JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

MINISTRY OF CONSTITUTIONAL AFFAIRS AND INDUSTRIAL DEVELOPMENT THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

FOLLOW-UP STUDY

ON

INDUSTRIALIZATION AND INVESTMENT PROMOTION IN THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA

(ESTABLISHMENT OF SMALL AND MEDIUM INDUSTRY DEVELOPMENT CORPORATION)

March 2001

KRI INTERNATIONAL CORP.

MPI JR 01-039 **PREFACE**

In response to a request from the Government of the Democratic Socialist Republic of Sri

Lanka, the Government of Japan decided to conduct the Master Plan Study for

Industrialization and Investment Promotion in Sri Lanka and the study was implemented by

the Japan International Cooperation Agency (JICA) from February 1999 to June 2000.

This study was implemented as a Follow-up study of the above Master Plan Study, focusing

on the plan of Small and Medium Industries Development Corporation (SMIDEC) in Sri

Lanka proposed in the Master Plan Study. JICA sent a study team, led by Mr. Hajime

Koizumi, President of KRI International Corporation, and organized by members of KRI

International Corporation to Sri Lanka twice from November 2000 to March 2001.

The team held discussion with the officials concerned of the Government of Sri Lanka, and

conducted related field surveys. After returning to Japan, the team conducted further studies

and compiled the final results in this report.

I hope this report will contribute to Small and Medium Industries development in Sri Lanka

and to the enhancement of friendly relations between our two countries.

I wish to express my sincere appreciation to the officials concerned of the Government of Sri

Lanka for their close cooperation throughout the study.

March 2001

Kunihiko Saito

President

Japan International Cooperation Agency

March 2001

Mr. Kunihiko Saito

President

Japan International Cooperation Agency (JICA)

Letter of Transmittal

It is with great pleasure that we submit the Final Report of the "Follow-up Study on Industrialization and Investment Promotion in Sri Lanka" with specific attention to the establishment of Small and Medium Industry Development Corporation (SMIDEC). The Study has been completed by joint efforts of the Working Group members assigned by the Ministry of Constitutional Affairs and Industrial Development (MCAID) and our Study Team.

The Study has worked out a plan to establish SMIDEC in order to support development of SMIs in Sri Lanka. SMIDEC is designed to serve as a one-stop-shop for (i) technical and management advice, (ii) management information service, (iii) venture and incubation promotion, and (iv) credit guarantee service. In view of the fact that SMIs are in crying need of technical, managerial and financial support, it is expected that SMIDEC would greatly contribute for development of SMIs all over the country. The Study Team hopes that this Final Report will serve for the establishment of SMIDEC and for the consolidation of industrialization in Sri Lanka.

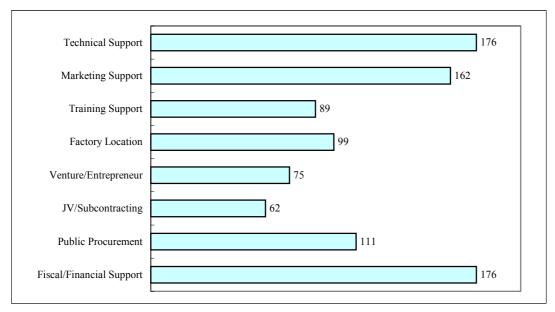
Out Study Team would like to take this opportunity to express its heartfelt gratitude for kind cooperation extended by MCAID and all other parties concerned in Sri Lanka. This Final Report is a fruit of excellent collaboration of all participants in this Study.

