OCCASION

This publication has been made available to the public on the occasion of the 50th anniversary of the United Nations Industrial Development Organisation.

DISCLAIMER

FAIR USE POLICY

CONTACT

Please contact publications@unido.org for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org

UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION
Vienna International Centre, P.O. Box 300, 1400 Vienna, Austria
Tel: (+43-1) 26026-0 · www.unido.org · unido@unido.org

20261

Distr.
LIMITED

ODG.17(SPEC.)
22 June 1993

UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION

ORIGINAL: ENGLISH

ii, 96 p
tables
diag, maps

IN-DEPTH EVALUATION OF UNIDO'S INDUSTRIAL HUMAN RESOURCE DEVELOPMENT ACTIVITIES

Country case study: Sri Lanka*

Prepared by the

Evaluation Staff
Office of the Director-General

* This document has not been edited.

V.93 86511

TABLE OF CONTENTS

ABBREVIATIONS

ADB	Asian Development Bank
CISIR	Ceylon Institute of Scientific and Industrial Research
CTA	Chief Technical Advisor
ERD	External Resources Division
FTI	Foreman Training Institute
GCE	General Certificate of Education
GCEC	Greater Colombo Economic Commission
GDP	Gross Domestic Product
GNP	Gross National Product
GTP	Group Training Programme
GTZ	(Executing agency for German bilateral assistance)
HND	Higher National Diploma
HRD	Human Resource Development
HRDF	Human Resource Development Fund
ICTAD	Institute for Construction Training and Development
IDB	Industrial Development Board (A Sri Lanka Government organisation)
IITRAD	Industrial Institute for Training and Development
ILO	International Labour Organisation
IMF	International Monetary Fund
IPM	Institution of Personnel Management
MIST	Ministry of Industries, Science and Technology
NAITA	National Appreatice and Industrial Training Authority
NC	National Certificate
NCC	National Craft Certificate
ND	National Diploma
NDB	National Development Bank
NGO	Non-governmental organization
NIBM	National Institute for Business Management
NIC	Newly Industrialised Country
NPD	National Programme Director
NTTTC	National Technical Teacher Training Centre
NYSC	National Youth Services Council
SIDA	Swedish International Development Agency
SLSI	Sri Lanka Standards Institution
SSM	Sarvodaya Sharamadana Movement
TEA	Technical Educational Authority
TSS1/2	Technical Support Services (UNDP)
TTI	Technician Training Institute
TVEC	Tertiary and Vocational Education Commission
UCD	UNIDO Country Director
UNCED	United Nations Conference on Environment and Development
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WID	Women in Development

1. ECONOMIC, SOCIAL AND INDUSTRIAL CONTEXT

General

1. From UNIDO's point of view the crucial aspect of Sri Lanka's immediate economic and social future is the reliance which must be placed on industrial development not only to increase average incomes but even more importantly to absorb at least some of the large numbers of young people expected to enter the labour force during the next decade. The labour force is expected to grow by no less than 40% between 1991 and 2000, and starting from a position at which about one million persons out of a total labour force of about seven million are unemployed some 210,000 jobs would need to be created each year during the decade in order to reduce unemployment to an acceptable level of 5%. This should be compared with a labour absorption rate of 75,000 a year between 1978 and 1988. There is inadequate scope for expansion in non-industrial sectors, and labour productivity in the very large agricultural sector is already low. A recent forecast predicts that an annual growth rate of 9% in manufacturing industry, as a component of an overall growth rate of 6%, would contribute to a reduction of unemployment to 6.8% by the year 2000[1].

2. The 1990 population of Sri Lanka is estimated at about 17 million, and the population growth rate is fairly low at about 1.3%. Density is 2658 persons per 1000 hectares.[2] The most recent census was taken in 1981. In the present conditions of armed insurgency in the Northern and Eastern provinces it is not possible to establish all-island figures on population or any other subjects. Violent unrest in the south in the late 1980s further weakened the statistical base, as well as causing severe economic disruption, which is now being overcome. Literacy in the two main languages of Sri Lanka is at the very high rate of about 87%, with a lower figure, 82%, for women, illiteracy being concentrated in the older age groups in both sexes. The population with some knowledge of English is estimated at about 10%. This is significant to the extent that industrial employers tend to require employees at technician or clerical levels and above to have a working knowledge of English.

3. Around 8% of the school age population never attend school, just over 70% complete primary education, 50% complete 8 years of schooling and 25% twelve years of schooling. Only 2% of the relevant age group are in the nine universities, and over two-thirds who obtain the formal academic entry qualification cannot find places. On the other hand it must be noted that over 35% of the unemployed have had an education at least up to GCE Ordinary Level.

4. Other social indicators such as life expectancy contribute to a relatively high Human Development Index for Sri Lanka (0.665), but they are combined with a low figure of US$ 420 for GNP per head[3]. This conceals wide variations of income and it is estimated that about a quarter of the population live in great poverty. There a pockets of malnutrition and poor educational, health and other services in a number of areas. It is some compensation that urban drift has been slow and the largest city, Colombo, has a population of only 700,000; some 75% of the population are estimated to live in rural areas. The Labour Force Survey mentioned below, which does not cover the Northern and Eastern provinces, gives a population of 11,623,000 in the other seven provinces, of whom 82% in the rural sector.

5. Unsettled conditions brought the economic growth rate down to a low point of 1.5% in 1987, but by 1990 it had shown a sharp recovery: GDP increased by 6.2% in that year, and GNP by 6.6%. (Remittances by Sri Lankans working in other countries are an important component of GNP.)

---

[1] Cited in Sri Lanka National Report to UNCED, Ministry of Environment and Parliamentary Affairs, Sri Lanka, September 1991, p. 106.

[2] Comparative density figures: Australia 22, Malaysia 528, Nepal 1399, U.K. 2357, India 2870, Japan 3280, Netherlands 4349, Bangladesh 8632. (UNDP Human Development Report 1991).

[3] "Asiaweek", 12 June 1992, puts the current figure at $510.

Industry

6. Industrial production registered real growth of 19.6% in the three-year period from 1987 to 1990 (despite the unrest) and contributed 17% to GDP in 1990. Sectoral distribution was as follows:

Table 1: Industrial production by sector 1990[4]	%
Textiles, apparel and leather	32.2
Food, beverages and tobacco	25.3
Chemical, petroleum, rubber, plastic	24.5
Non-metallic mineral products	8.7
Fabricated metal, machinery and transport equipment	4.8
Paper and paper products	2.2
Basic metal products	1.2
Wood and wood products	0.8
N.E.S.	0.3

The high figure in the figure in the textiles etc category is largely accounted for by garment manufacture, which itself largely takes place in export processing zones or in bonded factories elsewhere. This is illustrated in the following table of principal industrial exports, which account for 52% of the country's total exports.

Table 2: Industrial exports by sector 1990	%
Garments	58.5
Other textiles and wearing apparel	2.1
Leather, rubber, paper, wood and ceramics	9.3
Diamonds	8.9
Machinery, mech. & electrical appliances	5.7
Food, beverages and tobacco	3.1
Chemical products	2.5
Jewellery	0.3
Petroleum Products	9.6

7. It should be noted that garment exports entail a high import cost for raw materials. In 1990 the value of garment exports was 25 billion rupees, and of textile fabric imports 14 billion. The net foreign exchange earned by the leather, rubber, paper, wood and ceramics sector, which makes use of local raw materials, is much higher than that of the garment sector. The very low contribution of jewellery to exports indicates clearly that insufficient value is added to Sri Lanka's plentiful endowment of precious and semi-precious stones.[5] Similarly, so the mission understands, 95% of Sri Lanka's rubber exports are in the form of raw latex, which will be an input to manufacture in other countries.

8. Sri Lankan industry is mostly on a small or medium scale. There are very few truly large scale enterprises, which are in petroleum refining, cement and textiles[6].

---

[4] This table and the following table derived from the Central Bank report for 1990.

[5] Sri Lanka has a good endowment of mineral resources. Unset gems account for 5% of export earnings. The National Report to UNCED (op.cit., p 48) remarks that " a noteworthy feature of the [mineral] sector is that most of the products are continuing to be exported with little or no value addition. Moreover, the traditional methods of mining continue to be practised without innovation or technological improvement... Upgrading... is expected to play a significant role in economic growth and employment generation."

[6] ibid

Industrial policy

9. Since the change of government in 1977 the private sector has been encouraged by government policy, and public enterprises have gradually been privatized, or "peopleized" as the process is called in Sri Lanka. Some enterprises, and indeed other institutions such as training or research centres, go through an intermediate stage of "commercialization", which in effect means that they have to earn their own living, or at least a target proportion of it, from sales of goods or services.

10. In 1989, after the presidential election and the end of unrest in the south, a new industrialization strategy was launched. The objectives of the strategy[7] are:

a. to transform the primarily domestic market oriented industry to an export oriented one;

b. to provide greater employment and income opportunity;

c. to diversify the economy and strengthen the balance of payments;

d. to ensure a more equitable distribution of income and wealth.

11. Government action comprises:

a. adoption of prudent macro-economic policies to stabilize the economy, contain inflation and promote productive economic activity;

b. granting special incentives for investment and exports;

c. mobilizing greater savings, domestic and foreign;

d. encouraging foreign investment;

e. establishing neutrality between public and private sector ownership; and reforming public enterprises, by commercialization, peopleization and contracting out management;

f. promoting export-oriented industries by special incentives and by making existing industries internationally competitive;

g. establishing linkages between big investors/industries and small producers;

h. promoting more research and training of human resources and raising productivity of labour; and

i. removing administrative barriers by eliminating the need for clearances such as import licences, permits etc. Approval policies and incentives will work on an automatic basis as far as possible.

12. The strategy is being implemented and is generally welcomed by private sector industry, although certain sectors are suffering from the reduction of import tariffs and are complaining accordingly. There has apparently been some resistance amongst public officials and employees of formerly publicly owned industrial enterprises. The measures, together with other adjustment measures, have been supported by the IMF and the World Bank.

---

[7] From "A Strategy for Industrialisation in Sri Lanka", pp 2 & 3. Undated photocopy of a printed paper given to the mission at the Ministry of Policy Planning and Implementation.

13. As a general rule 10% of the shares in privatized companies are allocated free of charge to employees. The mission has noted one or two indications that the shares issued to the general public are bought by institutions, other companies, or wealthy individuals, perhaps as nominees for foreign investors. Shares are traded through the Colombo stock exchange.

14. It has to be noted that the new industrialization strategy does not refer to the participation of women although the thrust is on export-oriented and subcontracting industries in which the majority of workers are women.

Labour force

15. The number of persons in the labour force in the *first* quarter of 1990 was just under 7 million, representing 53.3% of the household population aged 10 or over. (This is the labour force participation rate.) Just over 1 million, or 14.4%, were unemployed.

16. Since early 1990 it has not been possible to carry out the quarterly Labour Force Survey in the Northern and Eastern provinces. (See para 2 above.) The most recent labour force figures, for the *fourth* quarter of 1990, thus cover seven of the nine provinces. The labour force in these provinces numbered just under 6 million, with a participation rate of 50.7% and unemployment at 16.3%. The figures in the following paragraphs are also taken from this seven-province survey.

17. Of the number in employment, just under 5 million, 700,000 (14%) were in manufacturing industry. A further 4% were in construction, and 3.7% in transport, storage and communication.

18. The number of persons in manufacturing by major occupational group was as follows:

Table 3: Employment in manufacturing		%
Senior officials and managers	4,295	0.61
Professionals	6,727	0.96
Technicians and associate professionals	23,008	3.29
Clerks	38,254	5.48
Sales and service workers	9,354	1.34
Skilled agric. and fishery workers	5,689	0.81
Craft and related workers	359,252	51.43
Plant and machine operators and assemblers	92,446	13.23
Elementary occupations	154,842	22.17
Unidentified	4,714	0.67
TOTAL	**698,580**	

19. Employment status in the non-agricultural sectors was as follows:

Table 4	
Employee	74.1%
Employer	2.0%
Own-account worker	20.8%
Unpaid family worker	3.1%

The last two categories, representing a quarter of non-agricultural employment, represents at least part of the "informal sector", and will present all the usual problems concerning acquisition of technology, training, working conditions, inspection, product quality and so on. The figures are not broken down further into non-agricultural sectors (which of course include many non-industrial occupations).

20. The educational attainment of employed persons is reported as follows:

Table 5	
No schooling	7.39%
Grades 0 - 4	24.21%
Grades 5 - 9	45.32%
GCE O-level	15.92%
GCE A-level and above	7.17%

21. It is interesting to compare the educational attainment of unemployed persons:

Table 6	
No schooling	1.70%
Grades 0 - 4	6.94%
Grades 5 - 9	54.48%
GCE O-level	23.00%
GCE A-level and above	13.89%

The relative concentration of unemployment amongst the better educated indicates that education by no means enhances employment opportunities, but it is also probable that the better educated have more exact and demanding expectations and are more likely to reject employment which does not meet these expectations.

22. Unemployment is concentrated amongst the young: 81% of them are in the age group 15 to 29. Out of these 15% are educated to GCE A-level or above (123,232 persons) and thus represent a very substantial resource, which may also be interpreted as a challenge, opportunity or social danger. It may be added that 92,702, or 75%, are women. It is in this context that the government is launching a scheme for three-year on-the-job training placements of 6,000 university graduates.

23. There is also said to be substantial underemployment in various sectors, not least by means of informal work-sharing in rural areas. It is beyond the scope of this report to go into this question in detail. The whole question of the definition of unemployment and underemployment and the reasons for these phenomena is subject to continuous argument[8].

