells them to individual consumers, shops and organisers of pilgrimages. The fifth produces clay household pots and other utensils.

These home-based producers use very little capital. In fact, their lack of capital has compelled them to opt for low-cost enterprises and to purchase raw materials in small quantities despite escalating prices. With the exception of the women engaged in sewing who already possessed a sewing machine or have invested in one for around Rs. 2,000, all these activities entail an investment in materials or equipment of no more than around Rs. 200 a month or about Rs. 2,500 a year. Only the two women who make envelopes and pots have taken private loans: women in this sector in general cannot afford to pay the high interest. Lack of access to institutional credit has thus limited the scale of their operations. Four of the sixteen self-employed women purchase their raw materials from industrial establishments in the formal sector (garment factories and the Paper Corporation) and the rest buy from shops or traders. The beedi worker's total production is controlled by the middlemen; the sewing workers sell at prices usually determined by traders and most other women sell to shops. The piece-rate workers are subject to a double dependency: the piece-work rates are fixed by other home-based entrepreneurs and they have to accept the irregular supply of inputs by these intermediaries as well.

Little technical know-how is required in these enterprises. The women, in fact, use existing skills for income generation (as in sewing and coir and reed products), or use elementary skills acquired on the job as they have had no access to specific training programmes.

Inevitably profits are limited, and in no case has monthly gross income exceeded Rs. 500 (Table 32) in a country where the 'poverty level' has been determined officially to be Rs. 700. The beedi worker earns around Rs. 450 a month as her output is high. At the other end the piece-rate joss stick worker earns Rs. 75 as her production is hampered by irregular supplies and consequent enforced inactivity for many days. The other two piece-rate

workers earn Rs. 150 and Rs. 200. Both reed workers also earn between Rs. 100 and Rs. 150.

Table 32. Monthly income of 20 home-based producers

Income	Number of Women
Rs. 100	1
Rs. 100 - 199	4
Rs. 200 - 299	4
Rs. 300 - 399	4
Rs. 400 - 499	7
<b>Total</b>	<b>20</b>

Profile of home-based women workers

The ages of the women in the sample range from 23 years to 65 years with the mean age being 38 years. Their educational level is relatively low. One had never been to school, five are primary school drop-outs, and 14 are secondary school drop-outs who have not been able to acquire the GCE (OL) qualification. Fourteen are married, two are widows and only four are unmarried. Their profile, therefore, differs markedly from that of the young secondary educated and mostly unmarried women workers in "world market" factories.

These women are married to men who are chiefly in low income occupations in the formal or informal sector, such as labourers, vendors, tailors, and 'minor employees' in government service. Their salaries or wages are reported to be hardly adequate to meet basic family needs in view of the spiralling cost of living. Two widows are heads of households and one of them has school-going children who are totally dependent on her. Only one woman has worked as a housemaid in the Middle East (West Asia). Three women live in shanty settlements in the city and five others live in cadjan and mud houses in the suburbs. The housing conditions of other participants are also, on average, poor.

All these women are motivated by the need to increase family income to meet survival needs. Their choice of home-based economic activities was determined partly by the lack of alternative employment opportunities. Fourteen of them, in fact, had been engaged earlier in other income-generating activities, eight in factories in the formal sector (garments, ice cream cups, flowers, toys, coir, chillie powder), five in small industrial units or home-based enterprises in the informal sector and one in the Middle East. Those who had opted out of the formal sector did so because of child care responsibilities or because of instability of employment and consequent low incomes in these private sector establishments. The choice of their particular activity has been determined by their previous experience, family traditions or the example of other women in the neighbourhood.

Working hours range from 3 hours to 9 hours and time spent on household tasks from one hour (in the case of the unmarried women) to 5.5 hours. Fourteen of them are dependent on the assistance of family members in purchasing raw material, production and marketing. Only six of them wanted to

change to a regular job in a factory in the formal sector or to other enterprises in the informal sector. Most of them saw no options in view of their family responsibilities, and in some cases, age. Most of them perceive their modest income as a crucial contribution to family survival and maintenance. Besides the widow who is the sole income earner in her family, 15 claimed that they contribute at least 50 per cent of the family income.

#### Constraints and needs

The home-based producers operate on the periphery of the urban economy of Colombo. They should be an important target group of development programmes as they have minimal access to resources - to capital, credit, machinery, infrastructure, appropriate skills, space to work in or to store materials; they also have few alternative employment opportunities while at the same time they are partly responsible for the survival of their families.

Home-based production has two basic negative aspects. Firstly, norms of domesticity allocate to women exclusive responsibility for household chores and child care with little evidence of sharing of responsibility and tasks by men. The women in the sample perceived themselves to be disadvantaged in this respect as they saw their time-consuming domestic tasks as a barrier to income generating activities as well as to their access to independent resources. Secondly, home-based workers are also the least protected in their isolation and are therefore vulnerable to exploitation by more affluent entrepreneurs, intermediaries (middlemen), and sub-contractors in search of cheap labour.

The specific constraints that have surfaced from the field survey are:

- (i) lack of capital/credit to buy raw materials in bulk to operate on a larger scale in present industries.
- (ii) lack of access to institutional credit to facilitate participation in more productive and profitable enterprises.
- (iii) lack of access to markets and absence of fair prices to ensure a reasonable margin of profit.
- (iv) a dependency relationship with intermediaries.

Home-based production has been the basis of family survival among the poorest and meets the consumption needs of the non-affluent population. Its inherent flexibility in terms of working hours that facilitates the performance of the multiple roles allocated to women, and the lower investment required as a result of the reduction of overhead costs are indicative of its potential as a strategy to improve living standards, expand employment opportunities and industrial production and increase national income.

Nevertheless, such a strategy has to take into account not only the need to promote industrial production but also to ensure that women producers have control over their resources so that exploitation and dependency can be reduced. It is necessary therefore to promote entrepreneurship among non-affluent women as self-employment has been noted widely to facilitate control over resources (Jumani, 1987).

In view of the economically disadvantaged status of these women, an integrated package of services would seem to be necessary to assist them to

reach a 'take-off' point. Such a package would include credit through a mechanism such as a revolving fund or the new scheme of services by the Regional Rural Developments Banks, technological innovations that will increase productivity without displacing women from these industries, non-formal training in appropriate production and management skills, continuing extension services that include quality control and access to markets. It is possible also to link home-based enterprises to industries in the formal sector, provided lop-sided dependency relationships can be avoided.

It is interesting to note that four women in the sample have aspirations of expanding their enterprises by buying more equipment and materials and employing other women. Such a vertical structure requires labour legislation to ensure minimum wages/rates for employees in the informal sector. The most effective mechanism to improve the bargaining power of women in low income families, however, is to promote a horizontal structure by mobilising women to organise themselves in producers' groups and to strengthen their control over resources, production processes and output, independent of intermediaries.

#### 5. Women entrepreneurs

During the past, much attention was directed towards income-generating schemes for women as a panacea for employment creation. Yet the corresponding programmes have been primarily oriented to lower level skill training to supplement family income, and concepts of entrepreneurship in modern economic terms have not been a feature of these efforts.

Programmes conducted for self-employment during the past decade demonstrated that many women motivated to enter the commercial business world could not do so due to their relative isolation from technical and professional expertise. A small entrepreneur invariably needs to maintain efficiency both as a worker at initial stages and as a manager at later stages. Training needs include technical production skills, financial management, and marketing in a competitive environment.

It is against this background that a Women's Chamber of Industry and Commerce (WCIC) was formed to identify the needs and special interests of women entrepreneurs and to formulate strategies for their support and assistance. Although there is a number of Business Chambers in Sri Lanka, they cater to businesses already well established, and their membership is largely male. The Women's Chamber on the other hand has pledged to help women beginning in business careers and in need of special attention. The character of the WCIC is thus necessarily different, and its tasks are by and large more difficult.

#### The Womens' Chamber of Industry and Commerce (WCIC): Goals and activities

The WCIC was incorporated in 1985 as a non-profit business organization.

Its goals and purposes are to promote the special needs and interests of existing and potential women in business enterprises through technical assistance, identification of opportunities for new marketing outlets, participation in training, trade exhibitions, conferences and international exchange visits, facilitation of access to credit and dissemination of business information.

Its main activities so far have been to:

- maintain a referral service for business consultancy, credit and other business information, legal consultancy and business training, publish a monthly newsletter and maintain a library service through its secretariat;
- conduct regular training workshops on technical areas considered by members to be their main needs and problems. Areas covered include product guidance, basic financial management, agro-industry consultancy and as a 1987 extension, a national agricultural trade show to create market linkages between buyers, processors and the farmer-producer;
- arrange international exchange visits (market promotion, training conferences and workshops).

From the business profiles of members (a total of 80 were registered as of February 1987), it can be seen that a wide range of production and service activities are covered with industrial enterprises accounting for slightly less than half of all members (Table 33). Within this category of industry-related members a concentration on textiles and wearing apparel (20 per cent of total membership) and on food processing and catering (10 per cent of total) is to be observed.

#### Women entrepreneurs in manufacturing industry

To ascertain the status of women's manufacturing activities within the socio-cultural and economic framework of Sri Lanka and their relevance, scope, potential and future prospects, a sample of ten members in the manufacturing industry, selected to represent as many sub-groups as were evident, was studied. The major findings are summarised below.

##### (i) Legal status, management structure and decision-making status of women entrepreneurs

Six enterprises had a formal corporate management structure. In only two of those, women were in full control. In the others, the decision-making and managing were shared by the women's husbands. Four enterprises had a less formal structure. In these, the women were sole owners, and although their husbands and/or male family members assisted them, the activities were actually controlled by the women.

##### (ii) Scale of operations,<sup>1/</sup> markets and employment

###### - Large-scale enterprises

Two enterprises were large scale with over Rs. 5 million capital investment, an annual turnover of Rs. 100 m and Rs. 7 m, and employing 700 and 69 workers respectively. In each industry 90 per cent were women. Both produced textile-based, "world market" goods. Respondents were both in total

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<sup>1/</sup> The definition used in this section to categorise enterprises as large, medium or small scale is as follows:

- large-scale: Capital investment of Rs. 5 million and above;
- medium-scale: Capital investment between Rs. 5 and Rs. 1 million;
- small-scale: Capital investment between Rs. 1 million and Rs. 10,000.

Table 33. Distribution of WCIC members by sectors (February 1987)

CATEGORY	Members (absolute numbers)	Share in Total (per cent)
<b><u>INDUSTRIAL</u></b>		
1. Textile	10	
Wearing Apparel	6	20.0
2. Food Processing	5	
Catering	3	10.0
3. Leather Products	2	2.5
4. Canvas Bags	1	1.3
5. Paper and Paper Products	3	3.8
6. Chemical/Cosmetics	1	1.3
7. Other manufactures:		
Gems and Jewellery	4	5.0
Fishing Flies	1	1.3
Soft Toys	1	1.3
8. Glass Products <sup>a/</sup>	1	1.3
9. Optical <sup>a/</sup>	1	1.3
<b>Sub-total (industrial)</b>	<b>39</b>	<b>49.1</b>
<b><u>OTHER</u></b>		
10. Agriculture and Floral Decor	8	10.0
11. Travel and Hotel Services	3	3.8
12. Trading	4	5.0
13. Professional and Other	22	27.1
14. Hoping to Start	4	5.0
<b>Sub-total (other)</b>	<b>41</b>	<b>50.9</b>
<b>TOTAL</b>	<b>80</b>	<b>100.0</b>

a/ Family business

Source: WCIC

control of their enterprises, holding the key positions of Managing Director and Chairman, and assessed themselves as successful businesswomen. Both were divorced, in their mid-forties and admitted business demands strained family life and marriage.

- Medium-scale enterprises

Three enterprises were medium scale. The annual turnover ranged from Rs. 100,000 (in home-based jewellery manufacture) to Rs. 25 million (in gem trading) and Rs. 500,000 in textile products. Employment was minimal: 1 craftsman in jewellery manufacture, 25 workers in gems (of whom 16 per cent were women lapidarists), and 30 women workers (100 per cent) in the textile venture. The enterprises were serving both export and domestic markets.

In one enterprise the position of Chairman was held by the respondent who controlled the enterprise. In the others, respondents were Directors with husband or sons in decision-making positions, with the exception of one respondent working at home with one craftsman. The enterprises had a formal structure.

All three respondents were married with adult children. The enterprises were managed from their homes, in partnership with family members. There appeared to be little or no strain on family life other than a lack of time for personal relaxation.

- Small-scale enterprises

Five enterprises, informal in structure with one exception, were small scale, registered as "sole proprietorships" or "private companies". Respondents were sole managers and home based. The enterprises were a miscellaneous group comprising soft toys, fishing flies, cosmetics, printing and textile and wearing apparel.

Employment was limited, ranging from one worker (craftsman) to 75, and the majority of workers were women. Casual daily wages or piece rate wages at standard government rates were paid. The annual turnover appeared to be around Rs. 50,000 to Rs. 1 million. Markets were mainly local, supplemented by limited export activities. However, the unutilised export potential (and therefore the employment potential) is high. Respondents were fully aware of this potential, but did not exploit it due to inadequate organisational capabilities to cope with large markets, or because (in one case) the respondent was not willing to expand until her children were older.

(iii) Access to resources

a) Raw materials

Three of the four textile and related industries with high turnover and large export markets imported almost 100 per cent of the raw material inputs. One entrepreneur making handloom textiles who purchased her yarn from local mills found that the poor quality and high prices of this yarn seriously affected her ability to compete with the imported product. Imported yarn and dye are expensive due to market monopolies, and cannot be purchased in small quantities. However, the small entrepreneur's only alternative would be the low-quality local product. It has been suggested to establish a central dye and yarn import depot.

The basic raw material for the fishing flies industry could be feathers of indigenous fowl, but the entrepreneur in question was unable to procure sufficient supplies of the required quality. She therefore has to rely on imports from India, where feathers are supplied by organised cottage industries. The same situation prevailed in the cosmetics enterprise: ingredients are in principle available locally, but the firm has to rely largely on imports.

The jewellery firm suffers from a lack of calibrated stones in Sri Lanka and the fact that gold is available only at black market prices; only exporters are apparently entitled to concessions for gold purchases (at lower world market prices). Although the situation would thus seem more favourable for the gemstone industry, its expansion is limited because gemstones are not accepted as collateral for bank loans.

Raw material supply problems of various kinds, in short, have negatively affected the growth potential of the industries surveyed.

b) Finance and credit

The small entrepreneur, especially the female entrepreneur, finds him/herself in a disadvantaged position vis-à-vis the larger enterprises when credit is needed. Many small entrepreneurs cannot handle the complicated documentation, including feasibility studies and project reports, which are often required, and are not in a position to fight administrative delays. Nor do they generally dispose of influential guarantors or of contacts with key personnel in banks. Collateral is another problem: many small entrepreneurs do not own real estate which can serve as such. Credit often takes the form of overdraft for which high interest rates have to be paid. Even the stipulations of the Small and Medium Industries Loan Scheme often cannot be met.

c) Technical and professional competence

Among the most successful entrepreneurs are those who were professionally trained in Business Management in foreign universities with further follow-up of training workshops and seminars held in Sri Lanka. Their enterprises are large and of corporate status.

In the area of production, it was very clear that most of the respondents had transposed special aptitudes and/or skills in specific areas (batik, embroidery, doll making, gemology, etc.) into viable business production. As managers of their own enterprises they were able to train employees in those skills. 50 per cent of the respondents have engaged technical expertise at some stage in their enterprises, whereas the rest have managed by trial and error.

Only the two professionally trained women had sophisticated marketing concepts. Trial and error played an important role in marketing too, with women who had travelled abroad and who disposed of a wide range of contacts at an advantage. Expansion of existing markets, breaking into new markets, product diversification, market research and studies examining potential avenues for industrial development however were identified as urgent concerns needing outside assistance.

Other priorities mentioned by the respondents include easily accessible and less expensive facilities for training in business management as well as job-specific skill training facilities for employees.



Conclusions and issues

- (i) The low profile of women entrepreneurs in Sri Lanka's business environment is largely a result of conflicting family and business roles. The more successful and common enterprises run by women are small-scale enterprises of semi-formal structure, home-based or close to the residence, where entrepreneurs are assisted by husbands.
- (ii) Although the scale of operations is relatively small, the firms are viable and there is scope for expansion in both local and foreign markets. Postponement of expansion has been mainly due to family considerations, and to inadequate business management capabilities. Women who have had access to resources and training for large-scale business have proved to be competent and efficient. Women in these large industrial ventures have tended to concentrate on "feminine areas" of weaving and wearing apparel industries.
- (iii) Those who have had the advantage of professional training in skills and of creative and artistic talents have excelled in "exclusive" products for exclusive markets which often generate as much value added as the mass-produced utility product.
- (iv) As the nature of enterprises in which women have excelled are those where creative sense and attention to fine detail are important, more attention should be given to exploring the employment potential of such exclusive industries than to the potential in assembly-line operations.
- (v) Bureaucratic and complex bank credit and repayment procedures have limited female entrepreneurship, especially in the smaller industries. There is also a need for better information on developments in markets for industrial products.
- (vi) Product guidance, technical expertise in production, professional management and marketing are essential pre-requisites that are especially scarce in food and related industries. Women have traditional food processing skills and the potential to move into viable agro-industries should be utilised.

## V. WOMEN IN SRI LANKA'S INDUSTRY: POLICIES TOWARDS ACHIEVING HIGHER PARTICIPATION

This final chapter provides a synthesis of the major trends, potentials and constraints that have been identified in this study. At the same time it outlines policy recommendations for enabling women to contribute more effectively to future industrialisation efforts in Sri Lanka. In the first section the significance of an integrated view is emphasised in terms of stressing the strong impact of general industrial strategy decisions on the role of women in industrial development. Subsequent sections deal with more specific issues in this process.