Hajime Koizumi

Study Team Leader

SUMMARY

- The Master Plan Study for Industrialization and Investment Promotion in Sri Lanka, conducted by MID and JICA in 1999-2000, has recommended a number of measures to be taken by the public and private sectors for accelerated industrial development towards 2010. The establishment of the Small and Medium Industry Development Corporation (SMIDEC) is one of the measures recommended for improvement of the technical, managerial and financial situation of SMIs. This study has been carried out as a follow-up to the Master Plan Study with the specific objectives to formulate a plan for the establishment of SMIDEC.
- It is reported that SMIs in Sri Lanka account for 90% of establishments, 70% of employees and 55% of gross value added in the industrial sector. However, the policy for development of SMIs has not been clearly defined in Sri Lanka. There is no fundamental legislation nor laws specifically enacted for SMI development, and no ministry nor public institute has been solely responsible for policy making and its execution. The public supports extended to SMIs are quite limited in Sri Lanka if compared to the support available in the neighboring countries. For instance, the public institutes in Malaysia offer a variety of technical and financial supports to SMIs and have consolidated the foundation for industrial development.
- SMIs have, at present, various constraints technically, managerially and financially. Major technical constraints are low technology level, obsolete production machinery and equipment, lack of skilled labor, low productivity, inadequate quality control, lack of market information and marketing capability. Managerial constraints are low management skills, inadequate accounting practice and documentation, poor utilization of market information, and retarded computerization. Financial constraints involve difficulty in borrowing, inability to provide collateral, high interest rates, and premature venture capital. According to the questionnaire surveys, SMIs are in crying need of technical, managerial and financial supports. Although some measures have been taken by the government (e.g., credit lines expanded to SMIs), they are yet insufficient to make SMIs competitive and sustainable in the global economy.



Note: Plural answers of 204 enterprises surveyed.

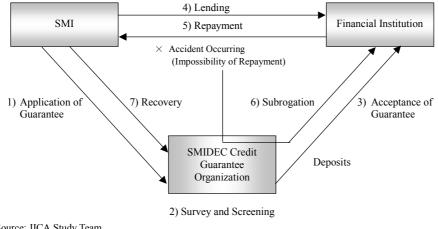
Source: JICA M/P Questionnaire Survey

Public Support Expected by Industries

- It is proposed that SMIDEC be established as a powerful institute to support SMIs in Sri Lanka. The establishment of SMIDEC will have four objectives; i.e., (i) to support self-efforts of SMIs technically, managerially and financially, (ii) to contribute for sound SMI development and consolidation of the industrial sector, (iii) to support creation and stabilization of employment, enhancement of production, productivity and competitiveness, and (iv) to contribute for balanced regional and sectoral development over the country. Additionally, it is expected that the establishment of SMIDEC will also contribute to alleviation of poverty caused by unemployment, undeveloped technology and management, and unbalanced distribution of resources.
- SMIDEC is planned to have four arms to support SMIs; i.e., (i) technical and management advice (TMA), (ii) management information service (MIS), (iii) venture and incubation promotion (VIP), and (iv) credit guarantee organization (CGO). SMIDEC will function as a one-stop-shop to support SMIs all over the country.
- Technical and Management Advice (TMA) is to support SMIs by means of technical consultation on production and management of the manufacturing activities, aiming at enhancement of their productivity, profitability, industrial linkages, and resultant competitiveness. TMA will also provide training programs for entrepreneurs and employees. It is planned that TMA will provide first-hand consultation, free of charge (about 250 cases a

year under Scenario 1), consultation services at reasonable costs (about 100 cases a year under Scenario 1), and training services (about 24 courses a year). It is expected that foreign experts would be retained at least during the start-up period of two years under the technical assistance of international cooperation agencies and they would train and upgrade local experts.

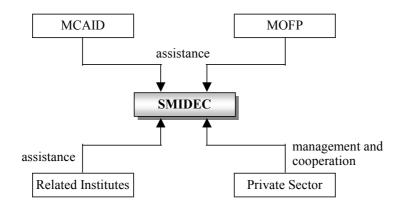
- Management Information Service (MIS) is to support SMIs in analyzing management of industrial enterprises, in maintaining sound accounting, taxation and auditing practices, in promoting vertical and horizontal linkages, and in promoting computerization for industrial management. MIS will also provide training programs in industrial management. It is planned that MIS will provide first-hand consultation, free of charge (about 250 cases a year under Scenario 1), consultation services at reasonable costs (about 100 cases under Scenario 1), and training services (about 24 courses). Foreign experts are also expected to support MIS operations during the start-up period.
- Venture and Incubation Promotion (VIP) has two arms; (i) venture promotion and (ii) incubation promotion particularly for the IT industry. Venture promotion aims at activating entrepreneurship by assisting the entrepreneurs to become full-fledged companies with professional advice on technology, marketing, management and finance. It is planned that about 45 ventures a year will receive a three-month training course in technology, marketing, management and finance. IT incubation promotion, on the other hand, aims at incubating the innovative ideas, providing the start-up IT enterprises with business facilities (up to the initial period of two years), technical advice, marketing and management advice, and financial assistance. It is planned that about 30 incubatees will be served a year.
- OP Credit Guarantee Organization (CGO) is proposed as the fourth arm of SMIDEC, because the existing credit guarantee system in the Central Bank is inactive with its outstanding guarantee amount exceeding the planned guarantee amount. The demand for credit guarantee is high because the on-going credits to SMIs require 100% collateral. A new credit guarantee organization in SMIDEC will have proper staff for research and examination, mid-term control and indemnity right control. It is planned that the amount of loans under credit guarantee is Rs.2~2.5 million and that partial guarantee (80% of loan amount) is applied. The fee for credit guarantee will be 1.6% of outstanding loan each year (the full operation period). The scale of guarantee will be Rs.5~6 billion (about 2,000~2,500 cases of guarantee) under Scenario 1.