24. Skill mismatch. The mission has heard several complaints of skill shortages, but at the same time it is reported that the craftsmen who emerge from the Apprentice Training Institute after three very thorough years' training are not in great demand. It is not that they are trained for the wrong industry or craft, but that employers prefer to take on low-wage, low-productivity workers with narrow and simple skills. The practice is reflected in the table of manufacturing employment by occupational group in Table 3, and the table of employment in GCEC enterprises in Table 7 below. This is one example of what seems to be an uninformed, short-term attitude to human resources and their development which is only gradually being superseded, although there may be perceived social benefits in the implied employment generation. Modernization, restructuring, or whatever it may be called, can lead to severe job losses; Sri Lanka Railways, for example, is in the process of reducing its work force from 27,000 to 15,000, and other unquantified shake-outs have been heard about, e.g. at the Government Factory, a jobbing engineering concern founded in 1849 by the Public Works Department. (Skill mismatch should not be confused with the alleged mismatch between school and university education and the requirements of the labour market.)

25. Quality of management. The mission heard a number of adverse comments on the quality and qualifications of middle management, but senior management was said not to suffer such deficiencies. It must however be a severe challenge to senior management to handle the

---

[8] A particularly interesting discussion of this point is to be found in Education - Employment Linkages: The Macro Profile, by P.J. Alailima, 1991, Ministry of Policy Planning and Implementation, Sri Lanka. (Informally reproduced.)

consequences of the major structural changes taking place, not least the consequences for HRD.

26. Migration. Sri Lanka is said to suffer from a continuous "brain drain" but numbers and professions do not seem to be available. Australia has recently been a prominent destination, but entry has been restricted. As regards unskilled or less skilled persons the government actively encourages employment in the Middle East. This employment is usually on a contract basis and does not entail permanent emigration. Many thousands of young women takes posts as domestic servants. Skilled workers and technicians are also in demand, and policy in regard to such people appears to be divided, or perhaps very subtle. On the one hand the loss of a technician, who will be hard to replace, can be severely damaging to an enterprise, especially a small one; but the government also, quite deliberately, trains unemployed people for potential overseas employment. It must be recalled that remittances are an important element in the balance of payments and the GNP.

27. Greater Colombo Economic Commission. This Commission (GCEC) promotes and approves foreign investment in Export Processing Zones and in enterprises which enjoy similar tax, duty and other conditions elsewhere. It has been assisted by UNIDO in a succession of projects since its inception in 1978. Not all GCEC enterprises are industrial, although a good number are in garment-making, which provides the bulk of the semi-skilled employment - cutting and sewing. Employment figures for 1992 furnished to the mission by GCEC show a high proportion of female employment, especially in the "semi-skilled" and "trainee" categories, as can be seen in the following table. (The question of women in industry is dealt with more fully below.) The GCEC informed the mission that foreign investors are increasingly looking for better educated and trained employees. It should be emphasized that the employees are employed by individual enterprises, not by the GCEC itself, and the GCEC does not concern itself with the quality of employment or with conditions of work.

Table 7: Employment in the GCEC Enterprises (1992)

Occupational level	Male	Female	Total	% F
Admin	617	216	833	25.9
Technical - executive	594	131	725	18.1
Technical - non-exec.	433	87	520	16.7
Supervisory - technical	718	511	1229	41.6
Supervisory - non-tech.	621	1,349	1,970	68.6
Clerical & allied	1,511	2,076	3,587	57.9
Skilled	4,659	6,675	11,334	58.9
Semi-skilled	3,369	33,209	36,578	90.8
Unskilled	3,366	9,096	12,462	72.9
Trainees	2,069	17,068	19,137	89.2
Others	1,583	337	1,920	17.6
TOTAL	19,540	70,755	90,295	78.4

Women in industry

28. Labour force statistics indicate that women have made a crucial contribution to the expansion of export-oriented industrialization while being displaced from some traditional industries, following the liberalization of the economy in 1977. Around 80% of the labour force in factories within and outside the Export Processing Zones and in piece rate work subcontracted by industrial firms to home based workers are women. The percentage of women in the labour force in manufacturing industries increased from 23% at the 1981 Census to 44.5% in the 1985/86 Labour Force Survey and according to the annual sample survey of manufacturing industries to 49% in 1990. These women have been concentrated in garment and textile industries, and to a lesser degree in food, tobacco and ceramic industries, and their participation has been minimal in wood, paper, iron and steel based and fabricated metal industries which are likely to expand in the foreseeable future.

29. The quality of the employment opportunities that have been available to women in industry has tended to reinforce gender inequalities in economic participation. Around 90% of women workers in the manufacturing sector, including the Export Processing Zones, are in low skilled occupations, while only 2% are in professional, technical and managerial jobs. Both macro data and micro studies underscore the fact that there has been casualization of employment and increasing concentration of women in marginal economic activities in the informal sector in the 1980s.

30. Women workers in factories and in piece rate work in subcontracting industries are engaged chiefly in fragmented, labour intensive, low technology, semi-skilled labour for relatively poor remuneration. Although they are largely secondary school leavers, they have few opportunities for upgrading skills and for upward occupational mobility. They are not protected by labour legislation or by trade unions with regard to working conditions including occupational health hazards and job security.

31. Women have, therefore, access to employment in industry, but their vulnerability has increased with rapid incorporation in the global economy. At the same time the overall unemployment rates of women have been at least double that of men over the last two decades -- 11.4% and 9.3% male unemployment and 21.2% and 23% female unemployment in 1970 and 1990 respectively.

32. The legal framework. Labour legislation in Sri Lanka follows international practice and positive action has been taken in recent years to increase the provision of maternity leave to three months. However, such legislation has been enforced only in the public sector and in some large scale private industrial establishments. The majority of women workers in industry are outside the ambit of these laws.

2. THE WORKING ENVIRONMENT OF INDUSTRIAL ENTERPRISES

Government

33. The government of Sri Lanka comprises an unusually high number of ministries, some of which are divided into "state ministries" or subsidiary ministries. As an example the Ministry of Industries, Science and Technology, in addition to its own departments, includes the Ministry of Mineral and Mineral Based Industries, the Ministry of Science and Technology, and the State Ministry of Industries. Similarly the Ministry of Tourism and Rural Industrial Development has one State Ministry for Tourism and another for Rural Industrial Development, and as it happens the Industrial Development Board comes under this ministry.

34. A number of ministers hold more than one portfolio. For example the Prime Minister is also Minister of Finance and Minister of Labour and Vocational Training. The Minister of State for Policy Planning and Implementation is also Minister of Environment, within the Ministry of Environment and Parliamentary Affairs. (The Ministry of Policy Planning and Implementation is headed by the President of Sri Lanka himself.) Similarly the Minister of Justice is also Minister of Higher Education, within the Ministry of Education and Higher Education.

35. Under the Industrial Promotion Act of 1990, an Industrialization Commission, an Advisory Council of Industry and Regional Industry Service Committees have been created, although only the Commission has so far started work. These are the responsibility of the Ministry of Industries.

36. The Ministry of Youth Affairs and Sports has responsibility for various aspects of industrial training. The Human Resources Development Council, the Coordinating Secretariat for Vocational and Technical Training, the Tertiary and Vocational Education Commission (TVEC) and the National Apprentice and Industrial Training Authority (NAITA) all come under this ministry. It hardly needs to be added that there is a Minister of State for Sports; there is also a Minister of Human Resource Mobilization - but apparently no Minister of Youth Affairs.

37. The Ministry of Labour and Vocational Training includes, or largely comprises, the Department of Labour and Vocational Training, and this in turn operates inter alia the Central Vocational Skills Development and National Trade Testing Institute, and the Foreman Training Institute. The Labour Force Survey is however the responsibility of the Census and Statistics Department. The Ministry of Policy Planning and Implementation (to which the World Bank/ILO-supported Institute for Construction Training and Development (ICTAD) belongs) has a Human Resources Division in its National Planning Department, and this Division has created an Employment Policy Unit.

38. The government is also slowly implementing a policy of decentralization as part of the search for a political solution to the virtual civil war in the north and east. This seems to entail creation of provincial governments each with its equivalent to the central ministries - which are not likely to relinquish authority or to diminish in size with any speed or willingness. Sri Lanka comprises nine provinces. (The process is delayed by the demand of the secessionary Tamil parties for a unified government for the Northern and Eastern provinces, thus going some way towards the establishment of a separate Tamil state.)

39. The mission has not mastered the intricacies of this profusion of departments and organizations, but it is important to realize the existence of the extraordinary labyrinth in which responsibility is diffused. More details of the system as it concerns human resource development in Chapter 3. As will be seen the effect is an admitted inability to formulate coherent policies for industrial manpower, or to implement the policies which are formulated in the various centers of policy formation. There is also of course an equivalent diffusion of financial and human resources in the ministries and subsidiary organizations.

40. Once an enterprise has been privatized it has little or no obligatory contact with the government apparatus (except, presumably, in regard to taxes and duties, and to labour and

environmental regulations in so far as these are enforced), and can carry on without interference or, for instance, the necessity for permits. It can also expect little help from the government, and in the area of the mission's enquiries the most serious deficiency is probably the absence of adequate statistical information on supply and demand in the labour market.

41. One consequence of privatization is that contact between enterprises and various institutes set up under ministerial control, with or without UNIDO support, becomes entirely voluntary. This will apply to the Textile Training and Service Institute, the Ceramic Research and Development Center, the Foundry Development and Services Institute, and other institutions of a similar nature[9]. Such organizations will be obliged to ensure that the services they offer respond to real demand from enterprises to a much greater degree than before privatization. Even without full privatization the process of "commercialization" of state-owned units imposes financial discipline which can be observed only by due attention to market needs. This change has clear implications for the organizational location of the kind of institution which UNIDO has successfully supported, and may continue to promote.

Industry organizations

42. The private sector is little, if at all, better than the government at organizing itself coherently. There are at least two Chambers of Commerce, one founded in 1821 (the Ceylon Chamber of Commerce) and the other since independence (the National Chamber of Commerce of Sri Lanka). In addition there is the Ceylon National Chamber of Industries. All these Chambers, and there may well be others, as well as the Employers' Federation of Ceylon and the sectoral industry associations, are reputed to have seen their functions hitherto as limited to expressing views and exercising pressure on immediate issues, as well as providing routine commercial services; the government is keen that they should take on a broader and forward-looking representative role, and that they should try to present more or less unified positions in negotiation with the government. It is to this end that the Advisory Council on Industry, referred to above, has been set up. This Council will consist entirely of representatives of industry. Inter alia it is hoped that Chambers and other industrial associations will contribute to human resource development policy, establish a productive relationship with the education service, and take part on a cooperative basis in HRD activities including training. Industry will naturally be reluctant to assume the associated costs; the question of financing of training is considered in detail in Chapter 3.

Workers' organizations

43. The mission has heard surprisingly, and regrettably, little about trade unions. It appears that they have some influence in the plantation and estate sector, but not in industry. Although U.N. system support for workers' organizations is primarily a matter for the ILO, they can contribute to total industrial success, not just to the short-term interests of their members. UNIDO might do well at least to keep itself informed concerning their development.

Advisory services available to industry

44. The most notable organizations offering technical services are those created or strengthened with UNIDO support and mentioned in the course of this report. The construction industry is backed by ICTAD, supported by the World Bank and ILO. The two management training institutions visited by the mission also offer consultancy services, but they are complemented by an array of consultancies which include such well known names as Coopers and Lybrand, Ernst and Young and PE Management Consultants. There are also a good number of indigenous firms, and the Development Finance Corporation of Ceylon also offers consultancy services.

---

[9] ICTAD, however, referred to above, is to be transformed by statute into a regulatory authority for the construction industry.

45. There is however a shortage not only of qualified and experienced managers in certain areas (not least human resources development in industrial enterprises), but also of qualified and experienced consultants to fill the gap on a temporary basis and assist the development of autonomous functions within enterprises. The Institute of Personnel Management offers limited consultancy services, but has no consultant staff of its own.

Banks

46. There are two state-owned banks and a number of others in the private sector; foreign banks are now permitted to operate, to open branches, and to offer commercial services. The missions has not gone into this matter in detail. The main point is that the financial environment appears to be open and competitive. Foreign exchange can be purchased freely although there are plenty of forms to be filled in.

47. Foreign investors are encouraged by all sorts of incentives and privileges, and local enterprises (unless taking part in joint ventures) may well feel that the resulting competition is unfair. It will necessarily stimulate them, if they are to survive, into modernization of technology and working practices - with all the HRD that the changes will entail.

Suppliers and customers

48. Industrial enterprises negotiate freely with domestic and foreign suppliers and customers. They do not have to work through state supply or marketing boards.

3. INDUSTRIAL MANPOWER DEVELOPMENT

Introduction - The overall system

49. There are many studies relating to manpower development, most of which start by noting the pre-independence neglect of skills development, technical education and management training. However, it should be noted that Sri Lanka has been independent for over forty years and that the bulk of its labour force has grown up within an educational system which has been substantially modified and even enhanced from its pre-independence format. The overall structure of the educational system which serves the labour market is summarized in Figure 1. This illustrates one of the most important features of the Sri Lankan system, namely the wide range of pre-employment training opportunities which exist at all levels. Even school dropouts are not debarred from entering the basic skills training programmes offered by the centres and mobile facilities of the Ministry of Labour or other non-formal training opportunities. At higher levels there are many openings for craft and technical level training and for those who later in life find a need for degree level training or other forms of specialized diplomas or post-graduate studies there are the facilities of the Open University. While Figure 1 mainly reflects the formal education system there is also an extensive private sector training system which complements these provisions. Most privately owned training facilities, estimated to account for 25% of the country's provision of training[10], offer short-term or part-time courses. Their value appears to vary widely but they make an important contribution to the overall system.