### A. Overall industrial strategies and policies

Prospects of women in industry must be viewed in the overall context of gender inequalities in access to employment. The manufacturing sector had an average growth rate of 5 per cent between 1978 and 1985 as compared to 1 per cent between 1971 and 1977. Official labour force statistics have not been available since 1981, but the percentage of women in the total labour force in the manufacturing sector declined from 29.3 per cent in 1971 to 23.0 per cent in 1981. At the same time, the distribution of the female labour force across the main economic sectors changed between 1971-81, with the manufacturing sector's share declining from 12.2 to 11.3 per cent, the share of the agricultural sector declining from 61.8 to 52.0 per cent and the share of the services sector increasing from 19.7 to 29.7 per cent. However, there have been significant internal changes within the manufacturing sector with regard to urban and rural areas: Whereas in urban areas manufacturing accounted for 20.4 per cent of the female labour force in 1981 (an increase of 6.4 percentage points over 1971), in rural areas its share declined from 11.9 to 9.2 per cent. It is likely that developments in the eighties have reinforced this trend towards widening urban-rural disparities in female industrial employment.

Changes in the internal composition of the manufacturing sector since 1977 have been significant. There has been a decline in the share of export processing of plantation crops and an increase in factory-based employment. The shares of small-scale industry and the informal sector have not changed appreciably. Around one-third of employment is still in small-scale industries and nearly 75 per cent of all industries are located in the Colombo district and its neighbouring Gampaha district.

The immediate impact of the 1977 reforms and the influx of imports was that small-scale industries could not compete with better-quality low-cost foreign products while their own costs of production escalated and their limited resources prevented easy access to credit, imported raw materials or technology. Large scale entrepreneurs survived and benefitted from the new policies, and local collaborators of foreign firms had relatively easy access to finance, foreign technology and markets. Recent trends in the international division of labour and the consequent relocation of labour-intensive industries to the Export Processing Zone (EPZ) established in 1978 brought in foreign investment, and private, large factory-based enterprises expanded under the GCEC (EPZ) and FIAC schemes.

These developments had a marked impact on the participation of women. The handloom industry, the traditional stronghold of women, and particularly

of rural women, virtually collapsed in the face of competition from imported textiles. Only 8 per cent of the co-operative handloom centres and around 30 per cent of the 110,000 handlooms continued to operate and about 40,000 weavers, the great majority of whom were women, are reported to have lost their means of livelihood. This accounted largely for the reduction of the number of women in textile production from 69,570 at the 1971 census to 36,109 in 1981. Although attempts are being made currently to re-establish 450 weaving centres, the handloom industry is yet struggling to survive. Since many agro-based and cottage industries shared the misfortunes of the handloom industry, women's access to rural industrial employment emerges as a priority area for remedial action.

The most rapid expansion in the manufacturing sector took place in export-oriented garment industries. Nearly half the industries in the Export Processing Zones - 46 of 119 factories in operation from 1975 to 1985 - and over half the factories promoted under FIAC produce ready-made garments for the export market. These garment industries utilise the services of young female secondary school leavers as low-cost labour. Over 90 per cent of textile and garment workers in the EPZ and almost as high a proportion in factories outside the zone have been women. The number of women in these industries increased from 6,314 in 1971 to 28,842 in 1981, and in 1987, women workers in the EPZ factories alone exceeded 30,000. It is important to note, however, that as many of these factories' workers are drawn from the suburbs of Colombo or from urban or rural areas in a few other districts, the expansion of factory industries could not compensate for the collapse of rural industries located in an island-wide network of centres. Moreover, the new employment opportunities created through these large-scale enterprises are chiefly semi-skilled jobs that reduce labour costs in production without providing opportunities for the upward career mobility of women workers or for significant transfer of technology.

The growth of the manufacturing sector depended largely on three groups of industries:

- (i) textiles, wearing apparel and leather products;
- (ii) food, beverage and tobacco; and
- (iii) chemicals and chemical products.

Women workers in the manufacturing industry are above all concentrated in the textile group, and to a lesser extent in food processing, the manufacture of plastic products, pottery and china, and other manufactured goods. Relatively fewer women have found employment in industries that manufacture wood, paper, rubber, glass, steel, fabricated metal and electrical products.

Economic policies also appear to have had a differential impact on the participation of women in public and private sector enterprises. The state policy of "privatization" through the transfer of ownership or management of state industrial enterprises to the private sector has led to changes such as the reorganization of four large textile mills; the closure of two other textile mills, three tile mills and corporations that were not considered to be economically viable; the transfer of 68 of 70 powerlooms to the private sector and the transfer of the Milk Board to a company. Women have been displaced from some of the industries that have ceased to operate. State enterprises are currently limited largely to capital-intensive, large-scale

enterprises in food, tobacco, plywood, paper, petroleum, cement and steel which employ few women, and then largely as unskilled labour. Small industries which have been the traditional avenue of employment of rural secondary school leavers tend to be in disarray at present and to be in a process of restructuring. While the public sector looms large in industrial production, it provides minimal opportunities directly for the economic participation of women.

It is quite obvious, then, that within the conditions set by culturally shaped attitudes it was overall economic trends and economic policy decisions that have largely determined the role of women in industrial development. No doubt, macro-policies and their impact on the structure and growth of the economy will continue to exert great influence on female participation. The direction and strength of the economy's growth will above all determine the industrial employment potential for women. Women-specific support measures (including the removal of traditional barriers) at the branch-level or micro-level generally operate within the scope set by these overall trends.

In view of this it is essential to look first of all into the impact of currently debated industrial policy measures on the role of women. Attempts at further diversifying Sri Lanka's industrial sector - which at present is basically limited to a narrow range of branches - are a case in point. In the long run, this diversification can be expected to be brought about largely by market forces: As international cross-country evidence clearly shows, the share of labour-intensive low-skill industries in general and that of textiles/clothing in particular tends to decrease with rising income levels. However, in the case of Sri Lanka with its currently extraordinarily high dependence on these branches, it can be argued that this industrial restructuring should be accelerated by deliberate policy measures. In fact, both GCEC and FIAC have recently been actively seeking to reduce their reliance on textiles/clothing-related foreign investment and have had some, albeit limited success in these efforts. At the same time, diversification is a major theme of overall policy perspectives for the industrial sector, as shown in the following statement taken from the Public Investment Plan 1986-1990: "Reliance on labour intensive activities such as garments is a typical characteristic of early stages of industrial development in countries at low income levels. The industrial sector is apt to face difficulties due to factors like quota restrictions imposed by importing countries and the low value added nature of garment and petroleum products unless measures are taken to diversify the industrial structure. Successful industrialisation also requires access to modern technological innovations and know-how so as to raise the productivity of this sector. In view of these considerations, efforts have been made to diversify the industrial sector by developing more capital and skill-intensive projects such as those involved in the production of electronic goods, rubber products and chemicals". (Ministry of Finance and Planning, 1986, p. 96 ff.).

It is understood that the government has assigned an important role to foreign investment in bringing about the desired restructuring and diversification of the economy. This would clearly require, however, that Sri Lanka starts to capitalise on assets beyond its availability of cheap unskilled/semi-skilled labour. If for example - as has been the case recently - investment promotion efforts are increasingly geared at attracting firms in the metalworking and machinery areas of production, then obviously a qualitative leap is required in terms of building up a more sophisticated and

resilient industrial system. This is so for the simple reason that investment requirements of engineering firms tend to be much more demanding than those of firms using Sri Lanka simply as an interchangeable export platform for standardised clothing items (see also section I.B.). This relates to infrastructural and technical training requirements, to the existence of capable local partners for joint ventures and in particular to a well-developed support network of efficient small and medium enterprises that can be drawn upon for subcontracting arrangements. In the absence of all this, the substantial international investment flows towards Asian countries will largely bypass Sri Lanka (UNIDO, 1987a).

Hence, what is essentially required is a coherent government 'vision' of where the country's industrial development should be heading. This perception of the country's desirable (and feasible) future industrial structure would allow to put the modern export sector into the perspective of overall national development needs. Furthermore, it would be necessary to identify bottlenecks, with the desired types of foreign investment in mind but also as a precondition for domestic investment and overall national planning. This is not to argue in favour of 'planning' industrial development in the traditional sense of the term. Rather, as can be seen from the experience of a number of East and Southeast Asian developing countries, it is the effective interaction of public sector guidance and private sector initiatives that has often led to successful economic development. As was stressed already before (see section I.B.), human resources and skill planning is to play a crucial role in this process as the prior existence of industrial skills at least to some extent determines investment decisions (particularly those of foreign investors) and not vice versa.

Yet it appears that the currently prevailing institutional set-up with regard to human resource issues is not quite up to these challenges. The establishment of a separate Human Resources Planning Unit in the Ministry of Finance and Planning to work out in advance the employment implications of growth targets is thus strongly recommended. Efforts should be made to ensure an adequate representation of women in national planning exercises, e.g. through a stronger institutionalised involvement of the Women's Bureau. However, without clearly formulated priorities for industrial development at the national level any such attempt at strengthening human resource planning would be deprived of much of its potential value.

It may appear that what has been said so far in this section has rather little to do with the subject of this study, i.e. the role of women in industry. In fact, the opposite is true. A full understanding of the major forces shaping industrial development is an indispensable element in any attempt to put the 'women issue' into perspective and to formulate related policy recommendations. As Hanna Papanek has pointed out:

"The most significant problem remains the failure to recognise that women - like men - are affected by all development policies ... The most significant obstacle to both research and policy design is the existing emphasis on isolated 'women's projects' or programs or 'women's components' in development projects ... Excellent local programs may benefit women in the short run, but the effects of such programs can be wiped out by policies at the national level that appear to be unrelated to women but actually affect their interests in many ways ... The conception of women as a 'backward' group whose needs can be met by scattered programs and projects ... undermines the formulations of adequate development policies." (Papanek, 1981, pp. 215 ff.)

Technological innovation as one of the essential macro-dimensions of structural changes is a case in point which brings us back to the diversification issue. While a more strongly diversified industrial structure is certainly desirable from a macro point of view, its impact on female industrial employment might initially be rather ambiguous. The immediate effect of a structural shift away from textiles/clothing towards more sophisticated industrial production will obviously be a substantial loss of jobs that have traditionally been 'female'. In consequence, women will only be able to benefit from industrial restructuring to the extent that they will be able and given a due chance to participate in some of the new growth industries. This assigns a decisive role to a vocational training system properly equipped to respond to the emerging challenges (see section III.C. below).

The overall policy guideline should in fact not be to 'protect' women against technological innovations or structural changes (which in the long run could turn out to be self-defeating) but to ensure their adequate participation in this process. No doubt, in the past there has often been an 'anti-women bias' in technological innovations. However, the blame for this in not to be put on (technological) modernization as such but rather on (socio-cultural) traditions which on the basis of gender-stereotyped employment patterns have relegated women to simple, easily mechanizable tasks. Hence, they have been structurally 'predisposed' to job losses (UNCTAO/INSTRAW, 1985). This has been true not only concerning the introduction of modern technology but often also in the case of small changes in traditional technology, e.g. in the area of processing agricultural produce (Cain, 1981).

Accordingly, it is of paramount importance to identify in advance those growth branches and emerging technologies in which women can in the future play a greater role than in most industries in the past. It appears reasonable to assume that at a time when traditional production processes are transformed by technological change the opportunities to overcome gender-based occupational classifications are comparatively great, due to the lower strength of vested interests. Hence, the close monitoring of the introduction of new technologies is of utmost importance in terms of establishing an 'early warning system' capable of identifying both threats and opportunities.

For example, one clearly discernible trend is that the utilization of computer technology is rapidly gaining significance, both in industry itself and in industry-related institutions (Ministries, research institutes, etc.). A potential growth area in the global division of labour in this field appears to be the writing of software, possibly also for international clients <sup>1/</sup>. It appears essential that the interests of women workers are introduced at an early stage into a national computer policy which is currently being shaped by newly established bodies such as the National Computer Policy Committee (COMPOL) and the Computer and Information Technology Council (CINTEC), set up to advise the Government in formulating, coordinating and implementing policy. Their first recommendations to the Government put special emphasis

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<sup>1/</sup> Reference is made to the cooperation between the University of Colombo and the University of Reading, UK, in writing software for education purposes.

on education/training requirements: "The Government should take immediate steps to improve computer-related skills and promote their application as widely as possible, especially in the following areas: scientific analysis, higher education, industry, business and financial management, and schools. The establishment of standards for computer education should also have high priority. Particular attention should be paid to identifying and encouraging the application of computers in the public sector. Efforts should be made, as soon as possible, to ensure adequate financial incentives and job satisfaction, in order to attract and retain the services of computer personnel in Sri Lanka. Computer literacy and appreciation of the potential of computers among the general public should be increased." (Munasinghe/Blankstein, 1985, p.15.)

While the impact of the rapidly expanding utilisation of computer technology cuts across all branches of manufacturing (and related service activities), there are other technological changes that mainly affect particular industrial branches. For instance, the textiles industry worldwide has in the recent past been experiencing drastic innovations in production technology which will change the future skill requirements of the industry's predominantly female labour force. Whereas their precise impact is not yet clear it appears safe to assume that, on the one hand, new supervisory, data control and programming activities tend to increase related skill requirements while, on the other hand, the generally higher degree of automation would tend to decrease the required skill level in other activities. The clothing industry has so far shown a stronger 'resistance' to technological change but major innovations e.g. in cutting processes are on the horizon. To the extent that these innovations are implemented in Sri Lanka (rather than to lead to a relocation of production back to developed countries) it is crucial for the female labour force to meet the resulting challenge in order not to be replaced by both new equipment and differently qualified male labour.

In the medium run it is important to note that as a result of increasing automation, production systems tend to become more similar across industrial branches than they have been hitherto (UNIDO, 1986). Under these conditions, training for industrial activities that make use of the new technologies can clearly yield economies of scale in the sense that a general technical training can easily be adapted for use in specific industrial branches. This implies that sooner or later industry will obtain benefits in strict cost terms through participating in general training courses in the use of new technologies. The financing of such training could, of course, come both from industry associations and the public purse; the benefits for government would be those of supporting industry in its efforts to remain internationally competitive. Moreover, this type of training tends to maximize the mobility of semi-skilled and skilled staff and thus creates more opportunities for dynamising the industrial sector as a whole. This point is especially relevant given the emphasis in Sri Lanka on the creation of small and medium ancillary industries. It has often been observed that the smaller firms which grow up to meet the needs of more complex industrial structures are created by people who previously acquire industrial experience through working in already established larger enterprises.

However, euphoria concerning new technologies in general and computer application in particular ought to be avoided. While trends in the introduction of new technologies need to be closely monitored and require strong efforts in anticipatory training they must not be regarded as a panacea for employment creation. The vast area of more traditional small industry,

largely rural-based, is still of overriding importance for the participation of women in industrial development. As pointed out earlier there is now a widespread feeling among policy-makers in Sri Lanka that these small and rural industries have tended to be neglected in the recent past and should now be revitalized. The establishment of Export Production Villages under the EDB, the Central Bank's initiatives to stimulate rural economic activity through the Regional Rural Development Banks and concessional finance under the Medium and Long Term Credit Fund as well as the Small and Medium Scale Industries Credit Guarantee Scheme of the National Development Bank are all elements of this approach. Furthermore, the Industrial Policy Committee set up in 1985 to formulate a comprehensive industrial strategy for the country is exploring possibilities to strengthen the linkage between small and large industries. This new policy awareness is to be welcomed both from the point of view of a more balanced national industrial policy and from the perspective of increasing the participation of women.

The stronger promotion of small and rural industries can be expected to further decentralization. It will help to reduce spatial income disparities and to avoid further concentration of industrial capacity in and around Colombo. At the same time, given women's comparatively lower mobility (largely due to the need to combine economic and domestic roles) female labour could greatly benefit from greater industrial dispersal. Specifically, it may contribute to removing recently observable imbalances between urban employment gains and rural employment losses of women.

While small and rural industries have traditionally mostly catered to markets in close proximity to their locations, these markets tend to be very narrow and often unstable. Linking rural producers to large industries as well as to export markets hence provide them with further growth potential as is clearly recognized by the Government: "The small- and medium-scale industries which for several decades were used as instruments for promoting an import substitution policy, could also assist the process of accelerating export-led industrial development. These industries can be linked vertically ... as a supply base for large industries. The benefits of export incentives are presently restricted only to direct exporters; it would be appropriate to grant such assistance to small- and medium-scale subcontractors as well." (Ministry of Finance and Planning, 1986, p.103.)

In view of the renewed policy focus on domestic small and medium industries an in-depth stocktaking of the actual status of this sector would be essential. The currently available sketchy evidence is hardly sufficient as a basis for policy decisions. Within the framework of such a general review the following aspects would appear to deserve specific attention:

- In order to establish a closer link between small and large enterprises, it would be important to thoroughly review the experience hitherto gained with the Subcontracting Exchange (SCX) established in 1980 within the Industrial Development Board. According to a first assessment undertaken in 1983 (Padmanathan, 1983) several shortcomings have so far hindered the SCX to play a leading role in effectively linking large and small enterprises.
- In establishing a link between rural producers and export markets, the concept of export production villages is evidently of great significance. Without relying on the EPZ-approach with all the shortcomings of its enclave-type production, EPVs have contributed to



both employment creation and increased export earnings. This is not to assume that in the short to medium run they could take over the role of a major foreign exchange earner. However, they play an important complementary role and appear to deserve more attention than they have attracted so far. It is strongly suggested to utilize the current consolidation phase to review the experience so far gained with EPVs, to explore the potential for a stronger industrial focus and to undertake thorough studies on the most promising markets for a potential second expansion phase.