Source: JICA Study Team

Flows of Credit Guarantee System

10 The legal status of SMIDEC has been studied with respect to four alternatives; i.e., (i) a specific governmental institute, (ii) a semi-governmental management corporation, (iii) a public company, and (iv) a private corporation or company. As a result of comparative studies, it is planned that SMIDEC will be established as a "public company". SMIDEC should be a credit-worthy institute with the participation of both the public and private sector, and it should mobilize the active private power for management to make its operation efficient and sustainable. It is expected that MCAID, DFIs, state banks, private banks and private institutes would contribute for equity capital of SMIDEC, and the government (MOFP) would extend a grant support to SMIDEC.



Participants in Public Company

11 SMIDEC, as a public company, is organized under the Board of Directors. The members of the Board will be assigned by the participants in the equity capital and a representative of SMIs. For operational management, two alternatives have been studied. The first alternative is that the President, Executive Directors and management staff are appointed individually. A key issue of this system is whether qualified personnel are appointed to assume responsibility for operations. The second alternative is that the SMIDEC operations are entrusted to a management consulting firm or consortium to be selected through a competitive bidding. The terms and conditions of the contract shall be agreed upon between the management firm or consortium and SMIDEC. It is recommended that both alternatives be studied further by the Board of Directors.

- In addition to the base case of TMA, MIS, VIP and CGO operations (Scenario 1), the expanded operations (50% expanded for TMA, MIS and VIP, and 75% expanded for CGO) have been alternatively evaluated. An alternative case for the expanded operations is to expect enlarged finance by loans of the international financial institutions (Scenario 2), or to expect equity investment and loans of the international financial institutions (Scenario 3).
- Under Scenario 1, SMIDEC will be funded by domestic finance alone with the equity capital of Rs.450 million and the government grant of Rs.200 million. The equity holding ratio will be 55.6% for the private sector and 44.4% for the government. SMIDEC, as a project, is evaluated to be financially viable with the internal rate of return (IRR) estimated to be around 23%. The cash flow analysis verifies that the SMIDEC operations are financially sustainable.
- Under Scenario 2, SMIDEC will expect long-term loans of Rs.1,250 million from the international financial institutions to expand its operations, in addition to the equity capital and government grant under Scenario 1. The expanded operations would bring about more returns, with IRR estimated to be 43~45%. Scenario 2 is also evaluated to be financially viable. Scenario 3 plans to receive Rs.400 million equity investment at the set-up period and long-term loans of Rs.850 million in the second year of operation, both from the international financial institutions. The same IRR is expected, and Scenario 3 will further improve the debt/equity ratio of the SMIDEC operations.
- Since the proposed establishment of SMIDEC is evaluated to be financially viable, in every case of alternative scenarios, it is recommended that SMIDEC be established as early as possible. It is further recommended that a Committee be organized by possible domestic investors, both private and public, and the Committee would initiate legal procedures and fund raising from the domestic and international sources. The Committee or MCAID is also suggested to take necessary actions to secure technical assistance of the international cooperation agencies to retain foreign experts in technical and management advice.

FOLLOW-UP STUDY ON

INDUSTRIALIZATION AND INVESTMENT PROMOTION

IN SRI LANKA

(ESTABLISHMENT OF SMIDEC)

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Development Corporation Limited.

Draft Article of Association of Small as Medium Industry Development Corporation Limited.