50. While such diversity may appear to offer an effective network of manpower development opportunities, the issue of efficiency needs to be carefully considered. There have been several recent studies which have reviewed the educational and training systems of Sri Lanka, the most comprehensive being the 1989 review supported by the Asian Development Bank[11]. In 1991 the Government, supported by the Federal Republic of Germany, held a national conference on HRD and the supporting documentation also provides considerable insights into the workings of the vocational aspects of the system[12]. These and other studies all point to the high literacy rate in Sri Lanka (87%), the highest recorded in South Asia, and a correspondingly high rate of numeracy. Together, these factors provide a substantive benchmark which combined with the wide range of training opportunities should ensure a successful manpower development policy. However, this is not the case and there are widespread complaints of labour shortages, particularly for appropriately skilled craftsmen and middle level management, while the oversupply of graduate level trainees, mainly in academic subjects, causes equal concern.

51. The reasons for inefficiency within the system can be traced to a variety of factors.

a. Within the first twelve years of schooling there is a shortage of qualified teachers, particularly in rural schools. This problem is compounded by outmoded curriculum models and a high social reverence for such formal qualifications as the General Certificate of Education (GCE), which although predominantly a measure of academic progress has become a pre-requisite for much subsequent education and training as well as a basic requirement for many forms of employment (ADB).

b. At the level of skills training the abundance of training venues are mostly concentrated in urban areas and the absence of effective coordination has led to wide differences in the quality of the programmes on offer. Approximately 3,000 training institutions have been recorded offering courses which range from

---

10 Ministry of Plan Implementation, 1987.

11 "Education and Training in Sri Lanka; an ADB sponsored project"; Educational Consultants India Ltd, 1989.

12 "Human Resources Development through Dual Training"; National Conference, Colombo, 11-16 February, 1991.

electronics and gem cutting to brick laying and artificial flower design[13]. But the absence of a uniform accreditation system makes it difficult for employers to gauge the value of the certificates on offer. The proliferation of training venues also contributes to widespread under-funding of facilities, poorly paid and under-qualified/inexperienced teaching staff and curriculum which rarely matches employment-related needs (GTZ).

c. While the multiple provisions for technician training appear reasonably adequate, although with some distortions, there is a critical shortfall of teachers with relevant technical experience, a problem exacerbated in the past decade by the emigration of many qualified staff. Approximately one third of approved positions within technical colleges remained vacant in 1989[14]. This offsets the great strides which have been made to re-equip the technical colleges through various donor agency funds. Another problem is the reluctance of many students to accept course-related employment as part of a technical education programme. Many prefer to remain unemployed rather than accept a job which they perceive to be too menial for their perceived status.

d. Tertiary level education and training is beset by a chronic mismatch between supply and demand. In 1992 as many as 6,000 graduates (20.8%) out of a total of 28,781 students who enrolled in 1989, are to be placed on a three year work experience programme within local industry and commerce in an attempt to relieve the problem of graduate unemployment. Meanwhile there is a dearth of middle level managers with accumulated work experience through systematic programmes of on- and off-the-job training. While part of this problem can be traced back to prevailing social attitudes, it can also be blamed on the absence of a general HRD policy at both national and enterprise levels and the lack of accepted forms of career guidance both before and after employment.

52. Most writers (ADB, Kelly and Culler, GTZ) all point to the further complications introduced by the two separate strands of Sri Lankan government development policy which, over the years, has attempted to combine economic growth with social equity. This policy goes some way to account for the very high number of government departments which have inputs to the HRD system. It is estimated that there are at least 21 government ministries operating training delivery systems, many of which are supported by different bilateral or international donor agencies, and which consequently work towards differing policies, plans and methodologies. During the current period of restructuring, which includes the privatization of large parts of previously state-owned enterprises, the lack of a cohesive HRD policy framework is compounded by the serious shortfall in relevant manpower data. To an extent the recent absence of comprehensive manpower data can be explained by the security problems faced by the government in the north and east. But this argument cannot explain away all the missing data. Other factors have been identified ranging from inadequate data gathering processes to a lack of experienced data analysts and a shortage of resources to carry out surveys and publish the results. But for the most part it would seem that in the absence of a unified approach to HRD issues, there is little guidance to either data gatherers or analysts as to what information should be collected or in what form or for what purpose it should be collated. This absence of manpower data tends to perpetuate a supply-led model of education and training which fails to be responsive to employment-led demand for skills and services (ADB) and excludes a direct role for the industrial or commercial sectors in the national HRD system (GTZ).

---

13 "Skills Development Policy in Sri Lanka"; T.F.Kelly and C.J.Culler, USAID, December, 1990.

14 ADB Report, op.cit.

Training for professional and management development

53. There are four main avenues for the development of professional or managerial skills.

a. Overseas training, once a preferred option for many professional aspirants, is now actively discouraged in many quarters because of the tendency for trainees to seek permanent overseas employment. Both government and private sector enterprises would prefer to support in-country programmes unless there is a proven need for highly specialized skills which are not available within Sri Lanka.

b. Universities, of which there are eight[15] (plus the Open University), offer a range of diplomas and degree level programmes in both technical subjects (science and engineering) as well as professional subjects (management and accountancy). Enrolments in 1989 are shown in the following table:

Table 8: Percentage University Enrolments by Faculty - 1989

Arts (incl. social sciences)	35.9%
Commerce and Management	18.8%
Science	18.0%
Medical	12.0%
Engineering	11.3%
Agriculture	4.0%
	100.0%

Source: University Grants Commission

However, there are consistent complaints from Sri Lankan employers that the degree programmes are too academic, unrelated to modern employment needs and are taught by an academic staff with little or outdated work experience. While this complaint is encountered in many countries, it is noted that in Sri Lanka there has yet to be developed a regular interface between tertiary level education and the world of work. These complaints appear to be supported by the figures for graduate unemployment which has exceeded 50% for the age group 20-25 years of age in recent years, although the numbers declines rapidly after the age of 25[16].

c. Professional centres such as the National Institute for Business Management (NIBM) or the management training institutes under the Ministry of Public Administration, Ministry of Education and Higher Education, and Ministry of Industry. These centres mostly cater for part-time students and the resultant certification is not always recognized by other institutions. The awards of the NIBM, for example, do not find equivalence within the university system, although discussions are currently taking place with the University Grants Commission for the consideration of some NIBM programmes to be up-graded to degree status. One of the problems encountered with this form of management training is that in an attempt to attract adequate numbers of trainees and sponsors, the programmes have become driven by syllabi and are not always based on curriculum design derived from surveys of established needs (Mission findings). Several of the professional institutes run by the Ministry of Industries were originally supported by UNIDO projects such as the Sri Lanka Standards Institution. As discussed later, these technically orientated programmes do not appear to fit into a wider framework of HRD policy and are rarely based on

---

[15] This figure includes universities in the Northern and Eastern provinces.

[16] P.J.Alailima, op cit.

established surveys of quantifiable professional or employment needs. Teaching staff in this category of professional centre are mostly drawn from industry or commerce and are reputed to bring recent practical experience to their courses.

d. On-the-job training. The Mission was repeatedly informed that many enterprises preferred to either poach their managers or senior technical staff from other companies or to develop such managerial skills on-the-job. There has been an apparent reluctance to employ new graduates as trainee managers because of an inherent suspicion of university students and their assumed radical beliefs. In addition to practical work experience, appointed staff are expected to attend the part-time (mostly weekend) programmes of the professional institutions, category C, frequently paying for all or part of the training costs as an investment for future personal development.

54. There are a wide range of professional associations in Sri Lanka which in principle could render valuable support to the process of management development. While some have always maintained the highest professional standards a shortage of resources and a past failure to find a role in the formulation of an overall HRD policy framework reduced the potential of many such associations. There are signs that under the rapidly expanding privatization programme there is a fresh interest in such professional associations. The Chartered Institute of Management Accountants, for example, has recently commenced a drive for new membership and is actively campaigning for wider recognition of its basic training requirements. Other associations, such as the Institute of Personnel Management, run occasional seminars and undertake some consulting services for members but have yet to gain full recognition as a certifying or regulatory body although membership is a pre-requisite for entry to appropriate NIBM courses.

Training for productivity and new technology

55. 24 technical colleges, of which 13 offer diploma or higher courses, cater for the training of middle level management and technicians. The courses range from Higher National Diploma (HND) which carries degree equivalence, National Diploma (ND), National Certificate (NC) to National Craft Certificate (NCC). Most diploma and certificate courses are run over two years and include engineering, business studies, technology and specific technical fields such as jewellery design and manufacture. Full details of the facilities and programmes appear in the ADB report, Volume I.

Table 9: Percentage of Admissions to Selected Technical College Courses - 1988

Course	Applied	Accepted %	Acceptance
Business Studies	2,199	599	27%
Civil Eng. Technology	1,809	678	38%
Accountancy	1,802	595	33%
Electrical Engineering	1,108	367	33%
Mechanical Engineering	911	298	33%

Source: ADB

Enrolment in 1988 totalled over 14,000, the heavy enrolment being partly due to the previous closure of the universities by the government for a period of two years, and following recent technical assistance programmes which have helped to extend and modernize facilities, enrolment could be expanded still further. However, staffing problems are acute and little has been to done to improve the salary or career structure of technical teachers. Given the low levels of government remuneration, proposals have been made for training-cum-production initiatives and consulting assignments but regulations have yet to be changed to enable funds from such sources to be used to supplement basic salaries (GTZ). 60% of technical college staff are at the instructor/demonstrator level and only approximately 10% have undergone teacher training. Many

are reported to have been recruited from the best students of the previous year (Kelly and Culler). The ADB funded National Technical Teacher Training Centre (NTTTC), intended to offset these staffing shortages. has lost much of its annual output to the overseas labour market while the absence of long-term career planning for technical teachers offers no viable alternative.

56. In addition to the Technical Colleges of the Ministry of Education and Higher Education some technician training are conducted by the Technician Training Institute (TTI) at Katunayake. The TTI is operated by NAITA under the auspices of the Ministry of Youth Affairs and Sports and also conducts some supervisory training programmes. The TTI four-year course includes a total of three years' work experience with employers. Technical College technician courses also have in company training of shorter duration. The Foreman Training Institute (FTI) under the auspices of the Ministry of Labour also undertakes supervisory training for those already in employment.

57. The rapid expansion of technical programmes in the 1970s-1980s has resulted in a proliferation of standards due in part to the absence of a well defined policy and format for curriculum preparation. Most curricula comprise at best a teacher's guide and a list of topics to be taught (ADB, Kelly and Culler), being more akin to narrow vocational-type skills training than advanced technical preparation. Relationships between subject matter is rarely explained resulting in an inadequately prepared workforce, particularly at the level of technicians and middle management where problem solving is a major item of concern (GTZ, Kelly and Culler). Very little competency-based evaluation takes place and the overall system is not set up to cope with technological change. Even the periods of work experience leave much to be desired. Much of the equipment encountered during the factory placements is very old and the industrial processes are not always up to the levels taught during the institutional training period. To offset weaknesses in the formal provision of technician and middle level management programmes, many government ministries have established specialized training centres where curriculum and standards can be controlled. Although such initiatives appear to meet all or part of the qualitative need for a well-trained workforce, the mission found little evidence to show that such facilities were based on long-term estimates of demand and consequently there must remain a doubt over the sustainability of their activities. While little formal evidence exists, it is surmised that considerable duplication of core curriculum must occur in such centres.

58. According to a recent survey, productivity is seen as a factor of material availability, equipment and supply costs by 90% of the respondents and only 22% of employers indicated that the availability of relevant management and supervisory skills was a problem[17]. To a large extent the mission believes that this attitude stems from the general approach to manufacturing in Sri Lanka, where government and individual enterprises place surprisingly little emphasis on value-added production. Greater significance is given to low-cost production which is heavily reliant on an abundant supply of semi-skilled labour in many industrial sectors and the low cost of Sri Lankan labour is even promoted in official campaigns to attract foreign investors. In an effort to keep labour costs as low as possible, many employers break down technological operations into a series of tasks that require very basic levels of skill, many of which are then performed by women in an effort to reduce costs still further (Alailima). However, the mission was informed that when allowances are made for productivity, Sri Lankan labour costs are not as low as supposed, easily surpassing those in Bangladesh and Vietnam (Maxwell). In the Export Processing Zones the inexorable trend into automation is making steady demands for increased levels of technology, both for initial installation and for maintenance. As companies compete for scarce technological skills the cost of technical staff will increase still further. While one long-term effect of such higher wage costs may be to slow down the exodus of highly skilled manpower to the overseas labour market, the short-term effect is to further accentuate the shortfall in available technicians. National and enterprise level HRD policies are need to bring greater stability to this sector of the labour market.

---

[17] Kelly and Culler, op.cit.

59. Due in part to the diversity of technical and vocational inputs and the absence of a coordinated HRD policy, little has been done to promote the links between skill enhancement and productivity. Employers groups contacted by the mission stated that they would welcome case studies which clearly demonstrated such links but the only example was encountered. This concerned the Textile Training and Services Centre (UNDP/UNIDO SRL/87/012) where the Management Services Division has undertaken such case studies. These examples have been used to promote productivity enhancement through the provision of both on- and off-the-job training programmes. The Mission did not find any mention of such awareness programmes within the Chambers of Commerce or Industry.

Skills training - pre-employment and in-service

60. Given the previous emphasis on social equity, pre-employment training in Sri Lanka has traditionally emphasized the supply of skills with little concern for demand. Skills training not only took out-of-school youth away from the street corners for the duration of the programme but also satisfied the social conscience which believed that vocational preparation was a direct way to reduce unemployment. Given the existing excess of labour supply and low labour costs, attendance to vocational training programmes can only delay the arrival of most aspirants at the unemployment queue. The objective of this approach to the training of skilled workers was partly to reduce the number of unfilled job vacancies (which do not exist in quantity at this level of training), to increase productivity and to prepare the way for future technology transfer (GTZ). Based on expectations of sustained economic growth in areas concerned with new technology and more capital-intensive production techniques, Sri Lanka embarked, like many other countries, on an ambitious programme of infra-structure development. Financed mainly by a variety of grants and loans from donor agencies a wide range of training facilities were constructed in the past two decades. Unfortunately the expected economic growth failed to materialize, but even if it had recent studies (ADB and GTZ) suggest that the supply-driven manpower development programmes could not have been responsive enough to match specific demands for vocational skills. Furthermore, the government's own reports have suggested that unrest in the south during the late 1980s was in part due to the disenchantment of many ex-trainees who could not find employment appropriate to the skills for which they had been trained (Min. Labour paper to GTZ conference).