- Difficult policy decisions will have to be taken with regard to the intended invigoration of the handloom industry. It would seem to be essential to tackle this task in a differentiated way. Whereas most of the handloom production is clearly geared towards serving the domestic market there is a narrow but growing segment in the sector which on the basis of high quality and creative design has become competitive in international markets. While the latter will require more specialised assistance in the future (e.g. in the area of marketing of input deliveries at preferential rates), the former can only survive in a more protective environment. Potential measures in this regard include tariff protection, market reservation schemes or preferential pricing in the case of public procurement (see also ILO-ARTEP, 1986).

To sum up, the following policy measures may be suggested to ascertain a fuller participation of women in Sri Lanka's industrial development:

- (1) Increase the participation of women at all levels of industry including policy and decision-making levels, as an integral element of national industrial policy and planning (including the nomination of women by the concerned Ministry to serve on the new Industrial Development Committee);
- (2) strengthen the institutional machinery for human resources planning exercises by streamlining the prevailing institutional set-up (removal of overlapping functions) and by introducing a Human Resources Planning Unit in the Ministry of Finance and Planning;
- (3) in view of the underestimation of women's contribution to informal economic activities in general and industrial activities in particular, develop more adequate statistical concepts and techniques - regional co-operation in the formulation of such concepts and techniques would help to facilitate comparisons;
- (4) ensure that the Ministry of Women's Affairs and Teaching Hospitals and its Women's Bureau are involved in the planning process and in monitoring the impact of industrial programmes and policies on women;
- (5) promote the recruitment of more women for technical and skilled level employment in urban industries in order to develop their own aptitudes and to enhance their contribution to national economic and technological development;
- (6) in the context of efforts towards stronger industrial diversification, monitor emerging structural changes and the concomitant introduction of new technologies with a view to identifying in advance their likely impact on employment (job creation; displacement of workers) and the potential for higher female participation at an early stage;

(7) promote small and rural industries in particular to achieve a more balanced industrial structure and a higher degree of decentralisation and industrial dispersal. More specifically, it will be desirable in this context to:

- (i) ensure that a panel including women representatives be appointed by the Industrial Policy Committee to examine the present status of small industries and to make appropriate recommendations to resuscitate them and to provide more economically viable employment opportunities for women in this sector;
- (ii) re-vitalise, in particular, the handloom industry for local and export markets;
- (iii) provide opportunities through the Mahaweli Development Programme for training-cum-production programmes in industries, and particularly non-traditional industries, for the increasing number of female secondary school leavers in the new settlements;
- (iv) increase the allocation of resources in Integrated Rural Development Programmes for industrial development to meet the specific needs of each district;
- (v) promote the participation of rural women in lapidary industries in gemming districts such as Ratnapura and Monerapala;
- (vi) strengthen the linkages between large and small industries by promoting sub-contracting arrangement on the basis of a review of the experience gained so far with the Subcontracting Exchange under IDB;
- (vii) review the Export Production Village scheme and give it a stronger industrial focus ensuring due representation for women at all skill levels and in decision-making positions.

#### B. Entrepreneurship and self-employment

One of the spin-offs of the promotion and expansion of private enterprise has been the emergence of an increasing number of women entrepreneurs on the industrial scene. These women who belong to elite groups or to the middle class have utilized their talent and skills, their family resources and support, their social contacts and the favourable economic climate to develop small scale and often home-based projects into economically viable enterprises. The most successful of them, particularly those whose enterprises are in the textile and garment sub-sector, have established relatively large enterprises, employing a largely female workforce as in other textile industries, and having access to profitable overseas markets.

Despite the establishment of the Women's Chamber of Industry and Commerce as a catalyst and support centre for women entrepreneurs, and the high motivation of these women, constraints to the effective functioning of many of their enterprises exist, adversely affecting women with less access to resources and to overseas markets. Three major areas of concern are: their lack of training, and consequently, the absence of professionalism in their

business management; problems in access to credit from lending institutions; and the paucity of relevant market information. Bureaucratic procedures have delayed supplies of imported raw materials and created frustration. The potential for innovative action and commitment among female entrepreneurs, however, foreshadow their important contribution to industrial production.

Self-employment has sometimes been perceived as a panacea for economically developing countries with unemployment problems. It has been promoted by international and bilateral agencies during the UN Decade for Women as the appropriate mode of income-generation for women who are not employed in the formal sector of the economy. It is the experience of many countries, however, that self-employment has been a successful strategy chiefly for women who already have some access to resources and who are thus able to make optimal use of 'project assistance'. Although governments, non-governmental organizations and funding agencies have attempted to assist women in low income families to develop viable self-employment projects, their efforts have been conceptualized largely for 'secondary earners'. Women in the lowest economic strata, however, engage in economic activities as a strategy for family survival and are in need of special support till they achieve some measure of economic stability.

Women in low income families in the informal sector in Sri Lanka are therefore an important and special target group of development programmes. They are the most disadvantaged group in industry as they lack access to capital/credit, skills (as school drop outs), technology, support services and markets. In their isolation they lack bargaining power and are exploited as piece rate workers by more affluent entrepreneurs or as self-employed producers by the ubiquitous middleman. Their poverty generally makes it impossible for them to find sufficient starting-up capital for their industries; hence they tend to be caught in the vicious circle of low production, low profits, low investment, low production.

The informal sector has been expanding partly as a result of unemployment and inflation, and structures can be developed to enable this 'invisible' sector to benefit from industrialization. The possibility of creating linkages between the formal and informal sector has already been explored through Export Production Villages and piece rate home-based production, relatively successfully from the production angle but less successfully from the perspective of women participants.

Another mechanism that has offered a good potential for developing the capacities for industrial entrepreneurship of the resourceless and facilitating their access to inputs and markets of the formal sector is the organisation of producers' groups. These groups can mobilise women in low-income families so that by increasing their own access to and control of economic resources they may be able to bypass exploitative middlemen, as in the case of the 'change-agent' programme in Sri Lanka.

Strategies to assist women entrepreneurs and self-employed women in the informal sector to improve their prospects and to increase their contribution to production must necessarily differ given their unequal access to resources.

Programmes and measures directed towards women entrepreneurs should be designed to fill existing gaps in support services:

- (1) The Women's Chamber of Industry and Commerce should be strengthened and linked with organizations such as the Sri Lanka Business Development

Centre, the Industrial Development Board and the Export Development Board in order to service the needs of women entrepreneurs more effectively. These services should include:

- (i) Counselling on all aspects of setting up an industrial venture and staying in business;
  - (ii) assisting with planning, preparation of project reports, establishing relevant linkages;
  - (iii) providing guidance in the selection of specific market potentials;
  - (iv) ensuring opportunities for basic training in management, production control, accounting and marketing;
  - (v) arranging technical assistance as required;
  - (vi) providing a data bank and referred services.
- (2) International, bilateral and other agencies should provide the services of a short-term consultant to work out a credit mechanism, preferably using the existing banking structure, that could be a 'risk' or 'venture investment fund' for supplying equity capital, extending unsecured loans and loans not fully collateralized to small industrialists. Loans should be in the form of a package of assistance, e.g.:
- (a) Servicing the loan through project earnings;
  - (b) reducing paper work and loan processing time;
  - (c) counselling and remedial adjustment in times of business difficulty or failure.

The following suggestions for policies and measures aim at self-employed women:

- (1) Government, non-governmental agencies and funding agencies should provide a package of inputs and services that will enable self-employed women to engage in economically viable enterprises. Such a package should include capital/credit, training and extension services in improving production and management skills, quality control and access to markets.
- (2) In the case of women in families in the lowest income decile, grants should be allocated so that inputs and services are provided without cost or at minimal cost until such women reach a 'take-off' point and become economically self-reliant.
- (3) Credit institutions such as the Regional Development Banks should have sufficient flexibility and be specifically geared to assist women in low income families who are unable to utilize normal credit facilities. Mechanisms such as nominal service charges or low-interest revolving funds should be set up to meet their needs and should be monitored at community level.
- (4) Women in this income group should be mobilized to form producers' groups that will help to increase their bargaining power and to develop

self-reliance so that they may by-pass exploitative middlemen who control materials and markets and thus depress prices and incomes. International and bilateral agencies should promote the exchange of experience with other countries in the region as regards organizing and supporting such groups of self-employed women (e.g. SEWA; Grameen Bank).

- (5) Efforts should be made to establish linkages between the formal and informal sector that will encourage the flow of inputs and services from the formal sector to the informal sector, and the production of goods in the informal sector to feed formal sector industries.
- (6) International, bilateral and other agencies should support studies of the economic constraints faced by low income women in the urban and rural informal sector, surveys of resources and market channels in the informal sector, and appraisals of alternative strategies that can help these women to achieve economic stability through industrial production.

### C. Education and training

Women in Sri Lanka have had equal access to education since free primary, secondary and tertiary (including university) education was introduced in 1945. Gender disparities in educational participation hardly exist and the percentage of girls in the total enrolment was 51.3 per cent in Grades 6 - 10 and 57.7 per cent in Grades 11 - 12 in 1985. Nevertheless differentials are wide in unemployment rates of secondary school leavers: 14.5 per cent male and 42 per cent female unemployment among the GCE (OL) qualified in the labour force, and 22 per cent male unemployment and 52.2 per cent female unemployment among the GCE (AL) qualified in 1981.

It has been seen that female secondary school leavers are channelled by push and pull factors, determined largely by the international labour market, into semi-skilled employment while women graduates tend to be absorbed by the services sector. However, the tradition of educational and economic participation, the absence of constitutional or legal barriers to the employment of women, and the economic need of both married and unmarried women for avenues of income generation facilitate the promotion of alternative modes of female labour utilization.

It is possible, therefore, to draw on these available human resources for new forms of industrial employment requiring more sophisticated technology and skills at different levels in order to accelerate the industrialization process and to provide opportunities for the development of individual aptitudes and skills.

In a country with an extensive network of schools and equal access of boys and girls to general education, it is regrettable that a major constraint to increasing the participation of women in industry is their narrow range of skills which is an outcome of their educational experiences. Gender-based diversification of practical subjects at school level, inadequate opportunities for vocational training in the formal and non-formal sectors in education, and a wide gender gap in enrolment in vocational institutions, have combined to confine women to culturally demarcated 'feminine' areas of employment.

The proportion of women in vocational education institutions and programmes has increased in the last ten years. Nevertheless enrolment

statistics indicate that the training capacity in these institutions and programmes has not been utilized adequately to equip women to engage in industry-related economic activities. For instance, less than 25 per cent of the trainees in the National Apprenticeship Board Programme are women and over two-thirds of these women are in textile and garment manufacture. It has been pointed out earlier in this study that while nearly 70 per cent of women in skilled level or middle level training programmes are in industry-related courses, 74.1 per cent of them are in training programmes in textile and garment manufacture. Training programmes have rarely taken into account the need to train women in skills relevant to other sub-sectors in manufacturing industries. The non-formal education sector that caters largely to school leavers and 'drop-outs' reproduces the imbalances in formal training institutions.

In the informal sector lack of skills confines women to 'subsistence' industries. In the context of a relatively well educated female labour reserve without marketable skills and the need to increase the participation of women in the industrialization process, a policy of channelling school leavers to training programmes that will assist them to develop a wider range of skills emerges as an area of priority. With the changing needs of industries, shifting priorities and increasing sophistication and complexity of skills, women are likely to be more marginalised and by-passed by the process of industrialization if constraints to relevant skill development persist.

At decision-making levels in industry, the relative absence of women contrasts with the significant proportion of women in higher education institutions. Although 40 per cent of the university student population have been women for nearly two decades, and 44.9 per cent of professional and technical workers were women according to the 1981 census, only 9.5 per cent of administrators and managers were women. There is considerable potential therefore to be directed to decision making and research levels in industry.

Unequal access to employment and constraints to self-employment and entrepreneurship are partly the outcomes of negative education experiences and disparities in vocational education but are also consequences of the fact that vocation-related information and infrastructural support are generally geared to male workers.

It is necessary, therefore, to focus on:

- Motivating women in higher educational institutions to enrol in courses geared to research, technology, science and management;
- increasing opportunities for secondary school leavers to acquire technical skills that are relevant to middle level and skilled employment in industry; and
- providing women in the informal sector and Middle East returnees (who often dispose of savings that could serve to start a manufacturing enterprise) with opportunities for training in business skills so that they may embark on their own industrial ventures.

Training and education needs that have surfaced from this study require the implementation of both short-term and long-term policies and programmes. The following measures are suggested:

- (1) In view of the imbalance between the pool of available female industry-related skills and labour market trends, and in particular the concentration of women in 'feminine' industries, steps should be taken to enrol more women in current technical courses and to expand formal and non-formal vocational training opportunities for women in order to equip them with the wider range of skills required by manufacturing industries.

More specifically:

- (i) the National Apprenticeship Board should motivate employers to accept women apprentices in employment areas in which they are at present under-represented. Currently there are women apprentices in only 23 of the 105 courses under the Board;
  - (ii) the National Youth Services' Council should expand training opportunities for women without gender differentiation in courses offered, as e.g. in the present Women's Programmes;
  - (iii) the Dehiwala Polytechnic of the Ministry of Higher Education, which is presently a women's polytechnic and therefore apt to be marginalized, should be re-organized as a co-educational Institute to meet the needs of such manufacturing industries as engineering, metalworking, food technology, textile technology, jewellery manufacture. Courses should also be geared to training in skills that are required in extension activities, management and market research;
  - (iv) the Department of Labour and the Non-formal Education Division of the Ministry of Higher Education should cease to channel all or the majority of their women trainees to sewing classes and should encourage women to enrol in all their courses according to individual aptitudes and interests;
  - (v) the Departments of Small Industries and Textiles should revamp their training courses and link them more directly with programmes to promote production and income generation;
  - (vi) employers should assist women in semi-skilled jobs in factories to upgrade their skills and consequently to increase their access to more remunerative employment;
  - (vii) the Women's Bureau, the Women's Chamber of Industry and Commerce, and non-governmental women's organization should liaise with formal training institutions to organize comprehensive training programmes in entrepreneurial skills for self-employed or unemployed women;
  - (viii) extension programmes, on-the-job training and vocational programmes should be organized with international/bilateral assistance for women in the small scale and informal sectors to upgrade their skills and to increase their economic productivity and quality of their output. Such programmes should also provide for easy access to credit, and training in management, accounting and marketing skills.
- (2) Industry-related institutions should recruit and train more women from universities for research and quality control programmes.

(3) Within the formal education system:

- (i) Allocation of students to practical/vocational courses in secondary schools should be on the basis of individual aptitudes. The gender-free pilot programmes in 'life skills' introduced in secondary schools should be extended to ensure the development of such aptitudes irrespective of gender;
  - (ii) Vocational Counsellors should be trained and Vocational Counselling programmes should be introduced extensively in schools and universities, and should be directed also to motivating girls and women to enrol in courses leading to non-conventional avenues of employment in industry;
  - (iii) university places should be increased in industry-related courses and in industrial research;
  - (iv) universities should increase their collaboration with industry, engaging in research that meets the present and future needs of industry;
  - (v) short-term post-graduate Diploma courses in industrial management and industrial relations should be organized for unemployed graduates to train them for managerial jobs in industry. Women graduates should be encouraged to enrol in these courses.
- (4) As a long-term measure, learning activities and materials in pre-schools and primary schools should be structured to encourage cross-gender activities in order to counter the negative impact of child rearing and educational practices based on gender-role stereotypes.

D. The status of women in industry

The contribution of women to the economy and to family income has often been under-estimated and understated. The textile industry, for instance, in which over 80 per cent of the workers are women is reported to be the largest in the formal sector and the second largest foreign exchange earner among merchandise exports. Likewise, the Export Production Villages draw heavily on women in the informal sector. Women in industry make a significant contribution to the national economy, as they do on plantations and in domestic agriculture and as migrants to West Asia.

Field studies have indicated that the majority of women in manufacturing industries have contributed around 50 per cent to the family income. Even young unmarried workers tend to contribute around 30 per cent while women are sole income earners in an increasing number of low-income, female-headed or female-dependent households.

It is important, therefore, to ascertain whether women participate as equal partners with men in industrial development. Are their skills efficiently utilized and do they get a fair share of the economic and social returns? As elsewhere, women in Sri Lanka tend to be perceived as 'secondary' human resources and as supplementary income earners despite their traditional participation in economic activities and their crucial contribution to family



income. There is also a contradiction between their equal participation and performance in education and their concentration at the bottom of the employment pyramid.

It was seen from the field studies that more than half the women employed in public sector manufacturing industries are in unskilled jobs in the 'labour' grade and less than 25 per cent in professional and technical posts. In private sector industries very few women are at supervisory level while the mass of women are semi-skilled workers. In industry-related institutions only 20-25 per cent of the research and technical staff are women with the exception of the Sri Lanka Standards Institute where some 40 per cent of the professional staff are women. In the Export Production Villages, the Boards of Directors are male dominated and the workforce largely female. Even some of the women entrepreneurs are reported to play a subordinate role to their husbands or male relatives in the management of their enterprises.

Many women workers expressed the view that their jobs were not commensurate with their education levels. Women factory workers had aspired to white collar jobs. They tended to look on their factory employment as a temporary phase of activity, necessitated by the lack of alternative employment opportunities. It was apparent, also, that women in semi-skilled jobs had few opportunities to acquire new skills or to upgrade their skills in their quest for upward mobility.

Women workers, moreover, appear to be relatively more vulnerable to adverse working conditions. Employees in large-scale public sector industries are protected by labour legislation and trade union support, but in large private industries labour legislation is often not implemented. The situation is worse in small industries in the public sector and in small scale private industries. Welfare facilities hardly exist, labour laws are not enforced and trade unions are inactive or non-existent. The most vulnerable are the piece-rate workers in public and private sector industries, in the Export Production Villages and in home-based occupations: they are unprotected by statutory regulations pertaining to minimum wages or working hours. Furthermore, home-based women workers in the informal sector are exposed to exploitation by unscrupulous middlemen.