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ABBREVIATIONS

ADB Asian Development Bank

ASEAN Association of Southeast Asian Nations

BOI Board of Investment, Sri Lanka

CGO Credit Guarantee Organization, SMIDEC DOCS Department of Census and Statistics

EDB Export Development Board, Sri Lanka

FDI Foreign Direct Investment GDP Gross Domestic Product

GVA Gross Value Added

IDB Industrial Development Board

IT Information Technology

JBIC Japan Bank for International Cooperation
JICA Japan International Cooperation Agency

JSMEC Japan Small and Medium Enterprise Corporation

JV Joint Venture

MCAID Ministry of Constitutional Affairs and Industrial Development

MID Ministry of Industrial Development, Sri Lanka
MIS Management Information Service, SMIDEC

MOFP Ministry of Finance and Planning
MOST Ministry of Science and Technology

MVTRI Ministry of Vocational Training and Rural Industries

NDB National Development Bank

NIBM National Institute of Business Management

R&D Research and Development

SAARC South Asia Association for Regional Cooperation

SAFTA SAARC Free Trade Area

SEEDS Sarvodaya Economic Development Service SMED Small and Medium Enterprise Developers

SMI Small and Medium Industry

SMIDEC Small and Medium Industry Development Corporation

TMA Technical and Management Advice, SMIDEC

UNIDO United Nations Industrial Development Organization USAID United States Agency for International Development

VIP Venture and Incubation Promotion, SMIDEC

WB World Bank

WTO World Trade Organization

Currency Equivalents

1 US Dollar = 85 Sri Lanka Rupees1 US Dollar = 116 Japanese Yen(As of February 2001)

I. INTRODUCTION

1.1 Background and Objectives

The industrial sector in Sri Lanka has grown steadily in the last decade, particularly such labor-intensive industries as textile, apparel and leather industries, and it accounted for 26% of GDP in 1999. Out of the total value added in the industrial sector, contribution of the manufacturing sector remained relatively low, or 16.0-16.5% of GDP, in 1987-1999. With the open market policy adopted by the government as a member country of WTO, as well as under the Indo-Lanka Free Trade Agreement agreed in March 2000 and the SAARC Free Trade Area (SAFTA) envisaged in the South Asia, the manufacturing sector in Sri Lanka will face harder competition than before, and the small and medium industries (SMIs) will become more vulnerable to trade liberalization.

In February 1999 - July 2000, the Ministry of Industrial Development (now called the Ministry of Constitutional Affairs and Industrial Development or MCAID) and JICA prepared the Master Plan for Industrialization and Investment Promotion in Sri Lanka. Under the Master Plan Study for Industrialization, it has been recommended that some supportive measures be taken particularly for development of SMIs in Sri Lanka. The Master Plan Study for Industrialization suggested that a SMI Development Corporation (SMIDEC) be set up for technical and financial support to SMIs. Without such a support, SMIs will become much more vulnerable and it will create social and economic problems that would require greater efforts and higher cost to overcome.

At the request of MCAID, JICA decided to extend technical cooperation in formulating a plan for establishment of SMIDEC as a follow-up to the Master Plan Study for Industrialization. The objectives of the follow-up study are to review the current situation of supporting systems to SMIs and to prepare an operational plan of SMIDEC with a view to promoting SMIs for further industrial and socio-economic development of Sri Lanka.

Since the Master Plan Study for Industrialization focused on development of SMIs, not the small and medium enterprises (SMEs), the follow-up study will continue to concentrate its attention to SMIs (manufacturing industries and IT industries) or how to support SMIs through establishment of SMIDEC.

1.2 Execution of The Study

For the follow-up study, JICA organized a team of experts assigned by KRI International Corp (a member of the Nippon Koei Group, specialized in economic and social studies). While, MCAID organized a Working Group (WG) with its members from the public and private sectors, to jointly work with JICA experts. The WG members and JICA Team members are listed on the following page.

The follow-up study was initiated in the first week of November 2000. At the outset of the study, the Inception Report was presented and discussed among MCAID, WG and JICA. The Progress Report was submitted in the middle of December 2000. In the course of the study in Sri Lanka, discussions have been held with various institutions concerned, including the following public and private institutions:

- (i) SMIs (including factory inspection)
- (ii) Associations (e.g., CCC, CNCI, NCCSL, FCCISL, and SLCSI)
- (iii) Public Institutions (e.g., IDB, NIBM, BOI, and EDB)
- (iv) Financial Institutions (e.g., Central Bank, NDB, DFCC, State Banks, and PCIs)
- (v) International Financial Institutions (e.g., WB, IFC, ADB, and JBIC)

The Draft Report was submitted to present a basic plan for establishment of SMIDEC as a material for discussion in February-March 2001. The results of discussions have been incorporated into this Final Report.