61. As stated previously, approximately 21 ministries and government agencies are currently engaged in the provision of basic vocational skills through an estimated 3,343 training institutions (ADB). Estimates of training capacity vary widely from 135,000 to 200,000 trainees per year in programmes lasting from 6-48 months (Kelly and Culler).

Table 10: Occupational Groupings covered by Training Institutions

Professional, technical and related centres	335
Clerical and related	231
Sales work	15
Service work	221
Agricultural related activities	81
Production	2,419
Other	51
TOTAL	3,343

Source: ADB 1989

However, the most recent incomplete returns from the registration programme of the TVEC indicate that these figures have probably increased dramatically. The 354 vocational institutions

registered by April 1991 recorded a student intake of 46,006[18]. Of this total the following breakdown by category and student intake was shown:

Table 11: Categories of Applicant Institutes by Proprietorship and Student Intake - 1991

	Private	NGO	Govt.	State Corps	Statutory Boards
Nos. Institutions	125	121	64	2	42
Student Intake	19,181	16,839	3,271	651	6,054

Source: TVEC, 1991

62. The major government ministries engaged in skills development are:

a. Ministry of Education and Higher Education, which offers craft level training at some technical colleges;

b. Ministry of Youth Affairs and Sports, which offers support to manpower training through two primary agencies: **National Youth Services Council** (NYSC) which operates basic craft programmes and the more important **National Apprentice and Industrial Training Authority** (NAITA) which is the regulatory body responsible for

i. Designing, implementing and supervising training schemes to cover every category of apprentice

ii. Establishing apprenticeship standards, duration of training etc.;

iii. Preparing/supervising trade tests and issuing certification.

Under the Apprenticeship Section of the TVEC Act (1990) students are paid a stipend by NAITA while the ratio of on and off-the-job training is determined for each occupation. The scheme has been criticized in some quarters as being a means to introduce cheap labour into some companies (Kelly and Culler). About 20% of all apprentices are women. In 1989, 2,325 enterprises were engaged in training approximately 8,000 apprentices (ADB). The NAITA has two major training venues, the **Technician Training Institute** at Katunayake, which was supported by UNDP/ILO, and the **Apprenticeship Training Institute** at Moratuwa. The latter supported by GTZ offers a 3 year programme of 12 months basic training, 4 months advanced training and 20 months in-plant work experience. Other specialized centres include the **Automobile Engineering Training Centre** established with JICA assistance.

c. Ministry of Labour and Vocational Training, which operates a large number of programmes at both permanent training centres and mobile facilities. It has received substantial UNDP/ILO support. The skills on offer are fairly basic, including skills for the informal sector such as handicrafts, and the programme has been under criticism for irrelevant curriculum and lack of adequate financial support. Approximately 10,000 trainees were enroled for 6-12 month courses in 1989.

d. Ministry of Local Government, Housing and Construction undertook an intensive programme of training designed to meet the needs of its own industrial sector. Originally set up with World Bank funds, the **Institute for Construction**

[18] Statistical Bulletin No. 1; TVEC, August 1991.

Training and Development (ICTAD) now operates under the auspices of the Ministry of Policy Planning and Implementation. ICTAD also trains some workers specifically for the overseas labour market. More recently the mission was shown evidence of manpower assessments for the sector, although ICTAD admitted that it had no internal capability to undertake such assessments and relied on private consultants to undertake manpower surveys and interpret data.

e. Other ministries involved in skills development include:
Industries, Transport, Tourism and Rural Industrial Development, Agriculture, Fisheries, Textile Industries, Posts and Telecommunications and Women's Affairs.

63. In an attempt to remedy the over-supply of training venues and make greater use of the available facilities, recent government policy has been to emphasize the importance of preparing youth for employment in the informal sector. However, several factors should be considered. First and foremost the informal sector is not a "bottomless pit" of employment but has finite parameters which can only expand when the formal economic climate improves. Secondly, preparation for the informal sector requires a different approach to skills development from that of the formal sector, usually requiring some access to credit or other modest financial support at the end of the training programmes. It will not be possible to merely switch the objectives of existing training facilities without re-thinking the whole approach to equipment and curriculum.

Private sector training

64. In addition to the provision of public sector manpower development the government recognizes three main categories of training within the private sector. These are:

i. Training within industry;
ii. Fee-levying training institutions;
iii. Voluntary organizations.

Details of industry-based training are difficult to find and only the formal inputs provided by the ATI are well documented. Available information seems to indicate that outside the formal apprenticeship programmes administered by NAITA, only limited pre-service and skill up-grading opportunities are provided for employees of the larger local or multi-national companies. The mission could find no data from the Chambers but notes that the level of industrial training within enterprises is perceived to be minimal (Kelly and Culler). Nevertheless, on-the-job training represents a significant opportunity to up-grade skills, particularly when new technology is introduced. The mission was informed that one model of an on-the-job training programme was the GTZ-supported Mercantile Seaman Training Institute which was being used to demonstrate the effectiveness of this approach to training to audiences in industries outside the maritime sector.

65. In recent years there has been a dramatic increase in the number and variety of private sector training facilities which charge fees for attendance. The mission could find no evidence that such training provisions were in response to employment demand; to judge by the Sri Lankan enthusiasm for qualifications and certification they were more likely designed to meet the hopes and aspirations of the trainees. Many private centres focus on the more advanced aspects of technology such as computers, electronics and the repair and maintenance of hi-tech equipment. Private colleges also exist offering programmes on such subjects as accounting, computer programming and systems analysis. Fees for these courses are high, thereby limiting student participation. At the lower end of the spectrum there has been an explosion of small facilities offering short programmes in typing, hairdressing and other vocational skills, many aimed at those applying for employment in the overseas labour market. The quality of private sector training varies widely from excellent facilities with the most up-to-date equipment to one-roomed centres offering little or no equipment and low standards of teaching (ADB). Until the passing of the Tertiary and Vocational Education Act (1990), such private training facilities were not controlled,

having no uniform curricula or certification standards. Following the 1990 Act the Tertiary and Vocational Education Commission (TVEC) has been tasked with registering all forms of public and private training facilities. TVEC will also be empowered to set up minimum standards of staffing, equipment and curriculum, and will monitor all training outputs.

66. NGOs are active in the training field, concentrating mostly on aspects of craft skills for those who fall outside the provisions of other forms of public and private facilities. These include poor women, the unemployed, school drop-outs, and more recently returning Middle East workers. Two important NGOs are the Sarvodaya Sharamadana Movement (SSM) which concentrates on handicraft training, and Agromart which trains in basic skills for small entrepreneurs, mostly in rural areas.

Employment-oriented education and training specifically for women

67. Increasing female labour force participation in industry has been facilitated partly by the equal access that women have had to general education for several decades and their greater representation in secondary education. Nevertheless, there are clearly gender imbalances in the development of skills that are relevant to industry. Gender-based diversification of practical subjects in schools and preference for biological sciences rather than physical sciences at senior secondary level contribute to the concentration of women in conventional 'feminine' vocational and professional training programmes and occupations in industry. In the vocational education sector, women are enrolled chiefly in commerce courses in Technical Colleges and over 80% of women in the major national non-formal training programmes are trained in sewing and related courses. Few of these vocational training programmes have links with employers or have facilities for vocational counselling. Hence, there is an oversupply of some categories of skills and lacunae in technical skills. Distortions are therefore created in the supply of female labour for industry with implications for increasing marginalization and frustration in the context of future industrial restructuring.

68. Socio-cultural issues. Underpinning the gender gap in training and employment are the gender role assumptions that undervalue the economic role and contribution of women and determine what are perceived to be 'appropriate' jobs for men and women. These assumptions of (a) women as dependent housewives, or at best, secondary earners, and therefore low cost and dispensable labour, and (b) technology as a male area of excellence and servicing roles as a natural preserve of women, are pervasive in Sri Lankan society as elsewhere. They influence the attitudes of policy makers, administrators, trainers, employers, and women themselves who are apt to internalize such negative social norms. Consequently, women have a narrow range of skills that reinforce the gender division in the labour market and limit their access to technology and remunerative employment. They are also increasingly vulnerable in an economy that prioritizes the reduction of labour costs rather than human development.

Coordination

69. The need for some form of effective coordination of such a diversified manpower development system has long been recognized by the government. Lack of coordination has not only caused confusion amongst the public and employers over the comparative value of different programmes and certification but it has also contributed to major inefficiencies in operation of the labour market, restricting mobility and contributing to major social unrest. The proliferation of HRD inputs has caused a wasteful duplication of national resources, with grant and even loan capital being used to set up rival facilities offering very similar programmes. The first attempt at serious coordination came in the wake of the Government's 1981 White Paper "Education Proposals for Reform", which established the Technical Education Authority (TEA) tasked with planning, organising and conducting vocational training programmes at all levels and conducting the relevant trade tests and certification. However, only two years later the then Ministry of Education and the Ministry of Youth Affairs set up a separate committee to report on tertiary-level vocational and technical education which overlapped with the responsibilities of the TEA.

70. More recent attempts to refine the coordination system also appear to have elements of duplication. A major report on HRD prepared by the Swedish International Development Agency (SIDA) in 1985[19] highlighted the urgent need for a national HRD policy to integrate the many disparate efforts in manpower development. Following its recommendations the government established the Human Resources Development Council as an advisory body to the Cabinet in 1988. The HRD Council is tasked with preparing coordinated policies and plans at the national level and with monitoring and evaluating all HRD initiatives undertaken by government agencies. Lacking funds and resources the Council's role was limited and in 1990 the creation of the statutory Tertiary and Vocational Education Commission (TVEC) largely overtook the HRD Council's mandate. The mission notes that the TVEC is also under-funded and under-staffed for its mandated tasks, particularly the initial task of registering all training facilities and monitoring their standards. However, also in 1990 the Ministry of Youth Affairs and Sports set up the Vocational Training Authority which claims to monitor parts of the same areas covered by the TVEC. Even more recently the Industrialization Commission announced plans to introduce the Committee on Human Resources Development and Labour (1991). This Committee is tasked with data gathering, although it would seem to concentrate on the supply side problems rather than identifying demand issues. It is also tasked with reviewing the adequacy of training facilities which appears to duplicate the functions of the TVEC.

71. It thus appears that the proliferation of manpower development initiatives is not limited to the provision of training but also extends to the coordination functions. The mission notes that in most of the coordination proposals, industry has not been fully consulted, mostly because it is difficult to find an appropriate focal point. Following years of regulatory controls, the Chambers have become mostly concerned with issues relating to finance and quotas and have not seen the necessity of taking a position on HRD. There are signs that this is changing and the mission found new interest in HRD matters but a lack of awareness of what role employers might play in the shaping of macro-level government HRD policy or indeed what part the representative bodies such as Chambers or professional institutions might play on behalf of their members' HRD strategies. There is a clear need for advisory inputs to both employers' federations and the Chambers in this respect. Similar advice should also be extended to workers' organizations. The 1990 constitution of the TVEC does make provision for tripartite representation on the Commission but to be fully effective, industry and workers' representatives need to be fully briefed as to their role and to have the backing of an informed and supportive membership.

72. The Mission also notes that many donor agencies (ADB, GTZ, Netherlands, SIDA, UNDP, World Bank) have recommended better coordination mechanisms. However, while support for the concept and principles of coordination clearly exist, little if any resources have been allocated to support the process of coordination. Coordination may begin with a piece of legislation but to be effective it needs investment in relevant infrastructure - a base of operations, limited equipment such as computers and software, and most important it needs staff development programmes in such areas as policy/planning, monitoring, evaluation and above all in advisory services. If HRD coordination is to become a service rather than a policing function, the ability to offer consulting services by which to advise and improve existing training provisions must be built into the system. In Sri Lanka it seems likely that a critical factor behind the continued creation of new coordination mechanisms is the inability of existing coordination systems to live up to expectations because of a shortfall in resources with to reach their objectives. New ideas are then put forward in an attempt to meet the shortfall.

Expressions of HRD demand

73. There is a general absence of data on all aspects of HRD supply and demand, particularly relating to demand at the sector or occupational level. There is also no accepted system for labour market information which would be considered as the norm for most countries striving for NIC

---

19 "Human Resources Development in Sri Lanka: an analysis of education and training", SIDA, Stockholm, 1985.

status[20]. What data does exist is usually out-dated and much use is made of information provided by the major donor agencies who have undertaken reviews of the HRD system (ADB 1989). The major regular source of data appears to be the Quarterly Reports of the Sri Lanka Labour Force Survey, of which the most recent available issue is dated fourth quarter 1990. However, with its concentration on unemployment data it is *de facto* more concerned with supply rather than demand. It is also noted that little concern for specific training demand featured in the UNIDO technical assistance projects reviewed by the mission. Several of the specialized training centres visited were unable to articulate demand in terms of vertical or horizontal occupational grades and appeared to be solely concerned with supplying training against supposed industrial requirements.

74. Fully aware that it is impossible to construct detailed estimates of demand for professional, technical or vocational skills at the national level, the mission did encounter one example of research into sectoral demand within the textile industry. Sample surveys undertaken by the Textile Training and Services Centre are an example of what can be accomplished to establish useful indicators of HRD demand within a particular industrial sector. The survey covered 25% of the country's textile mills but excludes the garment industry[21]. This survey supports the frequently recorded concern that there is a general lack of suitably qualified staff at all levels of industry, particularly at middle management levels. Many middle level managers are promoted through the ranks without up-grading their professional knowledge or skills. This does not bode well for a future technological revolution nor does it provide an adequate base for internal promotion to senior management grades. One small sectoral survey should not be used as a basis for national policies and plans. But it does illustrate what can be done when an industrial sector has interested and motivated professional HRD staff.