Given the importance of small and medium enterprises for a more balanced industrial structure as well as for enhancing female participation it appears essential that various "social performance" gaps between large and small enterprises be reduced. The field survey has e.g. clearly shown that the larger enterprises, both public and private, tend to offer higher salaries, provide better training facilities, are better equipped with facilities and are more likely to adhere to legally stipulated social benefits.

In view of the predominance of large enterprises in public sector industries it seems important that the latter assume the role of a 'standard-setter' (Garnsey/Paukert, 1987). Public industries could create precedents by employing more women at higher skill levels and in industrial and technical areas that have traditionally been regarded as male domain.

Priority needs to be given to specific measures to change structures and to eliminate barriers that have adverse effects on the working conditions of women in industry:

- (1) More opportunities should be provided by employers for women for upward career mobility in view of their present concentration in semi-skilled and unskilled employment in industry.
- (2) Labour laws should be enforced more effectively, particularly in private sector industries, including those in the export processing zone.
- (3) Labour legislation should be extended to small-scale industries, sub-contracting processes and piece-rate work in public and private sector industries as well as Export Production Villages to ensure minimum standards of remuneration, health and safety.
- (4) In view of the reluctance of some employers in manufacturing industries to employ women because of extended maternity leave regulations, the Women's Bureau or the Department of Labour should mount an advocacy programme to explain to employers the social benefits of this legislation and its application to only two occasions in a women's career.
- (5) Women should be encouraged to participate more actively in trade union activities and in workers' committees to improve their working conditions.

#### E. Support services and advocacy programmes

Norms of domesticity that confine women to the household operate as constraints to the optimal participation of women in industrial production.

These norms are reflected in the division of labour within the household that allocates almost all domestic chores to women. As a result, the average working day of women engaged in economic activities extends to 12-14 hours, with negative consequences for their health, their families, their economic activities, and participation in decision-making bodies and trade unions. Child care responsibilities also limit the involvement of women in industrial occupations, and particularly of mothers with pre-school age children, as adequate child care facilities are absent.

These social norms also relegate women to the status of supplementary earners, although in reality their wages are crucial to the survival of their families. Employers' perceptions of women's roles and aptitudes tend to result in women being given jobs that are extensions of their domestic and servicing roles in textiles manufacture, agro-based cottage industries and food preparation. Women also tend to be excluded from a wide range of skilled jobs, from handling machinery and from managerial jobs. Women's perceptions of their own roles and activities lower their levels of aspiration.

If women's participation in manufacturing is to be increased and if they are to be an integral part of technological change, support services are necessary to reduce their workload and advocacy programmes are required to change perceptions of their roles.

#### Support services

- (1) Efforts should be made to develop appropriate household technology, such as time and fuel saving cooking stoves and rapid food processing

household chores, and release them for more active participation in paid employment. These technologies could be the outcome of the industrialisation process itself.

- (2) Child care facilities should be provided for working women in the vicinity of their work places or preferably near their homes.

#### Advocacy programmes

- (1) The media should be utilised to
  - (i) counter concepts of women as supplementary/secondary earners which undervalue women's role in the economy and as family supporters;
  - (ii) change the negative and stereotyped attitudes of many employers, policy makers and administrators to the participation of women in skilled, technical and managerial employment.
- (2) Women should be motivated
  - (i) to engage in activities in manufacturing industries which correspond to their aptitudes, irrespective of social norms and stereotypes about gender-appropriate jobs.
  - (ii) to develop more self-confidence and self-reliance and to control their own resources through entrepreneurial activities.
- (3) Both the school curricula and the media should be used to promote a concept of shared responsibility between men and women in domestic tasks and a more equitable division of labour within the household which will permit women to respond better to economic opportunities and to the demands of the labour market and the needs of the economy.

Without changes in attitudes and behaviour the root causes of gender-related economic inequalities will persist. There can however be no doubt that it is very difficult to change attitudes. This implies that policy measures may only be successful in the very long run, for it is obvious from numerous studies that gender-role stereotypes that affect the vocational aspirations of women are common among policy makers, administrators and employers. Perceptions of gender-appropriate jobs predispose many women to avoid new economic activities, and employers to exclude women from technical, skilled and managerial jobs. The cumulative effect of such attitudes operates as a constraint to the optimal development of women as individuals and as human resources in industrial development.

## F. Scope for international cooperation

While many of the recommendations outlined above are primarily aimed at measures to be taken by national policy-makers and concerned institutions there is at the same time large scope for international cooperation on these issues. International organisations such as UNIDO as well as bilateral development agencies can provide their services e.g. in the following fields:

- Project-specific technical assistance at the national level  
This covers a broad range of diverse activities: Among promising project ideas - to mention but a few examples - would be the design of pilot training-cum-production programmes geared at promoting the employment of women in non-traditional industries, particularly in rural areas. Furthermore, it would be important to strengthen key women institutions such as the Women's Bureau and the Women's Chamber of Industry and Commerce whose activities and potential impact have been suffering from limitations regarding both financial and human resources.
- Exchange of information and experience at the regional level  
Various policy approaches and measures to enhance the role of women in industry have been applied in broadly similar but distinct ways in different Asian countries. This is true for example concerning the formation of co-operatives, the establishment of simple credit institutions for self-employed women or the village-level organization of specialized manufacturing activities for either domestic or export markets as in the case of Sri Lanka's export production villages. Information exchange on the success or failure of these approaches could be organized at the regional level by organizations such as UNIDO, ESCAP, ILO-ARTEP and others.
- Monitoring of development trends of the international level  
It appears to be particularly important to closely monitor technological changes affecting branches with a predominantly female labour force (e.g. textiles/clothing) so as to ensure an early awareness of emerging threats. This requires, inter alia, research to be undertaken at the company level in industrialized countries to identify changes in production technology and their impact on cost structures and competitiveness. Obviously, international organizations active in the field of industry are well equipped to collect and interpret data on such trends and to advise developing countries like Sri Lanka on suitable policy responses.

A N N E X E S

- ANNEX I:           Recent employment projection**
  
- ANNEX II:          Major agencies involved in human resource planning**
  
- ANNEX III:         Industry-related legal framework**
  
- ANNEX IV:         Statistical tables**

ANNEX I:

Recent employment projections

Employment projections generated in the more recent years in Sri Lanka are brought together in Tables A-I.1 and A-I.2. The estimates are derived from several sources which may be summarized as follows:

- (a) secondary sources (ARTEP, 1985; Rodrigo, 1983) where employment estimates have emerged as a by-product from investigations in related areas;
- (b) individual exercises reported in research and publications (Abeykoon, 1982; Rajapaksa, 1986);
- (c) a UNDP/UNESCO sponsored employment exercise carried out by the Employment and Manpower Division of the Ministry of Plan Implementation (Korale et al. 1983);
- (d) estimates under the Institute of Policy Studies (IPS) Project, Ministry of Finance and Planning (Irvin, 1986);
- (e) estimates of the National Planning Division, Macro-Economic Unit, (MOFP, 1986b).

Exercises (a), (b) and (d) are supply projections at different levels of detail. Source (c) records a pioneer attempt to project the demand dimension (i.e. employment requirements) over a time span 1986 to 1991. Source (e) projects the growth of employment until 1991. The methodology used in this exercise is to disaggregate projected GDP (from MOFP growth projections) by major sectors and then apply sector-specific incremental output-labour ratios to derive the employment (or demand model) forecast. In another exercise (MOFP, 1986 b) the labour supply dimension is explored, yielding estimates on the size of the work force and the annual increment, over a 5 year time horizon.

A few comments deserve to be made on the UNESCO-sponsored exercise of 1983. Here, perhaps for the first time, published forecasts are available on the demand dimension, both at the aggregate level as well as by industry and broad occupational category. With detailed 1981 census data not being available at the time of the exercise, the computations had to fall back on output - employment relationships constructed from the 1971 Population Census and the corresponding National Income accounts for 1971, albeit with some allowance made for productivity growth. The use of a remote base year for working out the coefficients restricts the usefulness of the exercise for long range forecasts for the 1990s.

The exercise also constructs projected demand-supply profiles for 15 selected occupations including categories of construction workers and medical personnel where labour force shortages have been particularly serious in recent years. The exercise has not been updated. The occupational projections, in any event, require greater sophistication and rigour if these are to constitute inputs in a serious planning exercise. Nevertheless the effort is instructive as a first attempt. The occupational projections are reproduced

in Table A-I.4. According to the sectoral projections Sri Lanka will have by 1991 a total labour force of 932,000 engaged in manufacturing activity. The additional employment projected to be available in this sector between 1986 and 1991 is 188,000 - an increase of 25 per cent. However, no breakdown is provided by sex. For the economy taken in its aggregate, domestic employment is projected at 5.58 mn for 1986 and 6.4 mn by 1991. This implies an average increase of some 164,000 per year (Table A-I.5) 9). In the light of a domestic employment performance of below 100,000 new jobs a year in the first half of the eighties this seems a highly optimistic prediction. Likewise, a 25 per cent increase in manufacturing employment between 1986-1991 seems more idealistic than realistic when manufacturing output itself is projected by the Planning Authorities to increase by only 3 per cent per annum.

The IPS paper (Irvin, 1986) assembles the labour force estimates of the eighties scattered in miscellaneous statistical exercises (Table A-I.6). The figures, however, are presented in aggregate terms with no breakdown by sex. In the Mission's own estimates the total labour force had grown from 5.75 mn to 6.37 mn between 1981-86 (an average of 124,000 per annum) after allowing for net migration. Net employment, by contrast, had grown at less than 90,000 per annum.

The Mission's own computations extend up to 1991. Over the period 1986-1991, annual additions to the workforce are projected at a level of 143,000, after allowance is made for migration (Table A-I.7). Domestic employment creation, estimated by the Mission on a model based on incremental capital-output-ratios was projected at 475,000 new outlets in the 'best' case and 371,000 on more unfavourable assumptions about GDP growth rates. In comparison, the Planning Ministry's own estimates (based on incremental output - labour ratios in a sectorally disaggregated GDP growth projection model) worked out to 472,000 for the same 5 year period (i.e. 94,000 per annum). In both estimates, unemployment was predicted to increase from the lower level achieved in the late seventies and early eighties. The Mission reiterates the views expressed earlier by an ILO Mission (ILO, 1971) that "there is probably no way in which a country like Sri Lanka can generate a level of domestic labour absorption consistent with achieving full employment and external balance in the foreseeable future" (Irvin, 1986, p. 16). Accordingly, the paper sees maintaining the unemployment rate at its current level as a more realistic policy objective.

The MFOP exercise of 1986 (Table A-I.3) projects employment generation on the basis of aggregate and sectoral output (growth) performance as envisaged by the National Planning Division in its Public Investment (Rolling) programme. The forecasts are therefore in line with the structural changes foreseen by planning authorities in the country's medium-term economic development. The medium-term structural changes envisaged between 1986-1991 involve a slight reduction in the share of the primary sector (23 to 21 per cent) and in manufacturing (13.6 to 12.8 per cent) and a corresponding slight increase in the share of services (56 to 58.5 per cent). Thus, the macro-economic scenario on which the MFOP computations are based reflects the industrial strategies, objectives and priorities of the Government as perceived in 1986.

On these estimates an additional 551,000 jobs are projected to be created locally between 1986 and 1991 which together with a forecast 120,000 employment opportunities overseas, would generate 631,000 employment outlets

fo the Sri Lankan labour force over the 5 year horizon. For the year 1991 the forecast is 133,000 new employment outlets (113,000 locally and 20,000 overseas).

According to these computations, unemployment in 1991 would be of the order of 0.95 million or 14.9 per cent of the labour force. The corresponding estimate for 1986 is an unemployment rate of 16.5 per cent although in absolute terms the number is placed again at around 0.95 million.



Table A.I.1. Projected total labour force, 1971-2001 (selected years) (thousands)

Projections	1980	1981	1983	1985	1986	1988	1990	1991	1993	1996	1998	2001
1. Srivastava et al. (1970)	-	-	6327	-	-	7179	-	-	8118	-	8932	-
2. Dept. of Census & Stat. (1974)	-	5954	-	-	6744	-	-	7544	-	8359	-	9145
3. Wilson (1975)	-	5994	-	-	-	-	-	-	-	-	-	-
4. ILO (1977)	5383	-	-	6113	-	-	6800	-	-	-	-	8122
5. Abeykoon (1983)	-	5750	-	-	6390	-	-	7045	-	7781	-	8577
6. ARTEP, I (1985)	5166	-	-	5908	-	-	6631	-	-	-	-	8024
7. ARTEP, II	5015	-	-	5553	-	-	6177	-	-	-	-	(2000)
8. Rajapakse (1986)	-	-	-	-	6197	-	-	6773	-	7523	-	8237
9. Ministry of Finance & Planning (1986) I	-	-	6127 (1982)	-	-	-	-	7631	-	-	-	-
10. Ministry of Finance & Planning II	5015	-	-	5706	-	-	6340	-	-	-	-	-
11. Irvin (IPS) September 1986	-	5750	-	-	6370	-	-	7090	-	-	-	-

Table A.I.2 Projected female labour force 1971-2001 (selected years) (thousands)

Projections	1981	1983	1986	1988	1991	1993	1996	1998	2001	Average Annual Growth Rate (per cent)			
										1981-86	1986-91	1991-96	1996-2001
1. Srivasta et al. (1970)	-	1544	-	1784	-	2085	-	2215	-	3.1 (78-83)	2.9 (83-88)	3.1 (88-93)	-
2. Dpt. of Census & Statistics (1974)	1633	-	2869	-	2104	-	2342	-	2567	2.7	2.4	2.1	1.8
3. Wilson (1975)	1714	-	-	-	-	-	-	-	-	-	-	-	-
4. Abeykon (1983)	1670	-	1876	-	2097	-	2329	-	2592	2.3	2.2	2.1	2.1
5. Rajapaksa (1986)	-	-	1799	-	1955	-	2237	-	2450	-	1.7	2.7	1.8

Table A-I.3 GDP (Fc), projected sector composition and employment creation 1981-1991

	1981	1982	1983	1984	1985	1986	1987	Projected			Incremental Employment Out- put Coefficient	
								1988	1989	1990		1991
GDP (1970 f.c) Rs. X 10 <sup>9</sup>	20.70 (100)				25.32	26.48	27.58	28.86	30.30	31.86	33.45 (100)	
1. Ag. forestry, fishing, etc.	5.10 (24.6)	5.23	5.50	5.47	5.49	6.12	6.20	6.37	6.65	6.93	7.16 (21.3)	.0000162
2. Mining and quarrying	0.71 (3.46)	0.74	0.80	0.81	0.82	0.89	0.95	1.01	1.06	1.13	1.19 (3.5)	.0000589
3. Manufacturing	2.82 (13.6)	2.96	2.98	3.34	3.52	3.60	3.69	3.80	3.93	4.07	4.27 (12.8)	.0001582
4. Construction	1.03 (5.0)	1.01	1.02	1.02	1.03	1.07	1.11	1.16	1.70	1.26	1.31 (3.9)	.0000702
5. Services	11.04 (53.4)	11.82	12.53	13.49	14.01	14.80	15.63	16.52	17.46	18.47	19.52 (58.5)	.0000661
Additional employment creation (10 <sup>3</sup> )												
Domestic		74.86	80.34	121.78	71.00	74.27	90.49	113.21	93.71	101.06	112.66	
Abroad		50.00	50.00	40.00	40.00	40.00	30.00	30.00	20.00	20.00	20.00	
Total		124.86	130.34	161.78	111.00	114.27	120.49	143.21	113.71	121.06	132.66	
Labour Force (10 <sup>6</sup> )	5.015					5.706					6.340	
Employment (10 <sup>6</sup> )	4.120					4.762					5.393	
Unemployment rate percent	17.8%					16.5%					14.9%	

Source: MFOP: The Labour Force, Employment and Unemployment, 1981-91, cited in Irvin (1986, p. 68).

Table A-I.4 Projected employment by major occupational group, 1982-1991 (000s)

Major Occupational Group	Employment			Projection for 1991	Increase	
	1980	1982	1986		1982 - 86	1986 - 91
1. Professional Technical and Related	267.7	282.7	329.3	383.7	46.6	54.4
2. Administrative and Managerial	25.9	27.5	31.8	38.3	4.3	6.5
3. Clerical and Related	272.8	288.2	362.8	479.6	74.6	116.8
4. Sales	397.4	420.4	502.3	626.7	81.9	124.4
5. Services	267.5	282.7	318.1	416.0	35.4	97.9
6. Agricultural, Animal Husbandry, Forestry and Fishing	2,074.7	2,189.3	2,305.1	2,430.0	115.8	124.9
7. Productive, Transport and Labourers	1,416.9	1,496.8	1,724.7	2,014.3	227.9	289.6
8. Unspecified	15.1	16.4	6.9	6.4	-9.5	-0.5
9. Total	4,738.0	5,004.0	5,581.0	6,395.0	577.0	814.0

Source: Korale et. al, 1983, p. 133, Table 34.