Table 1.1 Study Members

Name	Position	Institution
MCAID Management		
Mr. W.C. Dheerasekara	Secretary	MCAID
Mr. H.L.A. De Silva	Director	MCAID
Ms. T.M.B. Manike	Asst. Director	MCAID (Coordinator)
Working Group Member	s	
Mr. D. Weerasinghe	Dy. General Manager	Bank of Ceylon
Mr. H.M. Gunesekera	Director (National Planning)	Dept. of National Planning
Mr. S. Jeyawarman	General Manager	National Assets Management Ltd.
Mr. Sunil Lankathilaka	Senior Economist	Central Bank of Sri Lanka
Mrs. Mallika Perera	Asst. General Manager	People's Bank of Sri Lanka
Mr. Nissanka Perera	Senior Manager-credit	Bank of Ceylon
Mr. Aloy Jayawardena	Chairman	Chamber of Small Industry
Mr. A.M.A. Cader	Senior Manager	Merchant Bank of Sri Lanka
Mr. L.S.G. Tilekeratne	Addl. Director General	Export Development Bank
Mr. W.D. Premachandra	Manager (SMI)	National Development Bank
Mr. K.P.N.S. Karunagoda	Project Analyst	Central Bank of Sri Lanka
Mr. W.L. Mendis	Finance Manager	Industrial Development Board
Mr. M. Siwakumaran	Legal Draftsman	Legal Draftsman Department
Mr. N.G. Kularatne	Director General	National Institute of Business Management
Mr. D.K. Hettiarachchi	Registrar of Companies	Dept. of Registrar of Companies
JICA Study Team		
Mr. H. Koizumi	Team Leader	KRI
Mr. T. Takaba	Member	KRI (SMI expert)
Mr. H. Terashita	Member	KRI (Credit Guarantee expert)
Ms. K. Fukuda	Member	KRI (Financial expert)

II. SMIs IN SRI LANKA: AN OVERVIEW

2.1 Situation of SMIs

1) Definition of SMIs

There is no standard definition for SMIs. Often, definitions vary from institution to institution and from country to country. Generally, SMIs are defined in terms of amount of revenue, amount of capital, value of fixed assets, the number of employees, or the nature of the enterprise, i.e. whether the industry is in the formal or informal sector.

The Industrial Development Board (1994) has defined a small and medium industry on the basis of the size of the capital and the number of employees. An establishment is defined as a small industry if its capital investment in plant and machinery does not exceed Rs. 4 million and its total number of regular employees does not exceed 50 persons. If the number of workers was less than 5, such enterprises were defined as cottage industries while the industries with the number of employees ranging between 50-99, were defined as medium scale industries.

The World Bank, on the other hand, has defined the small-scale industries in Sri-Lanka by the number of employees as follows:

Enterprises with less than 49 employees - Small industries

Enterprises with employees between 50-99 - Medium scale industries

Enterprises with over 100 employees - Large scale industries.

For the "Sri Lanka Small and Medium Industries Impact of Liberalization and Constraints for Development" conducted by SMED in 1999, SMIs were defined on the basis of the number of persons employed as follows:

Less than 9 persons - Very small scale industries (VSSI)

10 to 19 persons - Small scale industries (SSI)

20 to 99 persons - Medium scale industries 1 (MSI 1) 100 to 199 persons - Medium scale industries 2 (MSI 2)

Over 200 persons - Large scale industries (LSI)

It appears reasonable that the number of employees is the basis for definition, because i) the number of employees is an appropriate common indicator to distinguish the size of

enterprises regardless of the lines of business, and ii) amount of capital investment has to be revised frequently due to inflation. Consequently, SMIs in this report are defined as follows:

Small scale industries less than 50 employees

Medium scale industries 50 to 99 employees

Large scale industries over 100 employees

2) Existing SMIs

According to the industrial census conducted in 1983, there were 102,721 registered and unregistered industrial units in Sri Lanka with employment of 639,256. Among them, the number of industries with less than five employees accounted for 84% of the total, contributing 8% of total production value and 7% of gross value added (GVA). In 1997, a report was submitted to the Development and Review Committee on Small and Medium Scale Industries in the Industrialization Commission that the SMI units were 50,000 registered and 125,000 unregistered. Another survey conducted by UNDP estimated that SMIs with a fixed asset of Rs.16 million or less accounted for 90% of the establishments, 70% of employment, and 55% of GVA in the private sector.