Table 12: Survey of Training Needs within the Textile Industry 1991

Staff Grades	Total Sample	Graduates Level	Diploma or Vocational	Ad Hoc Training	No
Senior Managers	80	21.0%	41.0%	25.0%	
Middle Level	279	7.0%	17.0%	50.0%	
Supervisors	672	0.3%	10.3%	49.7%	
Mechanics/ Fitters	1,053	-	14.0%	36.0%	
Operators	11,620	-	10.0%	60.0%	

Source: Sri Lanka Textile Bulletin, Issue No. 1, Vol.11, January 1992

Unfortunately, many of the departments responsible for HRD visited by the mission, including training centres established with UNIDO technical assistance, have not undertaken such surveys because they are not aware of the need for demand-side data and/or because they do not have the staff or the competencies to undertake such studies.

75. There are some signs that the data situation may change in the near future. Technical assistance to the Ministry of Policy Planning and Implementation (HRD Division) and to the Ministry of Industries is attempting to install new data gathering systems which will reflect demand for skill manpower. There is also a UNDP/ILO project which is supporting data gathering within the Ministry of Labour. It is to be hoped that these inputs will achieve some

---

20 "Manpower Services and Rural Training Support - a report of a Sri Lankan/Netherlands Identification Mission for the Ministry of Labour and Vocational Training"; April, 1991.

21 "Productivity Improvement Through Training"; D.P. Gunawardana, Textile Bulletin, No.1, Vol.11, January 1992, Colombo, p.7.

measure of coordination. The ADB Report (1989) recommends that demand data should be the responsibility of a newly created Industrial Institute for Training and Development (IITRAD) within TVEC, although this proposal does not appear to have found favour with the Government. But while these moves are taking place at the macro level there is a need for more sector specific initiatives implemented under the auspices of technical/professional associations, including the Chambers. Only by the transfer of authority and responsibility for skills training from the government to end users and the introduction of market signals into the process of manpower development can the HRD system improve its current low levels of programme effectiveness and efficiency (Kelly)

Financing HRD

76. Government expenditures on skills development in 1991 totalled 3985.5 million Rupees (approximately US$93.8 million). This represents 1.1% of GDP and 2.9% of the total Government Budget, down from 4.5% in 1989[22]. These figures are taken from the returns of 20 government ministries involved in aspects of technical and vocational education and do not include details of private sector support for training. Figures for 1991 are not available but in 1989, approximately 25% of the total government expenditure for training came from donor contributions.

77. Unit costs of training are not readily available from institute directors, a fact which matches the general paucity of data relating to HRD. Estimates indicate a range of between US$142 per student year at Sri Lanka Technical College to US$2,500 per student year at the Apprentices Training Institute, with a maximum of US$12,500 per student at the Technician Training Institute. NAITA estimates the average cost per apprentice/year is US$960 (Kelly). Most of these costs are born by the government who even pay stipends to trainees to encourage attendance.

78. In an attempt to re-direct what has become a wasteful and largely inefficient system, the Ministry of Industries, in conjunction with TVEC, has recently proposed the formulation of a Human Resources Development Fund (HRDF) which could be established with contributions from both the public and private sector[23]. The HRDF would supplement current allocations of resources for skills development, not replace them. Specifically the HRDF will not be available to finance existing or future training courses but could assist persons to utilize such facilities or to help enhance or improve such facilities. Funding would be made up of:

- contributions from the private sector in the form of a levy related to the benefit which will accrue to such businesses;
- contributions from State and Provincial Councils;
- inputs from National Provident Funds; and
- grants/loans from donor agencies.

Refunds for training would be given for both institutional and on-the-job programmes. The HRDF management would be undertaken by a separate incorporated body with 30% Government representation, 60% private sector and 10% representation from foreign donors inputting to the scheme. Funds from HRDF would be made available to both individual trainees as grants or loans, as well as to enterprises undertaking in-plant training. Only training institutions with a proven need for capital improvements would be eligible to apply for HRDF funding.

---

22 "A Strategy for Skills development and Employment Policy in Sri Lanka"; A draft paper prepared by T.F.Kelly, Resident Economic Advisor to Ministry of Policy Planning and Implementation, 15 May, 1992.

23 "Human Resources Development Fund"; a draft discussion paper circulating in the Ministry of Industries dated 29.1.92.

79. Provisional estimates expect the fund to be established in the order of Rs.2,000 million (US$47.0 million) serving about 200,000 trainees through the participation of 4,000 training institutions, company training venues and NGOs. While the scheme is still in a very early stage of conception, it does indicate that serious thought is being given to the way in which HRD should be funded in the future. The mission understands that a forthcoming World Bank mission will discuss these issues and may even allocate funds for some pilot activities. At this juncture little if any discussion with representatives of industry appears to have taken place and assistance to public and private sector enterprises will be necessary if they are to be able to play an informed, proactive role in future debates on the financing of industrial training.

4. INTERNATIONAL ASSISTANCE TO HRD IN SRI LANKA

A. UNIDO'S CONTRIBUTION

Data and methodology

80. A list of current and pipeline UNIDO projects, provided by the Colombo office, is attached as Annex 1. The mission was also provided in Vienna with a list of 117 UNIDO projects completed since 1972; this is not attached (a) because it runs to six pages and (b) because the relative weight or importance of the HRD element cannot be estimated from the project titles. It is worth noting that a number of "projects" appear to have comprised single fellowships, or a single expert or adviser.

81. The UNIDO office in Colombo does not maintain consolidated lists of fellows or of participants in study tours or group training programmes (and there is no apparent reason why it should). The UNDP office maintains lists of all agencies' fellows and participants in study tours, group training programmes, workshops, meetings, and so on. The mission extracted details of the most recent 100+ UNIDO entries (back to late 1989), which included some 30 participants in group training programmes.

82. Assessment of the HRD components of projects was made by means of discussions with National Project Directors or other senior officials or managers of the organisations concerned, and with a small number of former fellows and study-tour participants (who usually included the NPDs). Four participants in group training programmes were also interviewed.

Output HRD

83. In the course of the mission's work it became clear that the HRD component of technical cooperation projects has two distinct elements which have to be considered separately. One is *HRD-as-input*, in the form of fellowships, study tours and training by international or national experts; the other is *HRD-as-output*. This output consists of knowledge and skills concerning the "human" implications of specific technical or professional advances (be they in manufacturing, investment promotion or other areas of UNIDO expertise), or simply awareness of these implications. In the case of institution-building projects there is a second kind of HRD-as-output, namely the internal ability of the institution to define and manage its own continuing HRD requirements. As an example of this distinction, the Textile Training and Services Centre provides advice to its clients on such matters as skill requirements, training, production organisation, health and safety at work and so on; but it also attends to the needs of its own staff for technical and professional updating and development, a satisfactory reward structure, work-load, conditions of work, etc., and takes the staff implications into consideration when making its own plans for development.

84. In contrast, the new project to support the embryonic Foundry Development and Services Institute will, it seems, restrict itself to technical advice to its clients and will not concern itself with, for instance, the repercussions of new technology on operator skills, training and retraining, numbers employed, safety, production organisation and so on. The project is however so new that the National Project Director had only started work ten minutes before the mission's visit, and there is plenty of time for reflection on the desirability or otherwise of HRD elements in the future Institute's professional capacity both to offer advice and to manage itself. Meanwhile it serves as an example of a different approach to that of the Textile Institute.

85. The distinction between external and internal HRD capability is harder to maintain in the case of projects in which some form of HRD is the central professional output and objective, as is the case with the project "Establishing a Training Department at Kelani Tyres Ltd"[24]. But

---

[24] Sri Lanka Tyre Corporation until privatisation.

even here it is possible, and important, to assess the extent to which (a) the project provides for any aspect of HRD in the manufacturing side of the company other than skill training (such as re-organisation to make the best use of the trained staff and to increase their job satisfaction) and (b) staff development and eventual replacement in the training centre itself have been taken into consideration. (At Kelani Tyres manpower planning and development is a specific management function. The training centre of course constitutes one instrument at management's disposal and is itself incorporated in the management process. It is not clear to the mission to what extent management's recognition of the need for a broad and comprehensive HRD policy is derived from UNIDO policy or ideas; but at least the necessity for the training centre itself was pointed out by a UNIDO expert in an earlier, technical phase of the project.)

86. The mission had relatively brief discussions with National Project Directors and others concerned with six other projects, and found variable attitudes to HRD, and various measures taken in one HRD context or another. To a large extent HRD is equated with technical training; the managerial, organisational and other components of HRD are not generally considered. For example, the CAD/CAM Centre at the University of Moratuwa, in addition to the CAD/CAM components of engineering degree courses, offers short public training courses, especially in CAD; but not in the management aspects - technical and financial assessment of the desirability of introducing the systems, for instance, or the staff consequences of doing so. As a university institution it may well consider such matters outside its competence and interest, but as far as the mission is aware there is no complementary management course elsewhere, and it is at this point that UNIDO might have an expanded role.

87. This is not by any means to say that HRD considerations are entirely ignored by the Sri Lankan beneficiaries of UNIDO projects. For instance the Ceylon Institute of Scientific and Industrial Research not only furnishes technical information to industry but trains industry staff; and the Ceramic Research and Development Centre is building a training centre out of its own resources. In the mission's brief experience it was only at the Greater Colombo Economic Commission, where the mission met the National Project Director for the recent Investment Forum, that it proved particularly difficult to discuss human resource matters, such as foreign investors' demands for skilled and unskilled personnel, the available supply, consequent training requirements and delivery, skill and productivity upgrading, conditions of work, remuneration and other areas which the GCEC might need to be well informed about, and perhaps to keep an eye on after investors have started operations.

UNIDO policy

88. What did seem to be missing in all these discussions was any sense that UNIDO had a unified and positive policy or even point of view on the HRD-as-output components or repercussions of its projects. UNIDO's interventions tended to be reactive, specific to particular situations, and reliant for the design and implementation of UNIDO activities on the interests and capabilities of international project staff. In some cases this assessment may be unfair to backstopping officers, whose contribution the mission did not have time or resources to examine; but the fact remains that backstopping officers themselves, in HRD matters, will be acting on the basis of their own interests and professional knowledge rather than in response to explicit UNIDO policy.

89. It may be argued that UNIDO has no business to force HRD matters into projects and that if the Sri Lankan side wanted them they would ask for them. This would be an acceptable point of view if the Sri Lankan side (or any other beneficiary) were first given a clear idea of what was on offer, if UNIDO first ascertained that the beneficiaries were fully aware and informed of the HRD implications of a proposed project, so that any decision to exclude them was deliberate.

90. The UNDP has remarked[25] on the "scatterization", considered undesirable, of the Fourth Country Programme and expressed the intention to remedy this through the "programme approach" in the Fifth Country Programme. UNIDO's own substantial contribution to the fourth cycle can similarly be regarded as scatterized. On the other hand it can be argued (a) that it is up to the recipient government to ensure such inter-project linkage as it wishes to have, and (b) that the projects may not look so scatterized when simply viewed as parts of larger development programmes which may indeed contain projects or other inputs emanating from other international or bilateral sources. The mission has indeed noticed, at the level of fellowships and group training programmes, that there are a good many on offer in addition to UNIDO's, and that recipient institutions are very capable of putting together coherent programmes financed by several donors. When, under the UNDP successor arrangements, UNIDO is asked to execute only part of a project the apparent degree of scatterization will increase.

91. In the field of HRD it is not so much scatterization which is the feature of UNIDO's current programme as the lack of any centrally placed HRD project as a step towards a potentially general solution to common problems emerging from existing technical projects, or indeed from a separate and general analysis of IHRD in Sri Lanka. This point is explored in depth in the following chapter of this report.

Gender-specific activities

92. UNIDO's efforts to incorporate a gender dimension in its HRD activities in Sri Lanka have been limited to the study it undertook with the Centre for Women's Research (CENWOR) on 'Human Resources Development in Sri Lanka: Current and Future'. This study examined the impact of industrial development, training and employment on women in the public and private sectors and in the informal sectors. It encompassed a broad spectrum of human development issues including quality of life and social and gender equity and suggested policies and programmes to improve the economic and social status of women. Regrettably, attempts by UNIDO's WID programme to support follow up action were unsuccessful.

Input HRD: Fellowships and Study Tours

93. The most notable feature of the fellowships and study tours in the projects examined by the mission was the almost total extent to which selection of host countries and institutions was left to international and national project staff, in discussion with fellows and participants themselves. Intervention or advice from Vienna seems to have been negligible, although here again the unseen hand of a backstopping officer might have played a greater role than realized. The newly appointed National Project Director of one project had received no instructions or briefing specifically on fellowships or study tours before assuming his duties.

94. The National Project Directors and others concerned, including some former fellows, generally expressed more positive opinions than had been expected about the value of their programmes and the applicability of the knowledge and skills gained, and these reactions were very gratifying. One NPD did make the point that the prospect of fellowships was a very important inducement to join and stay with his institution, which being in the public sector could not offer attractive salaries, and this motivational quality was at least as important as the technical content of the programmes.