Table A.I.5. Employment projection by industrial sector, 1982 - 1991  
(thousands)

Sector	Employment		Projected Employment		Additional Employment	
	1980	1982	1986	1991	1982-86	1986-91
1. Agriculture, Hunting, Forestry and Fishing	2,173.0	2,283.0	2,519.0	2,851.0	236.0	332.0
2. Mining and Quarrying	64.0	71.0	88.0	116.0	17.0	28.0
3. Manufacturing	568.0	621.0	744.0	932.0	123.0	188.0
4. Electricity, Gas and Water	18.0	21.0	29.0	42.0	8.0	13.0
5. Construction	229.0	253.0	307.0	392.0	54.0	85.0
6. Wholesale and Retail Trade	491.0	516.0	569.0	644.0	53.0	75.0
7. Transport, Storage and Communication	197.0	209.0	236.0	273.0	27.0	37.0
8. Financy, Insurance, Real Estate	53.0	66.0	102.0	175.0	36.0	73.0
9. Community, Social and Personal Services	648.0	687.0	774.0	879.0	87.0	123.0
10. Activities not described	297.0	277.0	213.0	73.0	(-64.0)	(-140.0)
11. All economic activities	4,738.0	5,004.0	5,581.0	6,395.0	577.0	814.0

Source: Korale et al. 1983 p. 132. Table 33.

Table A-I.6. Alternative labour force projections (millions)

Prepared by	1980	1981	1985	1986	1990	1991	Average Addition	Implied Growth Rate
Ministry of Finance and Planning <sup>a/</sup>		5.97		6.76		7.63	0.167	2.5
Department of Census and Statistics		5.95		6.74		7.54	0.152	2.2
ARTEP Est. (1) <sup>b/</sup>	5.17		5.91		6.63		0.150	2.6
ARTEP Est. (2)	5.01		5.55		6.18		0.119	2.1
ARTEP Final Est. <sup>c/</sup>		5.02	5.66		6.50		0.167	2.9
Rodrigo (1983) <sup>d/</sup>	5.01				6.50		0.149	2.7
Ministry of Finance & Planning (unofficial) <sup>e/</sup>	5.02		5.71			6.34	0.132	2.6/2.1
Final Projections <sup>f/</sup>		5.75		6.37		7.09	0.134	2.1

Source: Reproduced from Irvin, (1986), Table A.4, pp. 63-64.

- a/ See Korale (1984b) p. 19: Ministry of Finance and Planning Figures are based on 1971 Census. We have interpolated to get 1981 and 1986 estimates.
- b/ See ARTEP (1985) pp. 84-5; Estimate (1) applies projected crude activity rates from ILO (1977) to UN (1982) population projection (medium variant). Estimate (2) uses 1981 Census figure as 1980 estimate and applies labour force growth ratio from ILO (1977).
- c/ The ARTEP final estimate (ARTEP: 1985) uses 1981 Census figures as the 1981 estimate, assumed the 1990 figure to be 6.5 million, and therefore concludes that the annual addition to population is 167,000.
- d/ See Rodrigo (1983), p. 84.
- e/ These figures are from a provisional internal document prepared in 1986 for the Ministry of Finance and Planning; the Census 1981 figure is used as the base while the annual addition to the labour force estimate is in line with Korale (1985; 1986).
- f/ Our 1981 starting figure is based on the SES (1980/81) rather than Census (1981); the projections have been prepared by Korale in a special document submitted to the mission (Korale 1986:b).

Table A-I.7. Workforce and employment projections (millions)

	1971	1976	1981	1986 (Est.)	Scenarios		
					Baseline 1991	Best 1991	Worst 1991
Total Workforce	4.45	5.10	5.75	6.37	7.09	7.09	7.09
Annual Growth Workforce <sup>a/</sup>	.130	.140	.124	.143			
Employed <sup>b/</sup>	3.65	4.08	4.90	5.34	5.78	5.81	5.71
Annual Employment Growth	.068	.164	.088				
Unemployed	0.80	1.02	0.85	1.03	1.31	1.27	1.38
Percentage Unemployment	18%	20%	14.7%	16.2%	18.5%	17.3%	19.5%

Source: Irvin, (1986), Table A.6, Page 66.

a/ Over 1971-81 the workforce is assumed to be growing at 130,000; slightly lower growth over 1981-86 reflects higher permanent migration. This is assumed to fall off for period 1986-91; the 1981 figure is based on Korale (1986 b) as derived from LCES 1980/81.

b/ Employment (and unemployment) growth 1981-1986 is based on Korale (1986 b). Alternative projections for 1991 are based on incremental capital/labour ratios estimated by author and applied to World Bank 1986 projections for investment share of GDP will fall to 22 per cent in 1989 and remain constant thereafter. The 'best' case assumes the current (25 per cent) share to remain constant over the period largely through increased overseas borrowing. The 'worst' case assumes it to fall to 17 per cent by 1989 and remain constant thereafter.

Table A-I.8 Female labour force projections by age, 1981 - 2001 (selected years)

Age Group	1981 Census	Projection "A" (000s)			1986 (000s)			1991 (000s)			2001 (000s)		
		1988	1993	1998	Projec- tion"B"	Projec- tion"C"	Projec- tion"D"	Projec- tion"B"	Projec- tion"C"	Projec- tion"D"	Projec- tion"B"	Projec- tion"C"	Projec- tion"D"
10 - 14	19,877	40	44	46	36	34	34	38	37	28	38	29	29
15 - 19	150,517	302	331	361	242	226	224	268	242	234	289	302	292
20 - 24	280,249	330	364	400	399	412	350	424	428	356	516	525	453
25 - 29	232,496	278	329	317	341	329	344	381	356	363	456	397	421
30 - 34	187,564	202	276	237	237	256	350	262	291	278	287	334	319
35 - 44	231,156	333	379	440	339	338	333	397	408	391	491	521	514
45 - 54	127,589	198	247	281	186	185	183	233	218	213	334	319	312
55 and over	50,897	101	115	133	89	96	81	101	117	92	148	165	110
TOTAL	1,290,345	1,784	2,085	2,215	1,869	1,876	1,799	2,104	2,097	1,955	2,559 <sup>a/</sup>	2,592	2,450

a/ In DCS (1974) the total appears as 2,567.

Sources: Projection A: Srivastava et. al (1970) Medium projection, estimated in June 1970  
 Projection B: Department of Census and Statistics (1974)  
 Projection C: Abeykoon (1983)  
 Projection D: Rajapaksa (1986)

ANNEX II

Major agencies involved in human resource planning

Ministry of Finance and Planning

As the name indicates, the Ministry's major functions and responsibilities relate to (a) economic planning and (b) general supervision over the financial affairs of the entire government. Its involvement in employment issues therefore arises from two capacities: as National Planning agency and as controller of the State purse. Budgetary allocations do determine in an ultimate sense the available supply in certain labour force categories (e.g. output of State-financed higher education institutes) as well as the demand for certain high and middle level professional workers (e.g. medical cadres). The allocations are administered by the Treasury Budget Division. The Division of Economic Affairs "formulates, advises and supervises the execution of governments' economic policies in general".

Within the planning arm of the Ministry the National Planning Division has as its main function "the development of the Medium Term macro-economic framework and Sector plans supported by a comprehensive portfolio of programmes and objects." Its activities include, among other things,

- preparing the medium-term macro-economic framework and plan and the sector programmes;
- preparing the annual plans for the sectors and providing the macro-economic framework for the government budget;
- working out long term perspective projections and development alternatives;
- studying of current national development issues; and
- servicing the Committee of Development Secretaries.

Plan preparation is to be in close liaison with the different Ministries. Greater coordination is facilitated by a recent institutional innovation, the Committee of Development Secretaries. The approach to planning since the late seventies has been one of programming public sector investment and indicative planning for the private sector - both within a 5-year (rolling) framework.

Although there is yet no integration of employment planning with socio-economic planning, some initiatives have been taken lately to improve the situation.

Among such initiatives are

- closer data monitoring, and employment/unemployment forecasting (as visible in MOFP, 1986 b), and



- identification of employment issues as a research priority under the newly established Institute of Policy Studies (IPS) project in the Ministry of Finance and Planning.<sup>1/</sup>

The Ministry of Plan Implementation has among its objectives:

- formulation and appraisal of Plan Implementation Strategies;
- coordination of the implementation programmes of government and non-government agencies;
- performance evaluation in implementation of development plans and programmes;
- dissemination of information concerning achievement of plan targets;
- the development of statistical services in relation to development strategy; and
- employment planning and administration of the Employment Data Bank.

The major agencies through which the employment-related functions are executed and their areas of action are as follow:

- Department of Census and Statistics: Collection, processing and compilation of statistical data relating to all areas of social and economic activities including population and labour force. The Department conducts regular Censuses and sample surveys.
- Food and Nutrition Policy Unit: Identifying strategies and measures for reducing malnutrition; national nutrition objectives and priorities.
- Population Division: Formulation and implementation of population policy, including coordination and monitoring the implementation of all population projects.
- Employment Data Bank: Registration for employment, referral and job placement functions.
- Manpower Division: Information and statistics, surveys and studies on employment and labour force questions.

Under the Central Employment Data Bank Scheme 85,239 persons were registered as at June 1986. Placement of 21,204 out of 61,462 registrants has been reported for the districts. The scheme does not apply to the private sector. Even for the State sector recruitment through the Scheme is limited.

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1/ Mention can furthermore be made of the recent ARTEP deliberations to initiate a network of Human Resources Planning Institutes for the Asian region (Edgren, 1986). At a technical meeting recently convened by ARTEP the opinion was in favour of locating such a unit within MOFP.

The Manpower Division has embarked on several exercises assessing the manpower requirements and job prospects for selected categories of personnel (secretaries, english stenos and typists; craftsmen in the construction industry; employment opportunities in the hotel industry; demand-supply position for accountants, engineers, doctors etc.). A Survey of Technical and Vocational Training funded by SIDA is currently in progress. The Division has done pioneering work monitoring migration for employment in recent years. Activities of the Division basically centre on information generation.

The country's national education system is currently under the jurisdiction of two Ministries - the Ministry of Education and the Ministry of Higher Education. The latter is in overall charge of tertiary (university and technical) education while the former has the responsibility for planning and policy making in respect of school education. The University Grants Commission (UGC) functions as the planning arm of the Ministry of Higher Education. In the Ministry of Education several agencies are involved in educational planning including the Curriculum Development Centre.

In colonial times a major objective of the formal school education system was to raise subordinate middle level personnel locally to man the middle level clerical and allied positions. The development of technical and skilled labour was neglected. This approach continued down to recent times. For most part of the post-independence period educational expansion was a passive response to the growth of social demand. In the sixties and seventies the intake of secondary level and higher educational establishments and universities was indiscriminately increased to keep pace with the social demand, with little consideration for the employment imbalances that could arise. One consequence of this was a growing problem of educated unemployment. The surpluses in the academically qualified categories persisted side by side with shortages in the technical grades.

In recent years, however, some effort is on record to move the educational output closer to the requirements of the changing economy and the realities of the market. The recent initiatives include expansion of facilities and intake for technical education, revisions in the educational curriculum and the UGC efforts to streamline the intake into different courses - medicine, engineering, arts, management etc. - in the universities.

In the official demarcation of functions, the Ministry of Labour is charged with the overall responsibility for formulation of desirable policies, initiation of programmes and ensuring their effective emplementation in all labour matters. Its formal coverage spans a range of aspects from wages and working conditions, labour relations, enforcement of labour legislation, vocational training to job placement. For almost four decades the Ministry also handled the employment service function through the network of Employment Exchanges until they were phased out and replaced by the Job Bank Scheme in 1977. It however retained the foreign employment and skill development functions. In recent years the Ministry has assumed a more dynamic role in overseas placement. Its current role is both promotional and regulatory. The newly established Bureau of Foreign Employment is entrusted with the tasks of policy formulation and enforcement pertaining to the employment of Sri Lankans overseas.

Under its skill development programmes the Ministry conducts several training courses at craftsmen and formen level. Generation of information on a range of aspects (wages, earnings, employments etc.) is another important contribution of the Ministry.

Finally, the Ministry of Youth Affairs and Employment has among its objectives to:

- assist in the continuous and active participation of youth in Sri Lanka in national development Schemes and Projects;
- provide employment opportunities for youth and prepare youth for national employment in respect of skills and aptitudes;
- coordinate training programmes operated by all Ministries and Departments in vocational skills for employment of Youth;
- conduct programmes for mobilisation and development of human resources.

In pursuit of its objectives, the Ministry, among other things:

- provides guidance and directions to the National Apprenticeship Board;
- operates a Graduate Employment Guidance Scheme;
- organises schemes of guidance, training and facilities for self-employment.

The National Apprenticeship Scheme provides training in a wide cross section of vocations. A stipend was stipulated to be paid by the Government to trainees.

ANNEX III:

Industry-related legal framework

The Constitution guarantees equality before the law, equal protection by the law, and freedom from discrimination on grounds of sex. However it is specifically declared that this last-mentioned provision does not prevent special legislation or executive action to improve the position of women. All citizens also have the freedom to form and join a trade union and freedom of association. Moreover, every person has a fundamental right not to be subjected to "cruel, inhuman or degrading treatment" which encompasses conditions of employment.

The fundamental rights provisions are augmented by the Directive Principles of State Policy by which the State is required to further universal and equal access to education, the full realisation of fundamental rights, freedom from sex discrimination and the creation of a just social and economic order.

The Directive Principles of State Policy are however only guidelines for State policy and are not legally enforceable. Fundamental rights are enforceable but only against the State or State authorities, not against private sector employers. In addition, such rights are subordinate to statutory and non-statutory laws which existed before the 1978 Constitution and which may be in conflict with them. Only new legislation violating fundamental rights can be challenged in court during its passage through Parliament. These measures therefore do not give meaningful legal protection to women industrial workers (Constitution of Sri Lanka, 1978).

Women are generally covered by the definition of "worker" or "employee" contained in laws, but some statutes contain special provisions for women, usually of a protective nature. Very few statutes are discriminatory. Some laws and regulations, although not expressly discriminatory, have practical implications that adversely affect women. Some categories of women workers are not covered by labour laws owing to the piecemeal nature of legislative enactments in this field.

Labour legislation, unlike the common law of contract, regulates the contract of employment irrespective of the inclination of the parties and seeks to protect the employee in a situation of unequal bargaining power. It provides a framework of standards, imposes penalties on employers for contravention, and confers legal rights on workers which they can enforce through labour tribunals that work faster and are more easily accessible than in the ordinary courts. However, major parts of the legislation tend to be ignored in the informal sector.

Unlike in some other countries, in Sri Lanka there is no dichotomy between national labour laws and ethnic, religious or family laws that affect the rights of a working woman. A woman's right to work, to enter into contracts and to be an independent wage earner is today recognised in the private laws of the various ethnic communities, with hardly an exception (Goonasekera, 1985).

Sri Lanka has accepted certain international commitments in regard to women workers and is a party to the 1975 United Nations Convention on Elimination of All Forms of Discrimination Against Women. However it has not ratified important I.L.O. Conventions on equal pay for equal work, non-discrimination in employment, and occupational health hazards.

The Sri Lankan labour laws discussed in this paper apply to all industrial workers; those who come within the Greater Colombo Economic Commission area (Free Trade Zone) are not exempt from these laws (GCEC Law No. 4 of 1978).

#### Legal protection for the contract of employment

Legislative controls attempt to ensure a fair employment contract by stipulating conditions as to wages, social security benefits, working hours, etc. Workers whose employment does not come within statutory controls are therefore seriously prejudiced, but this is compensated for to some extent by the institution of the Labour Tribunal in 1957. These courts are empowered to make "just and equitable" orders "notwithstanding anything to the contrary" in the contract of employment. They can superimpose legal rules so as to redress the unequal bargaining power of the parties and ensure a fair contract.

One of the earliest laws on employment was the Service Contracts Ordinance (1865) which provided that even a verbal contract was to be treated as a renewable monthly contract which was subject to certain terms and conditions. However it covered only a limited category of workers and imposed very small penalties for contravention.

Wages Boards can be established to prescribe the minimum wages for all blue-collar and non-managerial supervisory workers, but up to date only 31 trades are so covered. Some of the wage structures thus laid down are discriminatory against women, although it appears that some steps are now being taken to rectify this situation. In any case the procedure for recovering the minimum wages from a defaulting employer is unsatisfactory.

The Shop and Office Employees Act (1954) also regulates minimum wages for a limited number of categories of workers. Collective bargaining is another method of wage regulation but is seldom used by women industrial workers since they are ill-organised and employers do not have to recognise a union for that purpose.

#### Termination of contract

An employee has a right to seek redress from a labour tribunal for wrongful termination of his or her services. Even a so-called "casual" worker can seek relief if she can show that her employment was not in fact casual but stable. Fixed term contract employees cannot obtain relief from labour tribunals if their contracts are not renewed.

Termination of employment is lawful if it is on grounds of retrenchment, retirement, resignation, vacation of post or misconduct.

Retrenchment is the termination of the services of workers on the ground that they are in excess of what is required for that industry. A labour tribunal is entitled to award compensation for retrenchment. The Termination of Employment of Workers Act (1971) introduced several controls on an employer's right to retrench.

An employer's right to dismiss a worker with notice is inherent under the common law, and the reasons can include "business interests", "managerial efficiency" and "loss of confidence".

In the case of misconduct there is no statutory requirement to hold a disciplinary inquiry before dismissal. Where an employee who is dismissed following a disciplinary inquiry goes to a labour tribunal it is open to the tribunal to disregard the findings of the inquiry and examine the facts afresh. Refusal to appear before a domestic tribunal is not misconduct justifying dismissal.

"Insubordination" and "refusal to obey legal and reasonable orders" even on a single occasion can justify summary dismissal. Conduct "subversive of discipline" which does not fall within the narrow concept of "lawful trade union action" is also misconduct. Recent judicial decisions have strengthened the employer interest orientation of this aspect of the law, but the Termination of Employment of Workers Act (1971) has now restricted the employer's right of termination for reasons other than misconduct.

However judicial decisions have held that management has "the undoubted right to control its business" and the labour tribunal's powers to make "just and equitable" orders does not mean it can "dictate to the management how it should run a business".