The Annual Survey of Industries 1996 numbered 3,030 manufacturing establishments with total employment of 477,664 persons. This survey is based on enterprises with 25 employees or more. In the course of the Master Plan Study for Industrialization (1999-2000), an interview-type questionnaire survey was conducted for 357 industrial establishments listed on the Annual Survey in the categories of the selected target sub-sectors, mostly in the Greater Colombo area. According to this questionnaire survey, 62% of the registered firms were SMIs as tabulated below.

Table 2.1 SMIs in Target Industries

	Subsector	Establishment in Statistics*1	Enterprises Surveyed*2	No. of SMIs	Rate of SMIs (%)
322	Apparel	430	104	29	27
323	Leather	30	50	35	70
355	Rubber	213	50	37	74
356	Plastic	57	53	31	58
382	Machinery	42	50	49	98
383	Electric/Electronic	42	50	40	80
	Total	814	357	221	62

Note: *1 Number of establishments recorded in 1996 Annual Survey of Industries, MID

Source: JICA/UNIDO Questionnaire Survey

^{*2} Number of enterprises surveyed by JICA and UNIDO Random sampling for the apparel and leather industries

Another questionnaire survey was conducted by the Economic Research Department on the small scale industries in 1998. Around 20,190 small scale manufacturing industries with less than 50 employees had been registered with the local government bodies over the country at the end of 1997. Out of 5,000 samples selected at random, 706 responses were collected and analyzed. This survey disclosed that there were many small industries (less than 25 employees) unregistered in the central government and that their value added ratio was less than the average of the centrally registered SMIs (42%), as shown in the tables below.

Table 2.2 Size of Small Industries by Employment

	1-4		5.	-9	10-	-25	Ove	r 25	Total
	No.	%	No.	%	No.	%	No.	%	Total
1 Food, beverages and tobacco products	204	72.1	54	19.1	20	7.1	5	1.8	283
2 Textiles, apparel and leather products	33	71.7	8	17.4	2	4.3	3	6.5	46
3 Wood and wood products	114	78.6	23	15.9	8	5.5	0	0.0	145
4 Paper and paper products	19	76.0	5	20.0	1	4.0	0	0.0	25
5 Chemical, rubber and plastic products	8	42.1	7	36.8	4	21.1	0	0.0	19
6 Non-metallic mineral products	44	52.4	21	25.0	15	17.9	4	4.8	84
7 Basic metal products	2	66.7	1	33.3	0	0.0	0	0.0	3
8 Fabricated metal products	50	75.8	13	19.7	2	3.0	1	1.5	66
9 Other products	19	54.3	6	17.1	10	28.6	0	0.0	35
All categories	493	69.8	138	19.5	62	8.8	13	1.8	706

Source: Economic Research Department, "Present Situation and Problems of SMI Enterprises"

Table 2.3 Value of Production and Value Added by Small Industries

	Value of production			Value added			Value added ratio	
	1996	1997	%	1997	1996	%	1996	1997
1 Food, beverages and tobacco products	110,751,616	134,564,543	21.5	27,621,236	34,597,048	25.3	24.9	25.7
2 Textiles, apparel and leather products	17,304,575	18,975,800	9.7	4,527,102	5,342,605	18.0	26.2	28.2
3 Wood and wood products	16,019,104	19,884,694	24.1	8,114,115	9,899,472	22.0	50.7	50.1
4 Paper and paper products	2,460,400	3,132,100	27.3	1,051,800	1,259,518	19.7	42.7	40.2
5 Chemical, rubber and plastic products	4,298,734	5,134,094	19.4	1,329,260	1,522,148	14.5	30.9	29.6
6 Non-metallic mineral products	37,993,459	44,007,965	15.8	19,798,705	23,681,063	19.6	52.1	53.8
7 Basic metal products	225,000	285,000	26.7	49,000	59,000	20.4	21.8	20.7
8 Fabricated metal products	6,463,845	7,760,022	20.1	3,401,555	4,118,944	21.1	52.6	53.1
9 Other products	10,550,151	12,960,866	22.9	3,863,134	4,938,345	27.8	36.6	38.1
Total	206,066,884	246,705,064	19.7	69,755,907	85,418,143	22.5	33.9	34.6