95. Some fellowships programmes were however criticized, on the grounds that the subject matter was not useful, the course too short, the course badly run, and for similar reasons. The mission was interested to note that these cases occurred when the subject matter was not specific to the technical specialization of the project; for example, one unsatisfactory programme in marketing was organized for a "textile" fellow, and it must be recognized that project staff are a good deal less likely to be fully informed about training possibilities in such general subjects,

---

[25] Final draft of the Fifth Country Programme.

unless there are such facilities in industry-specific institutions. Another "textile" fellow expressed the greatest satisfaction about two separate programmes selected by the CTA, one in training and consultancy at the Textile Industry Research and Development Centre in Pakistan, and the other in the spinnability of fibres at the Shirley Institute in the United Kingdom. Highly specialized fellowships at the CISIR, planned by highly specialized international staff sometimes at their own home-country institutions, were also successful. In some cases there had been direct contacts, by mail or telephone, with host institutions in order to clarify and finalize programme requirements. It has been noted before, and experience in Sri Lanka confirms, that while fellowships in highly specialized and limited subjects can safely be left to the projects themselves, with or without the support of their equally specialized backstopping units, further information and advice on general cross-sectoral subjects could well be collected and disseminated by UNIDO headquarters.[26]

96. Study tours were similarly found to be generally successful, and the initial planning study-tour by the NPD at the start of project activities was utilized to good effect in one or two cases. In the case of Kelani Tyres Ltd the study tours were difficult to arrange since major manufacturers guard secret processes in a highly competitive international market; but the CTA, exploiting previous industrial connections, was eventually able to arrange one-week placements in India. Was this difficulty predictable, and does UNIDO really have to rely on these ad hoc personal approaches ? The mission has no information on UNIDO's previous activities in the tyre business, but if there have been any it might have been possible to exploit the experience in one way or another. A similar difficulty has arisen with a study-tour for three members of the Sri Lanka Standards Institution, which has still not been arranged some eighteen months after the request was sent to Vienna. The reason is not known, but it is notable (a) that nobody seems to be taking action to break the deadlock and (b) that no advice is available on the likely difficulty of finding host organizations for proposed study tours. These examples confirm the tentative remarks in the desk study on this subject. As a result of this particular case the SLSI will not ask UNIDO to execute the fellowship and study-tour component of the next phase of the UNDP-funded project, but will make its own arrangements[27].

97. On the subject of study tours the mission has learned that Sri Lankan organizations sometimes play host to UNIDO participants from other countries, in particular the GCEC and its Export Processing Zones. One such group was due to arrive while the mission was in Sri Lanka, but did not do so, with no prior warning from Vienna, thus regrettably undermining a reputation for administrative efficiency. Such incoming study tours, together with group training programmes and other non-project fellowships are handled by the UNDP office, not the UNIDO office, and the mission was informed that although UNIDO headquarters was generally correct and efficient they were often slow to act or respond in comparison with other agencies whose study tours and fellowships are also handled by UNDP.

98. The fellowship and study-tour procedure is unfortunately complicated by sometimes very slow government clearance of nominations. In its commendable efforts to ensure that fellowships go to the most suitable persons the government has introduced a competitive procedure and a series of approvals which seem to hold things up very badly in some cases. One such problem was unfolding while the mission was in Sri Lanka: a fellow from CISIR had not received government clearance the day before she was due to start her programme in France.

99. Since Sri Lanka is a relatively unbureaucratic country the government might possibly, if asked, do away with the need for government nomination of private-sector fellows and participants in other kinds of programme. This might at least be worth exploring. (Any such change would not of course help the public-sector)

---

[26] The annual "Guide to Training Opportunities" was not seen or referred to in Sri Lanka.

[27] The SLSI also intends to handle its own equipment purchases, but to request UNIDO to recruit consultants.

Input HRD: Project experts and consultants

100. Although some experts are reported to have run formal seminars or training programmes, and some to have done so more successfully than others, such formal training is only one means of delivery of a more general HRD activity. It can indeed be held that all experts' or consultants' work is, or ought to be, of an HRD nature. It is after all their primary function to build up the professional capacities of their counterparts and it diminishes this function to take decisions or actions on behalf of the counterparts. The mission has neither the time nor the resources to analyze this aspect of project effectiveness more deeply.

Input HRD: Group training programmes

101. To judge from the list for the past two years considerable use of GTPs is made in a variety of fields. The small number of participants met by the mission does not allow for general conclusions to be drawn about their quality or applicability. It is worth noting that the one Sri Lankan Railways engineer interviewed was generally satisfied, and able to make specific use of the rehabilitation techniques he had learnt in the U.K. and Thailand by virtue of his participation in a Japanese-financed locomotive rehabilitation programme which is in progress; but this, he said, was accidental. The other three participants interviewed were at the National Development Bank and had attended COMFAR programmes in various forms. The first of these had revealed that certain details of the COMFAR computer programme, despite its many admirable features, did not meet the needs of the bank, and so it had not been adopted. Non-COMFAR components of two of the programmes (feasibility studies) had been found interesting and useful as refresher courses, and in one case had improved specific ability in assessing the equipment component of industrial development proposals. However these UNIDO programmes constitute very small adjuncts to the major World Bank and ADB training programmes which had built up the NDB's main professional capacity from the start.

102. It is clear that at least in these cases invitations to apply for GTPs have been routed to the correct operational organizations, and have not stopped short in ministries.

UNIDO's mode of operation

103. Formal contacts are with the External Resources Division of the Ministry of Finance; all activities involving IPF expenditure or fellowships and study tours even if funded from other sources have to be approved by ERD. For exploratory discussions, public relations, or supervisory or other contacts with operational projects, the UNIDO office is free to make whatever arrangements it wishes directly with the persons or organizations concerned, and is under no external obligation to record or report these arrangements or their outcome.

104. Within this context the principal governmental contact is with the Ministry of Industries, Science and Technology. Relations with private-sector industry are also being built up, either by means of direct contact with individual enterprises, or through the various Chambers.

105. Given the plethora of government ministries, of parastatal organizations and of non-governmental organizations such as Chambers of Commerce and Industry, the difficulty faced by the UNIDO office and by other agencies and donors is to judge the most productive list of contacts to be maintained.

106. The mission's many discussions with government officials about HRD in general, and with other concerned with HRD in Sri Lanka, did not lead to any expression of opinion on UNIDO's completed or on-going projects except for general courtesies. UNIDO's operations seem to be well-known amongst those directly concerned, but otherwise it does not seem that UNIDO has a strong corporate identity. Considerable interest was however often expressed when the prospect of future UNIDO activities was floated - especially, it must be said, when fellowships were mentioned.

B. OTHER INTERNATIONAL ASSISTANCE TO HRD IN SRI LANKA

107. The UNDP Development Cooperation Report for 1990 (published in January 1992) shows total disbursement under the HRD sectoral heading of US$24.4 million, or 3.5% of total reported assistance. 71% of this went to the subsector "Technical and Managerial Education and Training". The planned expenditure for 1991 was sharply reduced, to US$5 million for the sector, of which 86% for the subsector. There will of course have been HRD components in other sectoral assistance, especially in the type "Freestanding Technical Cooperation", (which amounted to US$88.7 million in 1990) but the components are not disaggregated.

108. Seven donors contributed 90% of the US$24.4 million assistance in the HRD sector, as follows;

	(US$ x 1000)
ADB	6434
U.K.	4035
Japan	4027
Germany	3077
IDA	1860
Sweden	1597
Australia	1004

The UNDP's contribution of US$739,000 represents 3% of the total. The share of this executed by each agency is not shown, nor is UNIDO's or other agencies non-UNDP assistance recorded separately.

109. Although the costs do not correspond with the above figures, recent activities of some of the donors relevant to this evaluation have included:

ADB's support to the Technical Teacher Training Institute; also their study on Technical and Vocational Education and Training, a landmark study which only missed the industrial point of view;

British involvement with resettlement and retraining of people displaced by the dams which form part of the Mahaweli Development Scheme; also their contribution to some elements of ICTAD;

Japanese support for the Automobile Engineering Training Institute;

German support for the Apprenticeship Training Institute, the Railway Training Centre and other sectoral training;

IDA finance and technical assistance for ICTAD. (IDA's interest in the proposed Human Resource Development Fund should also be mentioned.)

110. It is important to note the various missions which have come to Sri Lanka to investigate and advise on the organization and coordination of technical education and training. The Dutch, for example, fielded a mission on vocational training in 1991 and subsequently decided not to proceed with a project (to be executed by ILO) until certain deficiencies had been rectified, namely lack of market orientation, lack of needs analysis, lack of national standards, in particular absence of coordination - and apparent lack of understanding of these requirements. Early in 1991 the Germans organized a major conference to present the virtues of their Dual System. In 1991 the Germans also undertook an in-depth evaluation of the Apprentice Training Institute which comes to important conclusions concerning the training system as a whole. As mentioned above the ADB has recently conducted a sector review which deals inter alia with technical education. A World Bank mission is expected later this year.

111. The interesting aspect of these activities is their close focus on vocational training; none of them take an integrated look at manpower requirements and training facilities at all levels and types of employment. As previously mentioned, as far as industry is concerned information and policy on manpower requirements - from general managers and production managers to computer operators and tool-makers - is seriously defective. To the extent that information exists it is scattered, and does not generally offer a dynamic picture of trends and expectations. There certainly seems to be scope for UNIDO in this area.

5. UNIDO's POTENTIAL CONTRIBUTION TO HRD IN SRI LANKA

Areas of perceived interaction

112. Assuming UNIDO's constituent to be the Government of Sri Lanka and through the government, the industrial sector - both public and private, the mission identified three main levels of potential interaction between UNIDO and its potential clients. In identifying these potential areas of interaction the Mission noted the accelerating trend for government to become less intrusive in the industrial scene, as noted by the lifting of many restrictive regulations and the increasing privatization of previous state holdings in a wide range of enterprises. Furthermore the mission based its findings on government documentation which emphasizes the intention to shift much of the responsibility for HRD from government to enterprises in the public and private sectors, even to the extent that consideration is being given to some degree of privatization for statutory bodies and national institutions tasked with administering, managing or implementing HRD.

113. The mission's suggestions do not preclude continuation of UNIDO's normal kind of project; they may however give them some form of unified approach to their HRD components.

Data collection/analysis relating to HRD demand

114. The shortage of statistical data in general is a concern for both the government and several of the major donor agencies, principally UNDP, ESCAP, and World Bank. ILO has been involved with projects to support employment data collection, but much of what is currently available is supply orientated and there is a critical shortfall of information on labour demand, particularly as it effects the planning and provision of HRD at both the macro and micro levels. While some efforts are being made to tackle the problem at the macro level[28], the mission notes that accurate demand-side data on aspects of HRD is most reliable when it is collected from a system of key informants, which by definition are to be found at the micro rather than the macro level. Reference has already been made to the highly successful attempts at HRD data gathering undertaken by the staff of the Textile Training and Services Centre. Every effort should be made to encourage similar examples within other industrial sectors, using existing infra-structure such as the training or specialized technology centres already established, particularly those which have close links with UNIDO.

115. To accomplish such an objective it will be necessary to initiate a dialogue with representatives of specific industrial sectors, and in particular those responsible for the training or technology centres. The objective of such a dialogue would be to introduce the concept of HRD as an input to productivity and profitability, an input which is just as important as improved technology or capital investment. Such a task should be made all the more easy by current Government moves to enforce an awareness of HRD on a hitherto unresponsive industrial society by introducing compulsory registration of training activities together with plans to introduce a mandatory levy to support HRD activities. The Industrialization Commission, for example, has recently (1991) established a Committee of Human Resources Development and Labour which will advise the Commission on various aspects of manpower data, including labour shortages in middle and higher management, skill shortages, deficiencies in labour mobility, and the adequacy of training facilities. Returns are expected from all public and private sector industries.

116. Given these moves, which will effect public and private enterprises alike, there is a need for employers and management to be made aware of the implications of such initiatives and to understand what role they can play in making a viable HRD strategy work to their advantage. This can only be accomplished when a data base on HRD demand is established for each industrial sector capable of quantifying HRD needs. Information on skill requirements and the need for staff development should be gathered for vertical employment bands within enterprises and

---

[28] See paragraph 75 above.

industrial sectors, encompassing senior management, technologists, supervisors, skilled and even semi-skilled workers; rather than assessing needs on a horizontal stratum of a particular level of employment. The former holistic approach marks the difference between data required to prepare an HRD strategy and information which can only lead to the preparation of training plans.

117. Gathering data through sample surveys and key informants requires both the motivation and the knowledge of manpower data processing. Appropriate staff within identified focal points should be identified and their capacity for collecting and analyzing manpower data needs to be developed. This can be undertaken by in-country training programmes supported by a limited number of selected overseas fellowships in aspects of manpower needs assessment for future trainers in techniques of manpower data analysis. For this purpose consideration might be given to building up a modern manpower planning training capability within a teaching institute such as the NIBM.

118. Since there are other measures being taken, with donor assistance, to assemble manpower data, albeit of a different kind, it will particularly important to ensure that any UNIDO activity such as proposed here is complementary, not in any sense competitive. Unusually close cooperation between donors and executing agencies will be called for.

Contributions to policy formulation and implementation

119. Two major policy proposals are currently under consideration by the government, both of which will have major implications for the future of Sri Lankan industry. The first concerns the introduction of the national HRD Fund (HRDF) which it is proposed will be financed in part through contributions raised by a levy on all enterprises over a certain minimum payroll size. There are various examples of such funds in both industrialized and developing countries and their experiences all point to the fact that unless industry understands the system and knows how to make it work to its advantage, the levy becomes just another tax burden. But if enterprises are aware of how the system works and are able to make valid claims for manpower development undertaken in pursuit of improved productivity/profitability, then a levy/grant scheme can be made to work to the advantage of all concerned.

120. The second policy, which is already on the statute books, concerns the activities of the TVEC in the registration and subsequent certification of all training facilities and programmes, both institutional and in-plant. At present the TVEC is limiting its activities to registration, but it is proposed that this will be followed by on-site inspection and certification of all training venues. Not only will the facilities, staffing and provision of training opportunities be assessed but also the curriculum and training standards for each and every programme. It is foreseen that this process will eventually link up with the levy scheme and only enterprises with approved programmes will be eligible for refunds under the HRDF (Kelly). It will also be intended to link the TVEC's registration and inspection activities to the proposals for national certificates and awards for all levels of skills and professional training, such as those currently prepared by NAITA. This will greatly improve mobility of labour and should eventually ease the manpower shortages currently affecting many industrial sectors. However, the implications for both public and private sector industry are very important. Such moves will necessitate a new approach to company HRD policy, personnel practices in general, and the way in which recruitment is undertaken in particular.