Re-instatement as a remedy for wrongful termination is discretionary and courts have generally preferred to award compensation. Labour tribunals have even awarded compensation in some cases where termination was lawful, provided there was no misconduct on the part of the employee, as for instance where a married woman's employment is terminated on the grounds of "business interests" or "managerial problems" when her husband has been dismissed.

#### Social security benefits

Social security legislation does not generally discriminate between men and women. However a woman can claim her provident fund at the age of 50 or upon marriage if she ceases to be employed thereafter, while a man must wait until he is 55. But a woman also cannot contribute to a provident fund scheme for the first time if she has already reached age 50.

The Payment of Gratuities Act (1983) gives workers who have served a minimum of 5 years a legal right to claim a gratuity. In cases not covered by the Act a gratuity may be awarded on termination where there has been long and faithful service.

All women blue-collar workers in industry are entitled to payments under the Maternity Benefits Ordinance along with maternity leave but white-collar workers are only entitled to maternity leave. Since 1985 maternity leave has been extended from six to twelve weeks for a period before and after delivery of up to two children. Women with more than two children are entitled to six weeks. Employment cannot be terminated by the employer on the grounds of pregnancy.

#### Health and safety at work

Another important area of regulation concerns health and safety at work. Apart from maternity leave there is a lack of uniformity in the leave entitlements and maximum working hours for different types of workers. Women

over 18 years who are blue-collar workers in industrial undertakings that are not considered "factories" are not protected by any regulations at all unless they are covered by Wages Board decisions which regulate leave and hours of work. However even existing controls are weak and have not prevented women factory workers from being required at times to work a 36 hour shift to meet production targets.

Regulations relating to working conditions and safety tend to be based on nineteenth century English legislation and are totally inadequate to protect workers from the labour practices of today. Apart from cleaning and fencing of machinery, safeguards in all areas of risk are dependent on the enactment of special regulations by the Minister. The investigation and monitoring of industrial accidents and diseases is also dependent on the promulgation of Ministerial regulations and the initiative of the Labour Department to investigate and prosecute. Penalties are minimal.

The alternative remedy of a protracted civil action by the injured worker for compensation under the law of delict is unsatisfactory, while the sums payable under the limited system of "no fault" compensation available under the Workman's Compensation Act are minimal.

Recent legislation in 1984 has removed the prohibition on night work for women and, although there are regulations regarding the facilities to be provided to such workers, their enforcement is subject to the same limitations mentioned earlier.

#### Violence against women workers

Sexual harassment and acts of intimidation that women may face at the work place are governed by the criminal law set out in the Penal Code enacted in the nineteenth century. Assaults not involving sexual intercourse can hardly be prosecuted owing to the "technical" requirements of the accusation and the light penalties. The rape law with its focus on the need for the woman to prove absence of consent on her part and the tendency to view her as an "accomplice" in the crime whose testimony requires corroboration, makes the chances of a successful prosecution remote. A woman is also not per se entitled to terminate a pregnancy caused by rape.

Criminal prosecutions against the police or management for acts of thuggery and intimidation are subject to the limitations discussed above, though the offence of wrongful restraint can also be used to launch a prosecution. An action for violation of fundamental rights may afford some relief against abuse of police power, but is not available against private sector employers.

#### Conclusions

Sri Lankan labour laws do not in general place women workers in a more disadvantaged position than men and personal or customary laws do not place constraints upon a woman's right to work and earn. However, laws that are not per se discriminatory can become so in their implementation. It has also been seen that Sri Lankan legislation postulates a different range of legal controls for the contract of employment of different grades of workers (white collar, blue collar and casual) engaged in different areas of employment (protected or unprotected). The scope of many labour laws depends upon Ministerial discretion, and women, who are generally at the lowest rungs of the industrial ladder, are often left out.

Both the device of legislation and constitutional remedies can and should be used to forge the concept of a fair labour contract with equitable terms of employment. Areas such as industrial health, wages, and job stability are key aspects of the employment contract in which meaningful employment standards can be set by legislative controls on management's activities. There is need for a comprehensive and consistent approach to the wider issues of worker protection against health hazards, and wages. There has been no effort to develop a concept of fair wages. Furthermore the expansion of regulatory controls should not be dependent on the arbitrary process of Ministerial directives.

Another matter of concern is the departure from the ILO Convention with regard to night work for women and the failure to ratify other important ILO conventions on the employment contract and occupational health.

The weakest aspect of existing legal controls is enforcement. In particular there seems to be a tacit understanding on the part of the labour authorities not to "intrude" on the privacy of the Free Trade Zone factories. The powers given to government officials will be ineffective if there is no political will to enforce the law.

Employee participation is crucial for effective enforcement and to help increase awareness of rights and responsibilities of labour and management and sensitivity to the need to achieve fair labour practice in industrial relations. The Employees Councils Act (1979) provides for the creation of employees councils in State undertakings, and Labour Tribunals have often been a useful focus in ensuring justice for workers.

Unionisation and capacity to negotiate a collective bargaining agreement has proved to be an important strength for workers in Sri Lanka in the past. But there is no tradition of unionisation among women workers, and their lack of negotiating skills makes them especially vulnerable. Unless legal support is strengthened and a campaign to strengthen unionisation and collective bargaining can be developed, women workers will be denied the chance to use a vital strategy for pressuring management to be responsive to their needs.

#### Legislation relevant to women in industry

Constitution of Sri Lanka (1978)

Art. 11; Art. 12 (1), (2), (4); Art 14 (1) (c) (d); Art 16 (1); Art. 17;  
Art. 27 (2), (6), (7), (8), (9); Art. 29; Art. 119; Art. 126.

Industrial Disputes Act (1950) as amended (1957)

Termination of Employment of Workmen Act (1971)

Wages Board Ordinance (1941)

Employees Provident Fund Act (1958)

Payment of Gratuity Act (1983)

Special Allowances of Workers' Law (1978)



**Supplementary Allowances of Workers' Law (1979)**

**Factories Ordinance (1942) as amended (1967), (1984)**

**Shop and Office Employees Act (1954) as amended (1957), (1966), (1975), (1978), (1984)**

**Maternity Benefits Ordinance (1939) and amendments (1946), (1952), (1958), (1962), (1966), (1978), (1981), (1985)**

**Workmen's Compensation Ordinance (1934) and amendments (1957), (1959), (1966)**

**Trade Unions Ordinance (1935)**

**Employment of Women, Young Persons and Children Act (1956), (1984)**

**Night Work Act No. 32 of 1984**

**Employment of Females in Mines Ordinance (1937) replaced by Mines and Minerals Law No. 4 of 1973**

**Labour Inspection Ordinance (1953) as amended (1972)**

**Employees' Council Act (1979)**

**Penal Code sections 310, 311, 330 - 337, 363, 364**

**Greater Colombo Economic Commission**

**Law No. 4 of 1978, as amended (1980) and (1983)**

**ANNEX IV:**  
**Statistical Tables**

**Table A-1. Small and Cottage Industries Sector of Sri Lanka, 1983**  
**(under 50 employees)**

	<b>Number of Units</b>	<b>Percentage within Group</b>	<b>Percentage of all Small Units</b>
1. <u>Food Processing</u>	<u>33,520</u>	<u>98.6</u>	<u>32.3</u>
1.a. Food and beverage	24,244	98.5	23.3
1.b. Tobacco	9,276	98.9	8.9
2. <u>Textile, Wearing Apparel and Leather Products</u>	<u>23,085</u>	<u>99.0</u>	<u>22.2</u>
2.a. Textiles, except wearing apparel	18,642	99.2	18.0
2.b. Wearing apparel	3,800	98.3	3.6
2.c. Leather products	643	97.9	0.6
3. <u>Wood and Wood Products</u>	<u>12,443</u>	<u>99.8</u>	<u>12.0</u>
4. <u>Paper, Paper Products, Printing and Publishing</u>	<u>1,020</u>	<u>97.8</u>	<u>1.0</u>
4.a. Paper and paper products	199	96.1	0.2
4.b. Printing and publishing	821	98.2	0.8
5. <u>Chemicals, Petroleum, Rubber</u>	<u>10,601</u>	<u>98.9</u>	<u>10.2</u>
5.a. Chemical products	832	95.6	0.8
5.b. Petroleum, coal and products	22	88.0	0.02
5.c. Rubber products	9,681	99.3	9.3
5.d. Plastics	66	85.7	0.06
6. <u>Non-metallic Mineral Products Except Petroleum and Coal</u>	<u>11,402</u>	<u>99.4</u>	<u>11.0</u>
6.a. Pottery, china and earthenware	4,382	99.8	4.2
6.b. Glassware and others	7,020	99.2	6.8
7. <u>Basic Metal Industries</u>	<u>912</u>	<u>99.7</u>	<u>0.9</u>
8. <u>Fabricated Metal Products</u>	<u>6,183</u>	<u>99.2</u>	<u>6.0</u>
8.a. Machinery and equipment other than transport equipment	644	97.4	0.6
8.b. Transport equipment	221	95.7	0.2
8.c. Other metal products	5,318	99.6	5.2
9. <u>Other Manufacturing Industries</u>	<u>4,680</u>	<u>99.6</u>	<u>4.5</u>
Grand Total	<u>103,846</u>		
Number of All Manufacturing Units	<u>104,866</u>		
Small Units as Percentage of		<u>99.0</u>	

**Source:** Industrial Census 1983, unpublished preliminary results; Department of Census and Statistics

Table A-2. Distribution of women workers by occupational groups

Sl. No.	Country	Years to which data correspond	Professional, technical and related workers				Administrative and managerial workers			
			1960s	1970s	1980s	1984	1960	1970s	1980s	1984s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Bangladesh	1974	-	2.5	-	-	-	-	-	-
2.	HongKong	1961,71,84	6.1	6.5	-	6.8	0.9	1.6	-	1.3
3.	India	1971,81	-	2.7	2.3	-	-	0.1	0.1	-
4.	Indonesia	1971,80	-	2.1	3.2	-	-	-	0.1	-
5.	Japan	1960,70,80,84	4.5	6.1	9.9	10.2	0.2	0.5	0.8	0.6
6.	Rep. of Korea	1960,70,80,84	1.4	2.0	3.3	4.6	0.8	0.1	-	0.1
7.	Malaysia	1970,80	-	4.5	7.0	-	-	0.1	0.2	-
8.	Nepal	1971	-	0.1	-	-	-	-	-	-
9.	Philippines	1960,70,80	5.5	9.6	10.6	-	0.3	1.0	0.8	-
10.	Singapore	1957,70,80	9.3	11.8	9.4	10.7	0.3	0.3	1.8	2.7
11.	Sri Lanka	1963,70,80/81	7.6	6.3	8.2	-	0.1	0.1	0.2	-
12.	Thailand	1960,70,82	0.9	1.5	3.0	-	0.2	-	0.7	-

Table A.2 (cont'd)

Sl. No.	Country	Years to which data correspond	Clerical and related workers				Production workers, transport equipment operators and labourers			
			1960s	1970s	1980s	1984	1960	1970s	1980s	1984s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Bangladesh	1974	-	0.2	-	-	-	12.2	-	-
2.	HongKong	1961,71,84	3.5	7.3	-	23.7	46.4	54.1	-	43.1
3.	India	1971,81	-	0.7	0.8	-	-	4.9	6.8	-
4.	Indonesia	1971,80	-	1.1	1.5	-	-	11.2	13.9	-
5.	Japan	1960,70,80,84	9.7	18.5	23.2	23.9	21.3	23.9	24.2	26.5
6.	Rep. of Korea	1960,70,80,84	0.5	2.8	8.0	9.7	6.8	14.5	18.6	20.6
7.	Malaysia	1970,80	-	3.5	9.1	-	-	9.0	14.5	-
8.	Nepal	1971	-	0.1	-	-	-	0.6	-	-
9.	Philippines	1960,70,80	1.9	3.7	6.0	-	20.4	18.6	13.3	-
10.	Singapore	1957,70,80	5.8	13.9	25.7	30.5	25.1	25.1	34.0	27.1
11.	Sri Lanka	1963,70,80/81	1.0	1.8	3.1	-	12.8	11.3	16.1	-
12.	Thailand	1960,70,82	0.3	0.8	1.6	-	4.2	5.0	8.0	-

Table A-2 (cont'd)

Sl. No.	Country	Years to which data correspond	Sales workers				Service workers			
			1960s	1970s	1980s	1984	1960	1970s	1980s	1984s
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1.	Bangladesh	1974	-	1.3	-	-	-	10.2	-	-
2.	HongKong	1961,71,84	-	6.1	-	8.1	-	14.9	-	15.3
3.	India	1971,81	-	1.5	1.1	-	-	3.1	1.9	-
4.	Indonesia	1971,80	-	13.4	18.2	-	-	4.9	7.6	-
5.	Japan	1960,70,80,84	11.4	12.4	14.7	13.9	11.0	11.4	11.7	11.5
6.	Rep. of Korea	1960,70,80,84	9.1	9.5	10.8	17.5	9.2	10.6	9.2	16.0
7.	Malaysia	1970,80	-	4.2	6.0	-	-	7.3	7.4	-
8.	Nepal	1971	-	0.5	-	-	-	0.4	-	-
9.	Philippines	1960,70,80	11.2	11.6	18.9	-	14.9	15.2	13.3	-
10.	Singapore	1957,70,80	10.5	8.6	11.9	12.3	34.9	19.3	13.2	15.3
11.	Sri Lanka	1963,70,80/81	1.7	1.5	3.6	-	-	4.0	4.5	-
12.	Thailand	1960,70,82	6.1	5.8	11.5	-	1.9	3.0	3.1	-

Source: Tables 5(a), 5(b) and 5(c):  
 ILO, Year Book of Labour Statistics, various issues.  
 Taken from Jose 1986.

Table A-3. Literacy rates by sex and age group, 1971/1981

Age Group	Total	1971		Total	1981	
		Female	Male		Female	Male
5 - 9	-	-	-	-	-	-
10 - 14	83.7	82.3	83.0	88.8	88.8	88.8
15 - 19	88.3	85.1	86.7	89.9	89.4	89.7
20 - 24	91.0	83.1	87.1	92.5	90.1	91.3
25 - 29	91.0	78.3	84.7	93.6	90.0	91.8
30 - 34	90.4	73.8	82.4	94.0	87.8	91.0
35 - 39	86.3	62.5	74.5	93.1	82.5	87.8
40 - 44	86.7	61.3	74.9	91.8	77.4	84.9
45 - 49	84.0	54.4	70.1	89.2	69.6	79.5
50 - 54	83.0	51.3	68.7	89.4	68.7	79.5
55 - 59	79.1	45.3	63.9	87.7	64.7	76.8
60 - 64	75.6	41.0	60.5	86.4	61.7	75.0
65 - 69	73.5	37.5	57.3	83.4	57.9	71.3
70 - 74	69.9	31.8	53.2	82.0	53.3	68.8
75+	60.8	23.8	42.9	77.4	48.4	63.4
15+ Population	86.0	68.5	77.6	90.8	81.2	86.1
10+ Population	85.6	70.9	78.5	90.5	81.5	86.5

Source: Census of Ceylon 1971, 1981.

Table A-4. Educational attainment of the population (10 years +), 1971/1981

Level	1971		1981	
	Male	Female	Male	Female
No schooling	16.0	29.5	8.7	17.5
Incomplete primary education	26.9	22.7	13.6	11.4
Complete primary education and incomplete secondary education	50.7	42.4	68.2	62.3
G.C.E. (O/L)	4.5	4.5	7.0	7.0
G.C.E. (A/L)	1.2	0.9	1.4	1.4
University degree and higher degree	0.6	0.1	0.9	0.5

Source: Census of Population, Sri Lanka, 1971, 1981.

Table A-5. National Apprenticeship Board - Number of apprentices by sex and level, 1973/1978/1983/1986

LEVEL	1973			1978			1983			1986		
	Total	Female	% F	Total	Female	% F	Total	Female	% F	Total	Female	% F
Technician	-	-	-	-	-	-	483	77	16.9	534	100	18.7
Craft												
Urban	768	20	2.6	3,947	226	5.7	2,739	651	23.8	2,785	546	19.6
Village	-	-	-	-	-	-	721	196	37.3	1,119	463	41.4
Construction Supervisors	-	-	-	-	-	-	-	-	-	195	43	22.1
Total	768	20	2.6	3,947	226	5.7	3,913	924	23.6	4,633	1,152	24.9

Source: National Apprenticeship Board

**Table A-6. National Apprenticeship Board - Number of women craft apprentices by trades, 1973/1978/1983/1986**

Trades	1973	1978	1983		1986	
			Urban	Village	Urban	Village
Mechanical Electricity/Radio					8	17
Mechanics		5	7	1	20	4
Watch Repairs/ Typewriter Repairs				2	1	
Gem Cutting			16	13	11	
Printing	4		19	7	83	14
Textiles and Garments	16	196	222	121	151	303
Footware Manufacture			32	13	39	
Pantry		25	15	2	3	6
Woodwork			18	1		8
Rubber and Plastics				3	1	
Hotel and Catering					1	4
Steno/Clerk Services			260	7	189	41
(Waiter, Cook, Maid)			73	26	39	66
<b>Total</b>	<b>20</b>	<b>226</b>	<b>651</b>	<b>196</b>	<b>546</b>	<b>463</b>

Source: National Apprenticeship Board.