Source: Economic Research Department, "Present Situation and Problems of SMI Enterprises"

3) Associations

For cooperation and assistance to SMIs, there are five Chambers in Sri Lanka as listed on the following page. Their members are not restricted to SMIs, except for the Sri Lanka Chamber of Small Industry, and these Chambers pay due attention to development of SMIs.

Table 2.4 Industry-related Chambers

Name of Chamber	Member Firms
Ceylon Chamber of Commerce	515
Ceylon National Chamber of Industries	320
National Chamber of Commerce of Sri Lanka	375
Federation of Chambers of Commerce and Industries of Sri Lanka	8,000
Sri Lanka Chamber of Small Industry	362

Source: Each Chamber

In addition, some industrial unions are organized, and there are some cooperative institutes for SMIs, like the Sarvodaya Economic Enterprise Development Service (SEEDS).

2.2 Support to SMIs

To support SMI development in Sri Lanka, the public institutions are extending technical assistance, management information assistance, and financial assistance. The current systems of support to SMIs in Sri Lanka with respect to technical support, management and information support, financial support and credit guarantee system are briefly introduced below, together with the explanation of systems applied in Malaysia and Japan. The case of Malaysia is referred to because the Malaysian government set up the Malaysian SMIDEC specifically for support to SMIs, and the case of Japan is introduced to understand a variety of supporting programs for SMI development.

1) Technical Support to SMIs

Technical support to SMIs in Sri Lanka is extended mainly by the public institution, i.e., the Industrial Development Board (IDB). A non-governmental organization called the Small and Medium Enterprise Developers (SMED) extends technical and managerial consultation services and seminars. There is little technical support extended by the academia to SMIs.

IDB is one of the most important implementation institutions for improvement of industrial technology under MCAID supervision. IDB was established by the IDB Act No.361069 and its mandate is to provide technical and managerial services towards the private sector, especially SMIs. In 1999, IDB extended assistance for establishment of 1,144 new units with employment of 3,766 persons. IDB also extended technical assistance to 818 existing units. About 75% of the units were small industries and 25% were medium industries.

IDB's technical assistance, however, has not been evaluated high by the recipients of assistance or SMIs. According to the post-evaluation of the World Bank and ADB sponsored SMI Lending (I to IV), technical assistance envisaged from IDB was not evaluated effective. It is partly because IDB is more oriented to industrial research and it is not specialized in providing professional consulting services to SMIs. Usually, the technical services required by SMIs are widely ranged from technical to managerial and financial issues, and integrated advices are required.

SMED is a non-governmental organization formed in 1989 by the Federation of Chamber of Commerce and Industry in Sri Lanka and the Friedrich-Naumann-Stifung of Germany to promote development of SMIs in Sri Lanka. The primary objective of SMED is to promote a market economy through improvement of individual performances of SMIs. SMED extends 70 to 100 consultation services a year and holds 30-40 seminars in the technical and managerial fields. SMED services are charged at about 20% of cost for first consultation, full cost for specialized consultation and seminars, and full cost plus for more specialized consultation.

In the case of Malaysia, technical support to SMIs is extended through the **Industrial Technical Assistance Fund (ITAF)** created under the Malaysian SMIDEC in 1990. ITAF is to enhance quality, productivity and cost competitiveness among SMIs. The eligibility to ITAF assistance is (i) incorporated under the Company Act 1965, (ii) engaged in manufacturing activities with full-time employees of less than 150 and with annual turnover of less than RM 25 million, and (iii) at least 70% of equity are held by Malaysians. ITAF has four funding schemes for technical assistance to SMIs.

ITAF 1 (Business Planning and Development Scheme) is an assistance scheme in the form of a matching grant to SMIs for consultancy and advisory service in business planning and development. The scheme provides matching grants to SMIs for consultancy services in the initial stage of business such as market pre-feasibility studies, technology pre-feasibility and feasibility studies, business planning, studies on market strategy both domestic and export and branding. The maximum grant allocated per company is RM 40,000 and assistance is given in the form of a matching grant where 50% of the project cost is borne by the Government and the remainder is borne by the applicant.