121. In both examples of national HRD policy development, the mission found that industry and commerce had little or no knowledge of the full implications of the changes being discussed or currently introduced. Discussions with the Chambers representing industry and commerce revealed an increasing interest in the wider functions of HRD (as opposed to the narrow interpretation of "training") but there was little evidence within the secretariat, or amongst the limited sample of members approached by the mission, of any awareness of the macro level policy decisions or their ramifications. An even greater lack of awareness was found in the in the professional or technical centres (with the one exception of the Textile Training and Service Centre). This absence of awareness and even concern on HRD issues opens up a whole area of

potential interaction on the part of UNIDO, which could help to develop industry's appreciation of the implications of the new HRD policies and to work towards a more proactive stance in national deliberations of future policy strategies. This could be accomplished by promoting a series of seminars and workshops on relevant aspects of HRD and through brief fellowships and guided study tours for key officials in the Chambers or other professional bodies.

Development of a professional HRD cadre

122. As mentioned in previous paragraphs the mission found no professional accumulation of HRD knowledge and skills in either the Chambers nor in most other professional bodies visited in Sri Lanka. There was some experience in training, although the level of such experience varied widely. Most donor- assisted technical assistance has focused on government providers of training, working either at the macro level of appropriate ministries or supporting specific training institutions. Between these two extremes there has been little input or assistance provided to the enterprise or particularly industrial sectors. Given that macro-level and institutional-level interventions have to some extent helped to support the continued proliferation of training ventures in Sri Lanka, the time for a fresh approach seems overdue. It is therefore proposed that more should be done to support the establishment of sector-specific HRD cadres within existing professional, technological and management centres along the lines of the successful Textile Training and Services Centre. UNIDO could assist Chambers and professional bodies such as the institutes of engineers, managers and accountants to recognize the advantages to be gained from building up such a body of HRD knowledge and skills. Working to a plan for industry as a whole a series of fellowships could be undertaken which would ensure at least one HRD specialist was to be found in every key professional body and relevant Chamber. Where UNIDO was engaged in supporting new professional or technical bodies it should always examine such proposals to see whether there was an opening for support to HRD policies/plans and if so provision for an HRD component should be planned from the outset.

123. One particular avenue seems to have been neglected in this respect. The Sri Lankan Institute of Personnel Management (IPM), established in 1959 and incorporated by Act of Parliament in 1976 currently includes aspects of manpower data analysis and HRD policy within its Diploma examination. With a membership of approximately 300 personnel managers and corporate membership from all the major industrial and commercial undertakings, the IPM represents a major point of entry to all major Sri Lankan companies and given further support assistance its could spread its influence still wider to encompass more medium level firms. The IPM has never been in receipt of technical assistance from any quarter and at present has minimal resources and supports its own training programmes and consulting services through the assistance of its members. Given the great potential of the mandate given to such institutes, UNIDO should consider preparing a major technical proposal to support the IPM, upgrade its capability to serve as a certification authority for HRD management, and give the institution a professional voice in the discussions between government and industry on all matters of HRD policy and planning. This could be accomplished by a programme of consulting inputs and fellowship training.

Future directions in HRD for women

124. Female labour force participation rates are projected to increase till 2025, and if the situation of women in industry is to be improved, strategies need to be developed (1) to ensure better working conditions that will enhance their quality of life and (2) to increase their access to skill intensive and high and middle levels of employment in industry. UNIDO's interventions will be particularly useful in supporting changes in policies and programmes -

a. which will counter the current lack of awareness of and concern for the poor quality of employment available to the majority of women, and

b. which will assist in diversifying the skills of women who seek employment or are currently employed in industry.

125. Due attention must thus be paid to gender issues in all three of the areas of activity suggested in this report. The disaggregation of data by gender will be essential as a basis for policy formulation on this point, and special gender-related surveys may be necessary, e.g. tracer studies of women trained by the major national agencies. (In this respect it has been observed that women secondary school leavers drift from one training programme to another in a futile search for employment skills.)

Potential funding for UNIDO interventions

126. UNDP successor arrangements have introduced Technical Supply Services (TSS1 and TSS2). TSS1 funds are available to support up-stream activities such as sector analysis and policy formulation. Support for manpower data gathering exercises within the industrial sector or sub-sectors should be possible under TSS1. So too could studies on aspects of HRD policy/planning prior to the implementation of government proposals. However, technical assistance for the development of an internal capacity to undertake data gathering and policy formulation and the development of a professional cadre of HRD specialists would require funding under TSS2. Although not specially covered under the present UNDP programming cycle, arguments could be made for inclusion of some components under the general heading of the HRD Programme.

127. The World Bank is fielding a mission shortly to examine the new HRD proposals, in particular the proposals for the HRD Fund. There are reports that the Bank's mission might be willing to consider financing some pilot studies as to how the scheme will work in practice. How such pilot projects will be prepared are as yet unknown but the possibility exists for UNIDO to keep a watching brief on future developments and take any opportunity offered to make a professional contribution to these activities. Should a major loan-funded project emerge, resources may be allocated for some aspects of the three priority areas mentioned above.

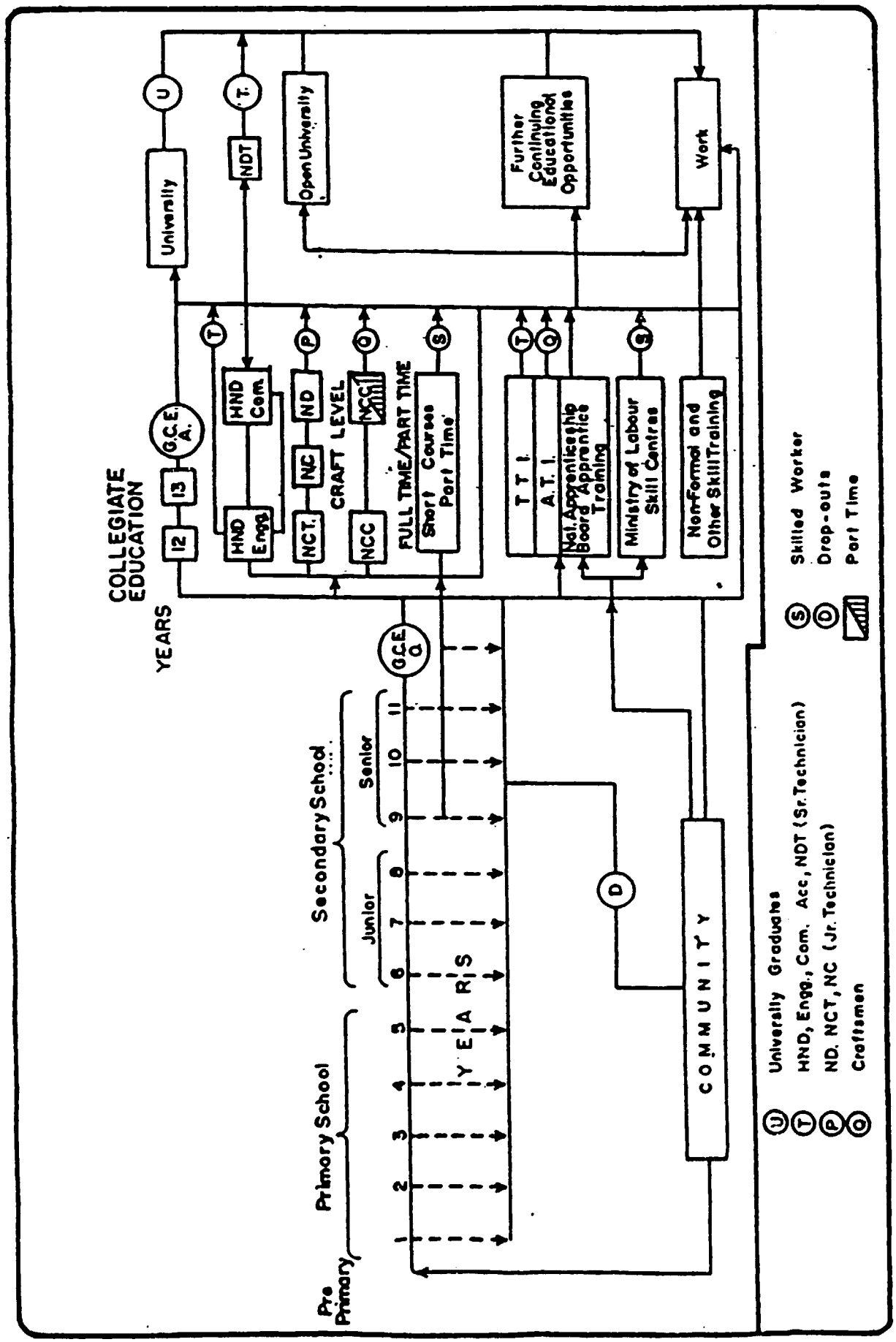
128. Although some bilateral donors are reacting solely to government initiatives, others are becoming more selective in their support and are encouraging the government to concentrate on projects which can improve internal efficiency within the HRD system. Funding for UNIDO interventions may become available through negotiations between government, professional institutions and potential donors who are willing to support improvements to system coordination or policy planning.

129. Given the financial implications for many enterprises, private-sector funds might be available to UNIDO for appropriate services in support of sector-specific interventions.

130. It is perhaps worth reiterating the imperative necessity for coordination between donors. Given the ease with which a donor can find a new point of contact in Sri Lanka amongst the many organizations and ministries, the donor community has probably, with all good will and professional standing, contributed to uncoordinated ineffectiveness on the recipient side. UNIDO should take care not to exacerbate this state of affairs.

Figure 1

STRUCTURE OF TECHNICAL/VOCATIONAL EDUCATION IN SRI LANKA



Annex 1

ON-GOING AND PIPELINE PROJECTS IN SRI LANKA[29]

ON-GOING PROJECTS:

83/019 - ASSISTANCE TO GCEC
Budget: 552.968 US$
Duration : 7 Starting date : 08/84
Status : to be completed
Counterpart : Ministry of Policy Planning and implementation
NPD :
BSO : Mr Galama
Remaining funds : 14.569 US$. Closing procedures requested to HQs. Awaiting BSO's reply.

DP/SRL/86/007 - STANDARDIZATION AND QUALITY CONTROL
Budget : 657.618 US$
Duration : 4 years Starting date : 03/88 Approx.compl. : end 92
Counterpart : Ministry of Industries, Science and technology
NPD : Jayawardene
BSO : K. Stephens
A training course in Sri Lanka will take place in 08/92.
SLSI has accepted a 1-year fellowship at Brunel Institute.
A short-term fellowship has to be organised.

DP/SRL/86/009 - ESTABLISHING OF A TRAINING DEPARTMENT AT THE KELANI TYRES LTD
Budget : 735.911 US$
Duration : 4 years Starting date : 07/88 Approx. compl. : end 92
Counterpart : Ministry of Industries, Sciences and Technol.
NPD : Abeygunawardena
BSO : V. Bysyuk
CTA : R. Garvin
This project is nearing completion. Terminal report received and government has requested that the remaining funds be utilised to perform a feasibility study of establishing a National Center for the Development of the Rubber Industry. The expert, Mr Niehaus, has been fielded for 2 weeks and during his debriefing, it appeared that the problems were more complex than expected, thus the need for a detailed study. The Terms of Reference for this mission have been drafted by UNIDO field office and sent on June 9th to the BSO for comments and completion before official submission.

DP/SRL/87/012 - MANAGEMENT SERVICES DIVISION AT THE TEXTILE TRAINING CENTRE
Budget: 1.126.066 US$
Duration : 4 y. Starting date : 06/92 Status : operat.completed Counterpart : Ministry of Handloom and Textiles
NPD : Pararajasingham
BSO : Mr Eraneva
Waiting for BSO completion formalities.

---

[29] Extracted from UCD's activity report dated 15 June 1992.

DP/SRL/87/007 - FORUM OF INVESTORS
Budget: 844.941 US$
Duration : 4 y. Starting date :07/87 Approx.completion :93
Counterpart : GCEC - Ministry of Policy Planning, Implementation
NPD : H.B. MASINGHE
BSO : F. Svarc
Mr Suma, expert in business analysis, has conducted a survey of the follow-up of the forum that took place in 11/91. He has remitted a draft of his report and recommendations. The project is almost completed except for fellowship. We're awaiting the nominations from the government. An in-depth evaluation mission is planned for January 93.

DP/SRL/86/016 - TECHNOLOGIES FOR FOOD AND AGRO-INDUSTRIES
Budget: 1.047.605 US$
Duration : 4 y. Starting date : 03/89 Approx.compl. :06/93
Counterpart : MIN.of Industries, Science and Techn. - CISIR
NPD : Jayatissa
BSO : Sabater de Sabates
CTA : Hogekamp
Visit of the CTA from 19/4 to 19/5. Presentation by CISIR in May of the products developed by its staff (a number of the products have already been commercialized).
2 fellows nominated should leave for France soon.
Aroma expert came for a 2 month mission in feb. and March 92; a bakery expert is expected in July/August as well as the CTA.

DP/SRL/86/014 - Establishment of a CAD/CAM center at the University of Moratuwa - Ministry of Education
Budget: 835.841 US$
Duration : 4 y. Starting date :01/89 Approx.compl. :93
Counterpart : U. of Moratuwa. M. of Higher Education
NPD : Prof Da Silva
CTA : M. Bossak
BSO : V. Shatravko
Visit of the project on April 10 by JM Bonnamy and N.Dewez. Cutting tool Design expert arrived on April 24 for a one month's assignment.
As requested by the centre, an evaluation mission has been planned in 93 to identify and assess the needs of local industries in order to create a private sector engineering centre.