Table A-7. Enrolment in Vocational Training Centres, Department of Labour, 1973/1978/1982/1986

COURSES	1973			1977			1982			1986		
	Total	Female	% F	Total	Female	% F	Total	Female	% F	Total	Female	% F
Mechanical trades	436	-	-	432	-	-	490	3	0.6	808	-	-
Radio mechanism										73	3	4.1
Marine engineering, Boat repairs	30	-	-	30	-	-	29	-	-	27	-	-
Tractor mechanism	-	-	-	-	-	-	143	-	-	118	-	-
Carpentry	390	-	-	624	-	-	1,775	20	1.1	1,273	-	-
Masonry	390	-	-	624	-	-	1,445	20	1.4	1,381	-	-
Sewing	216	87	40.4	960	816	85.0	3,946	3,836	97.2	4,220	4,220	100.0
Industrial sewing							9,459	9,459	100.0	1,448	1,448	100.0
Reed/mat weaving				16	16	100.0	100	100	100.0	92	92	100.0
Farming							20	20	100.0	25	25	100.0
English typing										85	40	47.0
Hair dressing	18	-	-	160	-	-						
Total	1,480	87	5.9	2,846	816	29.2	17,407	13,458	77.4	9,550	5,828	61.0

Source: Women and Children's Unit, Department of Labour.

Table A-8. Trainees in Department of Small Industries' Centres, 1987

Programmes	Total	Female	% Female
Artline textiles	1,708	1,698	99.4
Lace	176	176	100.0
Coir	1,007	958	95.1
Leather	60	60	100.0
Carpentry	1,979	108	5.4
Paper products	23	-	-
Total	4,953	3,000	60.6

Source: Department of Small Industries, Colombo.

Table A-9. Enrolment in National Youth Council Centres, 1987

	Total	Female	% Female
Motor mechanics	40	-	-
Electrical work	94	-	-
Tractor maintenance	35	-	-
Bicycle repairs	47	-	-
Welding	54	-	-
Carpentry, woodwork	150	-	-
Lacquer work	15	-	-
Metal work	26	-	-
Masonry	74	-	-
Gem cutting	101	39	38.6
Agriculture	155	85	56.7
Sewing	33	33	100.0
Women's programmes e.g. batik, sewing	523	523	100.0
Driving	30	-	-
Total	1,377	680	49.4

Source: National Youth Services Council, Ministry of Youth Affairs and Employment.

Table A-10. Trainees in Women's Bureau programmes, 1983/1986

ACTIVITY	1983		1985	
	No. of Women	Per cent Distribution	No. of Women	Per cent Distribution
Food preparation	87	2.1	564	8.5
Sewing	397	9.5	601	9.1
Small industries e.g. coir	306	7.3	863	13.0
Agriculture	897	21.5	1,008	15.2
Animal husbandry	2,194	52.6	3,242	48.9
Petty trade	106	2.5	345	5.2
Miscellaneous	185	4.4	-	-
Total	4,172	100.0	6,623	100.0

Source: Women's Bureau of Sri Lanka (1937).

Table A-11. Enrolment in universities, 1975/1985

FACULTIES	Total	1975		Total	1985	
		Female	% F		Female	% F
Medicine	1,239	584	47.1	2,193	946	43.1
Dentistry	193	108	55.9	225	109	48.4
Veterinary Science	108	53	49.1	134	54	40.3
Agriculture	390	100	25.6	315	134	43.4
Engineering	1,210	126	10.4	1,702	218	12.8
Architecture	73	21	28.8	89	30	33.7
Science	1,797	660	36.7	3,018	1,201	39.8
Management Studies	889	263	29.6	3,392	1,362	40.2
Education	971	613	63.1			
Law	144	61	42.4	392	172	43.9
Social Studies	5,634	2,563	45.5	6,346	3,395	53.5
Total	12,648	5,152	40.7	18,217	7,802	42.8

Source: Reports of the University of Sri Lanka and Statistical Handbook 1984, University Grants Commission.

Table A-12. Enrolment in the Open University, 1981/1985

Courses	1981			1985		
	Total	Female	% F	Total	Female	% F
Bachelor of Science				2,261	1,538	68.0
Bachelor of Law				562	167	29.7
Diploma in Education	638	218	34.2	997	491	49.2
National Diploma in						
Science	132	88	66.7	12	5	41.7
Mathematics	199	54	27.1	19	8	42.1
Technology				3,481	562	16.1
Management	541	204	37.7	167	51	30.5
Certificate in						
Technology	559	116	20.8	3,978	861	21.6
Entrepreneurship				384	96	25.0
Pre-school	314	290	92.4	178	176	98.9
Professional English	762	267	35.0	4,247	2,145	50.5
<b>Total</b>	<b>3,145</b>	<b>1,407</b>	<b>44.7</b>	<b>16,306</b>	<b>6,107</b>	<b>37.5</b>

Source: Open University of Sri Lanka, Nawala  
Statistical Hand Book 1984, University Grants Commission.

**Table A-13. Unemployed population by education and sex 1981/82**  
(as a percentage of the labour force)

Level of Education	Male	Female	Total
No Schooling Illiterates	2.1	2.6	2.4
No Schooling Literates	2.4	-	1.9
Primary	3.8	7.8	4.8
Secondary	9.6	33.5	14.6
G.C.E. (O/L)	14.5	42.0	24.5
G.C.E. (A/L)	22.0	52.2	34.8
Undergraduates	42.9	40.0	41.2
Graduates	8.1	12.1	9.7
Other	-	-	-
Total	7.8	21.3	11.7

**Source:** Report on Consumer Finances and Socio-economic Survey 1981/82  
Sri Lanka, Part I. Central Bank of Ceylon (1984).

**Table A-14. Unemployed population by age and sex, 1981 (per cent)**

Age	Male	Female	Total
10 - 14	4.5	2.2	3.4
15 - 19	27.9	19.2	24.1
20 - 24	33.5	34.9	34.1
25 - 29	16.0	22.0	18.7
30 - 34	7.9	11.9	9.7
35 - 44	5.9	7.7	6.7
45 and over	4.3	2.0	3.3

**Source:** Census of Population 1981.

Table A-15. Employment in public sector manufacturing corporations by sex, 1975/1985

Name of Corp./Institution	1975		1985	
	Male	Female	Male	Female
Ceylon Fertilizer Corp.	397	82	739	115
Sri Lanka Sugar Corp.	10,514	2,003	4,629	850
Paddy Marketing Board	n.a.	n.a.	1,894	158
G.O.B.U. of C.C.C. (Fertilizer)	n.a.	n.a.	452	50
State Flour Milling Corp.	417	92	-	-
G.O.B.U. of B.C.C.	1,053	248	1,018	259
State Gem Corporation	229	26	370	110
State Distillery Corp.	1,302	147	1,814	152
Ceylon Fisheries Corp.	1,818	296	562	82
State Pharmaceuticals Corp.	n.a.	n.a.	331	114
Sri Lanka Ayurvedha Drugs Corp.	232	49	237	46
National Packing Materials Corp.	-	-	129	75
National Salt Corporation	631	20	1,024	81
State Mining & Mineral Dev. Corp.	1,518	217	1,811	234
State Hardware Corporation	1,596	29	734	61
State Fertilizer Manuf. Corp.	80	13	1,055	59
Sri Lanka Tobacco Indust. Corp.	631	272	192	75
Ceylon Ceramics Corp.	2,587	704	3,708	972
Sri Lanka Tyre Corp.	1,965	38	1,708	104
National Paper Corp.	4,180	425	3,463	470
Ceylon Leather Products Corp.	740	223	853	318
Ceylon Plywoods Corp.	4,174	220	3,376	79
Sri Lanka Mineral Sands Corp.	425	49	655	36
Paranthan Chemicals Corp.	377	11	411	24
G.O.B.U. of United Motors	282	11	483	55
G.O.B.U. of Ceylon Oxygen	203	5	374	38
G.O.B.U. of Noorani Tiles	-	-	401	9
G.O.B.U. of Shaw Industries	-	-	241	68
G.O.B.U. of Vijaya Tiles	135	44	158	30
G.O.B.U. of SEATO	n.a.	n.a.	128	22
G.O.B.U. of Lanka Porcelain	382	278	438	372
Janatha Estate Dev. Board	n.a.	n.a.	10,559	2,266
Building Materials Manuf. Corp.	n.a.	n.a.	44	8
Ceylon Steel Corporation	1,210	46	1,686	81
Ceylon Cement Corp.	2,480	189	3,419	179
G.O.B.U. of C.C.C. (Engineering)	n.a.	n.a.	1,287	81
State Timber Corporation	1,549	48	2,179	175
Sri Lanka Cashew Corporation	119	11	142	11
Silk & Allied Prod. Dev. Authority	n.a.	n.a.	614	613
Sri Lanka Tea Board	n.a.	n.a.	452	142
Lanka Petroleum Corp.	3,620	405	4,924	567
G.O.B.U. of Colombo Gas & Water Ltd.	n.a.	n.a.	352	32
Palmyrah Development Board	n.a.	n.a.	59	27
Department of Small Industries	n.a.	n.a.	899	532
Oils & Fats Corporation	858	27	897	76
National Milk Board	2,164	166	1,646	124
State Printing Corporation	460	23	476	23
Wellawatta Weaving Mills Ltd.	2,829	432	78	10
Ceylon Silks Ltd.	641	111	524	82
National Textile Corp.	10,035	1,121	8,416	887
Lanka Canneries Ltd.	n.a.	n.a.	134	91
G.O.B.U. of C.C.C. (Teas) Ltd.	n.	n.a.	177	101
<b>TOTAL</b>	<b>61,833</b>	<b>8,081</b>	<b>72,352</b>	<b>11,226</b>

Source: Department of Census and Statistics, Census of Public Sector Corporations.

Table A-16. CISIR - Staff by technical divisions and sex, 1980/1981

Section	Year	Head		Research Officers		Technical Assistants		Laboratory Attendants		Clerks/Typists		TOTAL		Percentage female	
		T	F	T	F	T	F	T	F	T	F	T	F	in	TOTAL
Agro-industries	1980	1	1	8	5	10	4	1	-	-	-	20	10	50	
	1986	1	-	3	2	6	6	1	-	1	1	12	9	75	
Analytical Chemistry	1980	1	1	5	-	15	5	2	-	2	1	25	7	28	
	1986	1	1	2	-	5	-	2	-	2	2	12	3	25	
Applied business & electronics	1980	1	-	9	-	6	-	4	-	1	1	21	1	5	
	1986	1	-	7	1	6	4	3	-	1	1	17	6	30	
Fats and oils	1980	1	-	3	-	3	1	-	-	-	-	7	2	28	
	1986	1	-	2	-	4	1	1	1	1	-	9	2	22	
Food technology	1980	1	-	10	8	9	2	1	-	1	1	22	11	50	
	1986	1	-	8	5	7	3	2	-	-	-	18	8	44	
Industrial economics	1980	1	-	7	4	-	-	-	-	2	2	10	6	60	
	1986	-	-	2	2	-	-	-	-	1	1	3	3	100	
Industrial microbiology	1980	1	-	8	3	10	2	-	-	1	1	20	6	30	
	1986	-	-	9	3	9	7	2	-	2	2	22	12	54	
Industrial metallurgy	1980	1	-	2	-	9	-	1	-	1	1	14	1	7	
	1986	-	-	3	-	4	-	1	-	1	1	9	1	11	
Pilot plant & designs	1980	1	-	4	-	9	2	2	-	1	1	17	3	18	
	1986	1	-	3	-	9	3	2	-	1	1	16	4	25	
Minerals technology	1980	1	-	5	-	7	2	2	-	1	1	16	3	19	
	1986	-	-	4	-	8	5	2	-	1	1	15	6	40	
Natural products	1980	1	-	13	4	11	5	2	-	3	3	30	12	40	
	1986	1	-	8	3	7	7	1	-	1	1	18	11	61	
Rubber technology	1980	1	-	7	-	3	-	2	-	1	1	15	1	7	
	1986	1	-	4	1	5	-	3	-	1	1	13	2	15	
Wood & cellulose technology	1980	1	-	3	-	3	-	1	-	-	-	8	0	0	
	1986	-	-	1	-	3	1	1	-	1	1	6	2	33	

Notes: T = Total; F = Female.

Source: CISIR.

**Table A-17. Distribution of migrants for foreign employment by age and sex, 1979-1981**

Age Group	Males		Females		Both Sexes	
	No.	%	No.	%	No.	%
15 - 19	3	0.8	35	6.6	38	4.1
20 - 24	65	16.2	109	20.7	174	18.8
25 - 29	120	30.0	109	20.7	229	24.7
30 - 34	93	23.2	135	25.7	228	24.6
35 - 39	66	16.5	92	17.5	158	17.1
40 - 44	35	8.8	26	4.9	61	6.6
45 - 49	7	1.7	5	1.0	12	1.3
50 - 54			1	0.2	1	0.1
Above 55	3	0.8	1	0.2	4	0.4
Not stated	8	2.0	13	2.5	21	2.3
<b>All Age Groups</b>	<b>400</b>	<b>100.0</b>	<b>526</b>	<b>100.0</b>	<b>926</b>	<b>100.0</b>
	<b>43.2%</b>		<b>56.8%</b>			

**Source:** Foreign Employment Sri Lanka Experience Employment and Manpower Planning Division, Ministry of Plan Implementation (Enumeration of embarkation cards 1979 - 1981)



Table A-18. Distribution of migrants for foreign employment by skill level and sex, 1976-1981

	1976	1977	1979	1980	1981
<b>High Level</b>					
Total	15	51	1,657	1,357	1,991
Females	-	-	251	197	260
% Female	-	-	15.1	14.5	13.0
<b>Middle Level</b>					
Total	75	343	2,374	2,199	3,420
Females	-	11	381	282	264
% Female	-	3.2	16.0	12.8	7.7
<b>Skilled</b>					
Total	222	3,208	6,110	5,895	11,187
Females	-	-	11	96	277
% Female	-	-	1.8	1.6	2.5
<b>Unskilled</b>					
Total	214	2,031	12,803	14,501	31,936
Females	2	220	10,131	11,321	24,537
% Female	0.9	10.8	79.1	78.1	76.8
<b>Not classified</b>					
Total	-	-	2,931	4,692	8,913
Females	-	-	1,368	2,647	4,822
% Female	-	-	46.7	56.4	54.1
<b>All Levels</b>					
Total	526	5,633	25,875	28,644	57,447
Females	2	231	12,242	14,543	30,160
% Female	0.4	4.1	47.3	50.8	52.5

Source: R.B.M. Korale, Migrations of Sri Lankans Abroad (1981).  
Migration for Employment to the Middle East (1983).  
Middle East Migration (1984).

Employment and Manpower Planning Division, Ministry of Plan  
Implementation, Colombo, Sri Lanka.

Table A-19. Population by age groups (census years - 1971, 1981)

AGE GROUPS	POPULATION (THOUSANDS)											
	1971						1981					
	Male	M%	Female	F%	Total	%	Male	M%	Female	F%	Total	%
0 - 14	2,513	38.45	2,431	39.38	4,945	38.91	2,663	35.2	2,564	35.2	5,227	35.2
15 - 19	689	10.54	671	10.87	1,360	10.72	813	10.7	790	10.9	1,603	10.8
20 - 24	640	9.79	631	10.22	1,271	10.01	766	10.1	761	10.5	1,526	10.3
25 - 34	857	13.11	827	13.40	1,684	13.27	1,208	16.0	1,193	16.4	2,400	16.2
35 - 44	681	10.42	630	10.21	1,312	10.34	782	10.3	756	10.4	1,537	10.4
45 - 54	517	7.91	446	7.22	963	7.59	593	7.8	556	7.6	1,149	7.7
55 - 59	192	2.94	157	2.54	349	2.75	222	2.9	200	2.7	422	2.8
60 - 64	151	2.31	117	1.89	268	2.11	183	2.4	157	2.2	340	2.3
65 - 69	121	1.85	99	1.60	221	1.74	133	1.8	119	1.6	252	1.7
70+	171	2.62	147	2.38	318	2.50	206	2.7	183	2.5	389	2.6
<b>TOTAL</b>	<b>6,531</b>	<b>100</b>	<b>6,159</b>	<b>100</b>	<b>12,690</b>	<b>100</b>	<b>7,568</b>	<b>100</b>	<b>7,278</b>	<b>100</b>	<b>14,847</b>	<b>100</b>

Source: Department of Census and Statistics

Table A-20. Growth of population and labour force, 1971 - 1981

Census Year Sex and Age	Total Population		Labour Force		Crude Activity Rate	Refined Activity Rate 15-59 yrs.
	Number	% increase 1971-1981	Number	% increase 1971-1981		
<b>Both Sexes</b>						
1971	12,689,897		4,488,139		35.4	
1981	14,846,750	17.0	5,016,573	11.8	33.8	
<b>Male</b>						
1971	6,531,361		3,312,469		50.7	
1981	7,568,253	15.9	3,736,188	12.8	49.4	
<b>Female</b>						
1971	6,158,536		1,175,670		19.1	
1981	7,278,497	18.2	1,280,385	8.9	17.6	
<b>Age 15 - 59 years</b>						
1971	6,938,580		4,156,512			59.9
1981	8,638,344	24.5	4,698,040	13.0		54.4
<b>Male</b>						
1971	3,575,086		3,038,885			85.0
1981	4,383,309	22.6	3,461,775	13.9		79.0
<b>Female</b>						
1971	3,363,494		1,117,627			33.2
1981	4,255,015	26.5	1,236,265	10.6		29.1

Table A-21. Effects of changes in the size of population and activity rates on labour force growth, 1971 - 1981

Sex	Enumerated Labour Force 1971	Expected Labour Force 1981	Demographic Changes	Enumerated Labour Force 1981	Difference between 1981 enumerated labour force & 1981 expc. labour force
	(1)	(2)	(3)=(2)-(1)	(4)	(5)=(4)-(2)
<b>Both Sexes</b>	4,488,139	5,552,235	1,064,096	5,016,573	-535,668
<b>Male</b>	3,312,469	4,065,780	753,311	3,736,188	-329,597
<b>Female</b>	1,175,670	1,487,455	310,785	1,280,385	-206,070

Source: Census of Population 1981 (General Report)

Table A-22. Population projections, 1981-2001

YEAR	Department of Census and Statistics			Population Division, Ministry of Plan Implementation		
	H	M	L	TOTAL	MALE	FEMALE
1981	15,960 (2.3) <sup>a/</sup>	15,826 (2.1)	15,339 (1.6)	14,984 (1.7)	7,687	7,347
1986	17,885 (2.3)	17,357 (1.9)	16,244 (1.2)	16,293 (1.5)	8,271	8,022
1991	20,009 (2.3)	18,868 (1.7)	17,245 (1.2)	17,519 (1.3)	8,865	8,654
1996	22,291 (2.2)	20,338 (1.5)	18,313 (1.2)	18,705 (1.0)	9,440	9,265
2001	24,730 (2.1)	21,786 (1.4)	19,315 (1.1)	19,696 (0.9)	9,910	9,780
1971-2001	(2.2)	(1.8)	(1.8)			

Source: Manpower 1983: Employment and Manpower Planning Division, Ministry of Plan Implementation Sri Lanka.

a/ Figures in brackets indicate growth rates.

Table A-23. Population projections by sex and age (medium projections)

AGE GROUP	1981 (Enumerated population adjusted to mid-1981)				1986				1991			
	BOTH SEXES	MALE	FEMALE	%F	BOTH SEXES	MALE	FEMALE	%F	BOTH SEXES	MALE	FEMALE	%F
0- 4	1,941,427	936,806	954,621	2,041,151	1,040,560	1,000,692	12.6	2,021,046	1,031,744	992,302	11.7	
5- 9	1,672,592	855,468	817,124	1,923,337	977,658	945,679	11.9	2,022,112	973,374	942,171	11.1	
10-14	1,763,765	865,598	838,167	1,665,818	851,721	814,097	10.3	1,915,545	834,523	802,605	9.4	
15-19	1,642,336	830,560	811,776	1,671,574	846,257	825,318	10.1	1,637,128	803,639	799,239	9.4	
20-24	1,507,951	760,002	747,949	1,564,824	782,322	782,502	9.9	1,602,877	728,874	739,182	8.7	
25-29	1,325,760	660,578	659,182	1,398,118	699,398	698,721	8.8	1,468,055	547,262	642,778	7.6	
30-34	1,101,758	554,478	547,307	1,202,490	607,300	595,091	7.5	1,290,040	555,313	547,978	6.4	
35-39	853,539	432,362	421,177	999,288	505,674	493,614	6.2	1,103,290	466,984	459,553	5.4	
40-44	685,215	352,648	332,567	783,345	400,098	383,248	4.8	926,537	386,848	369,698	4.3	
45-49	621,044	318,806	302,238	658,869	340,267	318,602	4.0	756,549	328,456	311,499	3.7	
50-54	534,295	277,178	257,117	603,538	308,030	295,508	3.7	639,955	284,322	277,416	3.3	
55-59	430,267	227,018	203,254	492,783	253,926	238,857	3.0	561,737				
60+	982,797	521,698	461,099	1,113,849	581,930			1,284,414	657,933	626,479		
<b>TOTAL</b>	<b>15,002,773</b>	<b>7,649,195</b>	<b>7,353,578</b>	<b>16,118,980</b>	<b>8,195,136</b>	<b>7,923,844</b>		<b>17,232,272</b>	<b>8,730,073</b>	<b>8,502,199</b>	<b>49.3</b>	

Source: Department of Census and Statistics

References

- Abeykoon, A.T. (1976), Population and Manpower Planning in Sri Lanka, (M.A. Thesis, Cornell University), New York 1976.
- Abeykoon, A.T. (1982), Population Projection of Sri Lanka, in: Progress, December 1982.
- Amjad, R. (1986), Human Resource Planning: The Asian Experience - An Overview (Paper presented at the HRD Network Workshop held by ILO-ARTEP in Bangkok, December 16-18, 1986).
- Ariyadasa (1985), Study of the Technical Education Unit of the Non-formal Education Programme of the Ministry of Education, SIDA 1985.
- Athukorala, P. (1984), Direct Foreign Investment and Manufactured Export Expansion: The Case of Sri Lanka, in: Vidyodaya Journal, Vol. 12 (1984), pp. 21-41.
- Athukorala, P. (1986), The Impact of 1977 Policy Reforms on Domestic Industry, in: Upanathi, Vol. 1 (1986), No. 1, pp. 69-105.
- Bhagwati, J. (1984), Development Economics: What Have We Learned?, in: Asian Development Review, Vol. 2 (1984), No. 1, pp. 23-38.
- Bhatt, E. (1987), The Invisibility of Home-based Work: The Case of Piece Rate Workers in India, in: Singh, A.M./Vitanen, A.K. (eds.), Invisible Hands, New Delhi 1987.
- Boserup, E. (1970), Women's Role in Economic Development, London 1970.
- Cain, M.L. (1981), Java, Indonesia: The Introduction of Rice Processing Technology, in: Dauber, R./Cain, M.L. (eds.), Women and Technological Change in Developing Countries, Boulder 1981.
- Castells, M. (1986), High Technology, World Development, and Structural Transformation: The Trends and the Debate, in: Alternatives, Vol. 11 (1986), pp. 297-343.
- Central Bank of Sri Lanka (1986b), Review of the Economy 1985, Colombo 1986.
- Central Bank of Sri Lanka (1986a), Annual Report 1985, Colombo, April 1986.
- Central Bank of Sri Lanka (1987), Annual Report 1986, Colombo, April 1987.
- Central Bank of Sri Lanka (1984), Consumer Finance and Socio-economic Survey 1981/82.
- Ceylon Institute of Science and Industrial Research (1980), Annual Report 1980.
- Cline, W.R. (1982a), Can the East Asian Model of Development Be Generalised?, in: World Development, Vol. 10 (1982), pp. 81-90.

Cline, W.R. (1982b), 'Reciprocity': A New Approach to World Trade Policy, Washington 1982.

Currie, J. (1985), Export Processing Zones in the 1980's (Economist Intelligence Unit Report No. 190), London 1985.

Department of Census and Statistics (1985), Report on the Survey on Manufacturing Industries Sri Lanka 1981, Colombo, November 1985.

Department of Census and Statistics, Industrial Census 1983 (unpublished preliminary results).

Department of Census and Statistics, Census of Population 1981.

Department of Census and Statistics (1974), The Population of Sri Lanka, Colombo 1974.

Divatia, M.V./Srivastava, R.K. (1971), Employment Potential of Industry in Ceylon (mimeo), Ministry of Planning and Employment, Colombo 1971.

Drucker, P., The Changed World Economy, in: Foreign Affairs, Spring 1986, pp. 768-791.

ESCAP (1987), Economic and Social Survey of Asia and the Pacific 1986, Bangkok 1987.

ESCAP/UNCTC (1985), An Evolution of Export Processing Zones in Selected Asian Countries, (ESCAP/UNCTC Publication Series B., No. 8), United Nations 1985.

Garnsey, E./Paukert, L. (1987), Industrial Change and Women's Employment: Trends in the New International Division of Labour, Geneva 1987.

Goonasekera, S. (1985), The Impact of the UN Decade for Women on the Legal Status of Sri Lankan Women, in: CENWOR (ed.), UN Decade for Women. Papers and Achievements of Women in Sri Lanka, Colombo 1985.

Goonatilake, H. (1986), Work, Conflict and Consciousness. The Case of Women Factory Workers in Sri Lanka, CENWOR and APDC, Kuala Lumpur 1986.

Green, T.L. (1952), Education and Social Needs, in: University of Ceylon Review, Vol. 10, October 1952.

Herring, R.J. (1987), Economic Liberalisation Policies in Sri Lanka. International Pressures, Constraints and Supports, in: Economic and Political Weekly, Vol. 22, No. 8, February 21, 1987, pp. 325-333.

IDB (1980), A Study on the Effects of Liberalisation of Imports on Local Industries (unpublished working paper), Colombo 1980.

ILO (1971), Matching Employment Opportunities and Expectations - A Programme of Action for Ceylon, Geneva 1971.

ILO (1986), Yearbook of Labour Statistics 1986, Geneva 1986.

ILO-ARTEP (1985), Impact of Out and Return Migration on Domestic Employment in Sri Lanka: A Preliminary Analysis, New Delhi, May 1985.

- ILO-ARTEP (1986), *The Impact of Economic Liberalisation on the Small Scale and Rural Industries of Sri Lanka*, New Delhi, May 1986.
- Irvin, G.W. (1986), *Sri Lanka: Current Prospects for Employment* (mimeo), IPS Project, Phase I, Colombo, September 1986.
- Isenman, P. (1980), *Basic Needs: The Case of Sri Lanka*, in: *World Development*, Vol. 8 (1980).
- Jayaweera, S. (1976), *Vocational Preferences of Secondary School Girls in Sri Lanka*, in: *Modern Ceylon Studies*, Vol. 7 (1976), Nos. 1 and 2.
- Jayaweera, S. (1979), *Women and Education. Status of Women Sri Lanka*, University of Colombo 1979.
- Jayaweera, S. (1985), *Integration of Women in Rural Development*, IRDP, Nuwara Eliya 1985.
- Jayaweera, S. (1985), *Women and Employment*, in: CENWOR (ed.), *UN Decade for Women. Progress and Achievements of Women in Sri Lanka*, Colombo 1985.
- Joekes, S.P. (1985), draft chapter "Industry" for a forthcoming INSTRAW-publication.
- Jose, A.V. (1986), *Employment Diversification of Women in Asian Countries: An Assessment*, (Paper prepared for the seminar on "Diversification of Training and Employment of Women", Tokyo 8-12 December 1986).
- Jumani, U. (1987), *The Future of Home-based Production*, in: Singh, A.M./Vitanen, A.K. (eds.), *Invisible Hands*, New Delhi 1987.
- Kelegama, J.B. (1986), *Review of Economic Policies and Progress 1977-1984*, in: *Sri Lanka Economic Journal*, Vol. 1 (1986), No. 1, pp. 12-57.
- Kim, Y.B. (1986), *Human Resource Planning: The Asian Experience - The Republic of Korea*, (Paper presented at the HRD Network Workshop held by ILO-ARTEP in Bangkok, 16-18 December 1986).
- Korale, R.B. et al. (1983), *Manpower: Data, Sources, Utilisation Trends and Prospects in Sri Lanka*, (Report prepared for UNESCO), Colombo 1983.
- Korale, R.B. (1984a), *Middle East Migration* (mimeo), *Employment and Manpower Planning Division, Ministry of Plan Implementation*.
- Korale, K.B. (1984b), *Employment and the Labour Market in Sri Lanka: A Review* (mimeo), Colombo 1984.
- Korale, K.B. (1985), *Employment and Wages: A Case Study of Sri Lanka* (mimeo), Colombo, March 1985.
- Korale, K.B. (1986), *Background Studies in Employment Generation; Employment Trends and Prospects* (mimeo), Colombo, September 1986.
- Kreye, O. et al. (1987), *Export Processing Zones in Developing Countries: Results of a New Survey*, (ILO Working Paper No. 43), Geneva 1987.



Marga-Institute (1978), A Study of the Informal Sector in Colombo City, Colombo 1978.

Marga-Institute (1986), A Survey of the Female Business Community Colombo District, Colombo 1986.

Ministry of Education and UNICEF (1985), Report of Baseline Survey on the Educational Needs of Non-school-going children in three AGA Divisions in the Anuradhapura District.

Ministry of Education and UNICEF (1984), A Baseline Survey of Educational Needs of Non-school-going Children among Low Income Groups in the City of Colombo.

Ministry of Education and ACEID (1981), National Study on Meeting the Educational Needs of Young People without Schooling and with Incomplete Schooling in Sri Lanka, UNESCO, Bangkok 1981.

Ministry of Education and University Grants Commission (1985), School Census 1985.

Ministry of Finance and Planning (1985), Public Investment 1985-1989, Colombo, May 1985.

Ministry of Finance and Planning (1986a), Public Investment 1986-1990, Colombo, May 1986.

Ministry of Finance and Planning (1986b), The Labour Force, Employment, and Unemployment, 1981-1991 (first draft; mimeo), National Planning Division, Macro-economic Unit, Colombo 1986.

Ministry of Finance and Planning (1987), Public Investment 1987-1991, Colombo, May 1987.

Ministry of Industries and Scientific Affairs (1986), Review of Activities 1985-86, Colombo 1986.

Ministry of Textiles (1986), Review of Activities 1981-86, Colombo 1986.

Mohs, R.M. (1985), NICs: Can the Second Generation Succeed?, in: Intereconomics, January/February 1985, pp. 21-26.

Morris, M.D. (1979), Measuring the Condition of the World's Poor. The Physical Quality of Life Index, New York 1979.

Munasinghe, M./Blankstein, Ch. (1985), Computer Policy Framework and Issues in Developing Countries, in: Munasinghe, M. et al. (eds.), Microcomputers for Development. Issues and Policy, Colombo 1985.

Papanek, H. (1981), The Differential Impact of Programs and Policies on Women in Development, in: Dauber, R./Cain, M.L. (eds.), Women and Technological Change in Developing Countries, Boulder 1981.

Paukert, L. (1984), The Role of Women in Industrial Development, (Study prepared as a contribution by UNIDO to the "World Survey on the Role of Women in Development"), UNIDO/IS. 484, 13 September 1984.

- Perera, H.R., *Industrial Development: Economic Trends including Impact of Technology* (mimeo), Colombo, March 1987.
- Rajapakse, R.P. (1986), *A Labour Force Projection for Sri Lanka, 1981-2001*, (Diploma Dissertation, Demographic Research Unit, University of Colombo).
- Risseuw, C. (1980), *The Wrong End of the Rope*, Leiden University 1980.
- Rodrigo, P.C. (1983), *A National Wage Policy for Sri Lanka*, Colombo 1983.
- Rodrigo, P.C. et al. (1986), *Human Resource Planning: The Asian Experience - Sri Lanka*, (Paper presented at the HRD Network Workshop held by ILO-ARTEP in Bangkok, December 16-18, 1986).
- Skjonbert, E. (1982), *Report on Self-Employment of Women*, IRDP/NORAD 1982.
- Srivastava, R.K. et al. (1970), *Labour Force Projections for Ceylon, 1968-1998* (mimeo), Ministry of Planning and Employment, Colombo 1970.
- Srivastava, R.K. et al. (1969), *Employment in the Industrial Sector, 1967-1969* (mimeo), National Economic Planning and Programming Project, Ministry of Planning and Economic Affairs, Colombo 1969.
- Thorborg, M. (1980), *Women's Economic Position in Republican China 1911-49*, in: *La donna nella Cina imperiale e nella Cina repubblicana* (Civiltà Veneziana Studi, No. 36), Firenze 1980.
- Thorborg, M. (1986a), *Identification of Priority Research Issues on Women in Asia and the Pacific. A Report on Research and Research Organisations with Bibliography*, (SAREC Documentation, Women in Development), Stockholm 1986.
- Thorborg, M. (1986b), *Women in EPZs in S.E. Asia: Division of Work and Socio-economic Changes*, in: *Proceedings from the Symposium on Class, Sex and Ethnicity in Southeast Asia*, Oslo, October 1986 (in print).
- Thorborg, M. (1986c), *China's Special Economic Zones and the Open Door Policy*, in: *Proceedings from the Conference "China - Ten Years After"*, Marienlyst, November 1986 (in print).
- UNCTAD/INSTRAW (1985), *Women, Technology and Sexual Divisions*, United Nations 1985 (UNCTAD/TT/79, 5 March 1985).
- UNESCO (1960), *Report of the Regional Meeting of Representatives of Asian Member States on Primary and Compulsory Education*, Bangkok 1960.
- UNIDO (1980a), *Export Processing Zones in Developing Countries*, UNIDO/ICIS. 176, 18 August 1980.
- UNIDO (1980b), *Women in the Redeployment of Manufacturing Industry to Developing Countries*, UNIDO/ICIS. 165, 8 July 1980.
- UNIDO (1981), *Women and Industrialisation in Developing Countries*, New York 1981.
- UNIDO (1986a), *Industrial Development Review Series: Sri Lanka*, UNIDO/IS. 613, 25 February 1986.

UNIDO (1986b), *New Industrial Technologies and Human Resource Development in Asia: Some Selected Issues*, UNIDO/IS. 611, 19 February 1986.

UNIDO (1987), *Scope, Structure and Determinants of Linkages between Enterprises in the Katunayake Export Processing Zone and Domestic Sri Lankan Enterprises* (to be published in 1987).

UNIDO (1987a), *Recent Developments in the Machine Tool Industry: The Prospects for Foreign Direct Investment with Particular Reference to Asian Developing Countries*, PPD. 53, 16 September 1987.

United Nations (1986), *1984 Demographic Yearbook*, New York 1986.

University Grants Commission (1984), *Cooperate Plan for University Education 1984-1988*, Colombo 1984.

Voice of Women Publication Series No. 1 (1983), *Women in the Free Trade Zone of Sri Lanka*, Colombo 1983.

Weekes-Vagliani, W./Frossat, B. (1980), *Women in Development. At the Right Time for the Right Reason*, OECD Development Centre, Paris 1980.

Wilson, P. (1975), *Economic Implications of Population Growth, Sri Lanka Labour Force 1946-1981*, (Australian National University), Canberra 1975.

Women's Bureau of Sri Lanka (1985), *Women of Sri Lanka in Statistics*, Colombo 1985.

World Bank (1984), *Sri Lanka: Recent Economic Developments, Prospects and Policies* (Report No. 5038-CE), May 4, 1984.

World Bank (1986a), *Sri Lanka: Current Economic Situation and Outlook* (Report No. 6176-CE), May 13, 1986.

World Bank (1986b), *World Development Report 1986*.