DP/SRL/91/031 - MICRO LEVEL INDUSTRIAL POLICY
Budget: 695.000 US$
Duration : 2 y. Starting date : 04/92
Counterpart : Ministry of Industries
NPD : Jayawardena
Project Manager : Hattice Pehlivan
BSO : F. Richard
Arrival of the Program Manager Miss Helice Pahlevan on April 20
(she is under sub/contract with Maxwell Stamps) Mr Robertson, will start his assignment as micro industrial Policy advisor on July 1st. We're expecting visit of BSO.
Status :

DP/SRL/89/014 - REACTIVATION OF THE FOUNDRY INDUSTRY
Budget: 698.750 US$
Duration : 3 y. Starting date : 06/92
Counterpart : Industrial Development Board (Min. of Tourism and Rural Industrial Devel.)
NPD : R. Rodrigo

CTA : Mc Ardle
BSO : A.Buckle
New NPD appointed in June 1st.
Office equipment and car ordered.
Waiting for the arrival of the CTA in July.

SIS/SRL/89/801 PRODUCTION OF GRINDING BALLS AT THE CEYLON STEEL CORPORATION.
UNIDO Budget : 30.000 US$
Starting date : 06/90 Status : almost completed
BSO : Buckle
First mission of mr Southwick, expert grinding media highcrome cast iron, end of 1990. Second mission started on May 11,92, for 1 month to review and participate in testing and further production activities.

PREPARATORY ASSISTANCE:

DP/SRL/91/027 - INVESTMENT PROMOTION PROGRAMME : PREPARATION OF A STRATEGY
Budget: 226.040 US$
Duration : 12 months Starting date : 1/92
Counterpart : Industrialization commission - GCEC
Implemention agency : Inter. Finance Corpor.
NPD : L. Watawala
CTA . B. Velic
A first FIAS (Foreign Invest. Advisory Service) mission sent in March to study the comparative Advantage of Sri Lanka. A second mission on the policy framework expected in July.
P.A. doc. and signed cooperating agency agreement by the govt sent to Vienna in April.

DP/SRL/91/007 - ITMIN
Budget: 252.000 US$
Duration : 6 months Starting date :04/92
Counterpart : Min. of Industries - CISIR
Project Manager : Mr Murazkiewitz
National project coordinator : M.Mubarak
BSO : M. Dimitriev
Team leader arrived April 5th for a 6-month mission.
Other experts : Mr Klimov arrived April 24 and Mr Teremesky June 11.
Publication by the team of News Letters.
Organisation of a workshop on the ITMIN design on May 4, 92.

PIPE LINE:

DP/SRL/91/034 - ASSISTANCE TO RESTRUCTURING GCEC
Budget: 285.500 US$
Duration : 1 y. estimated Starting date :
Counterpart : Ministry of Policy Planning & Implement.
Implem. agency : GCEC & Indust. Commission
The draft project document has been discussed during a meeting at the Ministry of Policy Planning on April 15 in presence of Mr Mr Watawala, UNDP DR and UCD. Some amendments have been requested by the Gvt. The amended document has been submitted for official approval to the Gvt on April 28.

DP/SRL/91/019 - Industrial Policy Pollution
Budget: 2.157.000 US$
Duration : 3 y. Estimated Starting date : 09/92
Counterpart : Ministry of environment and parliamentary affairs - CEA
BSO : R.Luken
Revised project document received from Vienna following PAC recommendations. Still a few changes have to be made in the field, upon UNDP request.

DP/SRL/92/005 - ENHANCING QUALITY IN SRI LANKA
Budget : 1.458.000 US$
Duration : 4 y. Estimated starting date : 01/93
Counterpart : Ministry of Industries - SLSI
De Silva
BSO : K. Stephens
Revised P.D. received from Vienna (taking into account recommendations of pac meeting) and transmitted to government.

ADVISORY ASSISTANCE TO THE M. OF TOURISM AND RURAL IND.
Duration : 2 years
Counterpart : MTRID
M. Ratnayake
1st draft of Project document prepared by field office and submitted to MTRID.

NON UNIDO PROJECT BUT HANDLED BY UNIDO

SRL/92/0XX - MODERNIZATION AND AUTOMATION OF THE INDUSTRIAL PROPERTY ADMINISTRATION AND ITS PATENT INFORMATION SERVICES
Implementing agency : Ministry of Trade and Commerce
Co-operating agency : WIPO
Budget : 400.000 US$
The registar of patents and Trade Marks has to prepare a work plan. When receiving it, field office will set up a pac meeting.

TRUST FUND AND OTHER ACTIVITIES:

US/SRL/78/207 - ESTABLISHMENT OF A CERAMIC RESEARCH AND DEVELOPMENT CENTRE
Budget : 1.505.800 US$
Counterpart : Ministry of Industry
Completion procedures to be done at the Headquarters.
BSO : N. Biering
There is a lot of interest in Sri Lanka for trust funds following the mission of Mr Marei in February. While most often the requests are for financial assistance there are a number of well documented request for precisely defined technical assistance, mostly in the form of facilitating the recruitment of foreign experts through UNIDO roster or information network:

- Samuel and Son

This engineering company has requested the help of UNIDO to recruit two low cost experts on short-term assignment , which could be extended. UNIDO has proposed two chinese experts who fit inside the company affordable budget. However the company would like UNIDO to take in charge the airfare and assist in enhancing their salary.
Status : Request transmitted to Mr Marei. Waiting for his reply

- Ceylon Glass Company

CGCo has requested the services of an expert in glass container manufacture for a period of 1 year to help in implementing a major development project.
Request transmitted to Mr Marei

- Glassware project with Lanka Ceramic

This company has requested a feasibility study regarding the establishment of a joint venture for producing glassware.
Mr Marei has asked us to prepare terms of references and composition of team of experts with Lanka Ceramic.

- Mc Callum Brewery

This company, the second of the two brewery in Sri Lanka wants to start production of table water and has approached UNIDO for technical assistance. Contact have been arranged in Colombo through the French embassy to approach french firms who could be interested in a joint venture and have an exploratory mission financed through the french contribution to IDF.
Status : waiting for the formal application of Mc Callum Brewery

- DIMO

This company has asked the assistance of UNIDO to recruit at its own cost a long term expert in bus body construction. A suitable expert has been found by UNIDO.

Annex 2

PERSONS CONSULTED

Mr A.S. Jayawardena
Secretary
Ministry of Industries, Science and Technology

Mr K. Austin Perera
Additional Secretary
Ministry of Industries, Science and Technology

Mr G. Gunawickrema
Director Management and Manpower Development Division
Ministry of Industries, Science and Technology

Mr Luxman Siriwardena
Director Investment Division
Ministry of Industries, Science and Technology

Mrs V. Ratnayake
Ministry of Industries, Science and Technology

Mr Tilak Collure
Director Industrialization Commission
Ministry of Industries, Science and Technology

Mr T. Maxwell
Adviser on Industrialization
Ministry of Industries, Science and Technology

Mr C.D.R.A. Jayawardene
Deputy Director-General, Sri Lanka Standards Institution
Ministry of Industries, Science and Technology
(National Project Director DP/SRL/86/007)

Dr P.M. Jayatissa
Director, Ceylon Institute of Scientific and Industrial Research
Ministry of Industries, Science and Technology
(National Project Director DP/SRL/86/016)

Ms Subadra Jayasinghe
Officer-in-Charge, Agro Industries Section
Ceylon Institute of Scientific and Industrial Research

Dr U.M. Senanayake
Officer-in-Charge, Natural Products Section
Ceylon Institute of Scientific and Industrial Research

Professor Mieczyslaw Muraszkiewicz
Industrial Technology Market Information Network Feasibility Study
Ministry of Industries, Science and Technology
(Project Coordinator DP/SRL/91/007)

Mr Viacheslav E. Klimov
ITMIN Feasibility Study

Ms Nalini Madanayake
Deputy Director, External Resources Division
Ministry of Finance

Mr S.A. Karunaratne
Director, National Planning Department
Acting Secretary
Ministry of Policy Planning and Implementation

Dr P. Alailima
Director, Human Resources Division
National Planning Department
Ministry of Policy Planning and Implementation

Ms Chitra Perera
Deputy Director, National Planning Department
Ministry of Policy Planning and Implementation

Mr Terence F. Kelly
Resident Economic Adviser, National Planning Department
Ministry of Policy Planning and Implementation

Mr G.A.K. Gajaweera
Director (Training)
Institute for Construction Training and Development
Ministry of Policy Planning and Implementation

Mr G. Weerakoon
Commissioner of Labour
Department of Labour and Vocational Training

Mr T. Hapangama
Deputy Commissioner of Labour, Manpower Division
Department of Labour and Vocational Training

Mr P.M. Leelaratne
Senior Assistant Secretary
Ministry of Youth Affairs and Sports

Professor Dayantha S. Wijesekera
Vice-Chancellor, The Open University of Sri Lanka
Chairman, Tertiary and Vocational Education Commission
Ministry of Youth Affairs and Sports

Professor Willie Mendis
Director-General, Tertiary and Vocational Education Commission
Ministry of Youth Affairs and Sports

Mr H.S. Wanasinghe
Chairman, Human Resources Development Council
Ministry of Youth Affairs and Sports

Mr A.J.M. Muzammil
Chairman,
National Apprentice and Industrial Training Authority
Ministry of Youth Affairs and Sports

Mr W. Jayamaha
Secretary, Ministry of Handloom Industries and Textiles
Chairman, Textile Training and Services Centre

Mr E. Pararajasingham
Director
Textile Training and Services Centre
(National Project Director DP/SRL/87/012)

Mr A.H.W. Saheed
Marketing Specialist, Textile Training and Services Centre

Mr Minal Perera
Weaving Specialist, Textile Training and Services Centre

Mr Joseph Fernando
Spinning Specialist, Textile Training and Services Centre

Mr D.P. Gunawardene
Training Specialist, Textile Training and Services Centre

Dr M.M.J.W. Herath
Director Technical
Ministry of Minerals and Mineral Based Industries
(National Project Director US/SRL/78/207)

Mr B.D. Sarath R. Silva
Assistant General Manager (Research), Lanka Ceramic Limited
Ceramic Research and Development Centre

Mr Ranjan Rodrigo
Foundry Development and Services Institute
(National Project Director DP/SRL/89/014)

Mr H.F. Nanayakkara
Foundry Manager, Industrial Development Board
Ministry of Tourism and Rural Industrial Development

Mr Asoka N. Senanayake
Director-General, National Institute of Business Management

Mr C.G. Jayasuriya
Secretary General, The Ceylon Chamber of Commerce

Mr Chandra Silva
Assistant Secretary, The Ceylon Chamber of Commerce

Mr J. Sothinathan
Secretary General, Ceylon National Chamber of Industries

Mr Gamini De Silva
Group Director - Human Resources, Singer
President, Institute of Personnel Management

Ms Sumitra N. Fernando
Group Personnel Manager, Aitken Spence & Co Ltd
Secretary, Institute of Personnel Management

Mr S. Devendra
Manager, Human Resources, Ceylon Glass Co Ltd

Mr N.H.S. Bastian
Managing Director, Delmege Forsyth & Co (Paints) Ltd

Mr H.D. Wijayanandana
Executive Director, Harischandra Mills Ltd, Matara

Mr Changa J. Samaraweera
Director, Bartleet and Company Ltd

Mr R.S.R. Abeygunawardane
General Manager, Kelani Tyres Limited
(National Project Director DP/SRL/86/009)

Mr N.B. Piyasena
Manager, Human Resources Development
Kelani Tyres Limited

Dr Abhaya Attanayake
Managing Director, Sri Lanka Business Development Centre

Ms Swarna Kodagoda
Deputy Executive Director - Entrepreneur Development
Sri Lanka Business Development Centre

Professor P.A. De Silva
Head, Department of Mechanical Engineering and CAD/CAM Centre
University of Moratuwa
(National Project Director DP/SRL/86/014)

Dr S. Rohan Tittagala
Senior Lecturer in Mechanical Engineering
University of Moratuwa

Miss S.M.C. Fernando
Probationary Lecturer in Mechanical Engineering
University of Moratuwa

Mr H.B. Masinghe
Director - Promotion & Services
Greater Colombo Economic Commission
(National Project Director DP/SRL/87/007)

Mr N.S. Bogoda
Senior Executive - Projects, National Development Bank
(Participant in COMFAR seminar, Manila, 1989)

Ms W.S. Madurawela
Executive - Projects, National Development Bank
(Participant in Investment Feasibility programme, Turin, 1990)

Mr S.L.C. Peiris
Executive - Projects, National Development Bank
(Participant in Industrial Project Preparation programme,
Ahmedabad, 1991)

Mr R.A.R. Rabel
Mechanical Engineer (Locomotives)
Sri Lanka Railways
(Participant in Rolling Stock Rehabilitation programme,
Derby, U.K., and Bangkok, 1991)

----o----

Mr André Vinette
Counsellor (Development), Canadian High Commission

Mr Wienand Staring
First Secretary, Royal Netherlands Embassy

Mr J. Iida
Assistant Resident Representative, JICA

Mr M. Kawasaki
Assistant Resident Representative, JICA

Mr G.W. Kaveendraraja
Coordinator, JICA

Mr Klaus Schneider
German Project Manager, Apprentice Training Institute

----o----

Mr J.K. Robert England
Resident Representative, UNDP

Mr Bernabe Garcia
Deputy Resident Representative, UNDP

Mr Saliya Tilakaratna
Senior Fellowship/Recruitment Officer, UNDP

Mr Roberto Bentjerodt
Senior Operations Officer, The World Bank

Mrs Brita Östberg
UNICEF Representative, Sri Lanka and Maldives

Mr Guy B. Scandlen
Programme Officer (Planning/Evaluation), UNICEF

Dr Hans G.P. de Knocke Van der Meulen
Country Director, United Nations Population Fund

Mr B.C. Srivastava
Director, ILO

Mr Peer Hijmans
Representative, FAO

Mr Jean Marc Bonnamy
UNIDO Country Director

Ms Nicole Dewez
UNIDO JPO

Mr Bernard Seneviratne
UNIDO