ITAF 2 (Product Development and Process Improvement Scheme) is an assistance scheme in the form of a matching grant to SMIs to improve and upgrade indigenous technology through development of new products, designs and processes, as well as improvement and upgrading of existing processes and improvement of existing products or designs. The

maximum grant allocated per company is RM 250,000 and assistance is given in the form of a matching grant where 50% of the project cost is borne by the government and the remainder is borne by the applicant.

ITAF 3 (Productivity and Quality Improvement and Certification Scheme) is an assistance scheme in the form of a matching grant to SMIs to upgrade productivity and quality and achieve international standards and certification. The scheme provides matching grants to SMIs for quality improvement, development of products, quality control based on customer's requirements, factory auditing, documentation of quality system certification, total quality management scheme and other quality development systems such as 5S, production and planning control (QCC) and total productive maintenance (TPM). The maximum grant allocated per company is RM 250,000 and assistance is given in the form of a matching grant where 50% of the project cost is borne by the government and the remainder is borne by the applicant.

ITAF 4 (Market Development Scheme) is an assistance scheme in the form of a matching grant to SMIs to assist SMIs to enter the export market and enhance competitiveness. The scheme provides matching grants to SMIs for participation in internationally recognized trade exhibitions locally and abroad, participation in trade mission overseas and printing of promotional materials. The maximum grant allocated per company is RM 40,000 and assistance is given in the form of a matching grant where 50% of the project cost is borne by the government and the remainder is borne by the applicant. The performance of ITAF schemes is shown in the table below.

Table 2.5 Approvals under ITAF Schemes (1990-1999) under Malaysian SMIDEC

Scheme	Number	Value (RM million)
ITAF 1	616	8.3
ITAF 2	237	13.1
ITAF 3	531	22.9
ITAF 4	947	6.5
Total	2,331	50.8

Source: Malaysian SMIDEC

In Japan, a variety of programs/projects are extended for technical and managerial advisory services for SMIs. Some of them are briefly introduced below.

(Technology Development Assistance to SMIs)

• Technological Advisor Project

There are many SMIs having unique business ideas but which cannot realize the ideas due to lack of technology. Then, local governments employ or roster technical experts and dispatches them as advisors to SMIs in response to requests of SMIs. The central government partly subsidizes the cost to employ experts.

• Local Frontier Technology Development Program

Local Frontier Technology Development Program is one of the technological development programs with the collaboration between industrial sector and academia in respective regions. In this program, respective local governments select a technology to be studied which is expected to have a significant effect on the regional industry. Then, fundamental and essential technologies will be studied by the public research institutions with the collaboration of academia. And then, the measures for utilization of such technologies will be studied by SMIs. All participating organizations will be subsidized from the central government.

• Local System Technology Development Program

Local System Technology Development Program is another technological development program with the collaboration between industrial sector and academia in respective region. The objective of the project is to study the measures for introduction of advanced production control system such as factory automation system into SMIs. In this program, each local government selects a system to be studied and makes a research plan of the system with the cooperation of the central government. Then, in accordance with the plan, the essential technology composing the system itself will be studied by public research centers with collaboration of academia, and the measures for actual utilization will be studied by SMIs or the group of SMIs. All of the organizations which participate will be subsidized from the central government.

• Subsidization System for Technical Development Expenditure

The Subsidization System for Technical Development Expenditure was established in 1955, for expenditures to develop new technologies or products. Additionally, the research type enterprise portion was set in 1984. This portion subsidizes SMIs for one second of the total expenditure for research and development activities.

(Technology Dissemination to SMIs)

• Technical Exchange Plaza Project

Technical Exchange Plaza Project was established in 1981 for facilitating the mutual technical exchange among SMIs in different industries by setting up a place for such exchange. The Technical Exchange Plazas are established in each prefecture and Japan Small and Medium Enterprise Corporation dispatches advisors to them.

• Loan Scheme for Development of the Frontier Technology

Loan Scheme for Development of the Frontier Technology was established to lead SMIs into the industry of frontier technology by setting up concessional long-term loan scheme for SMIs in frontier technology industry. SMIs are eligible for the loan when they are able to:

- (i) produce products using frontier technology,
- (ii) produce components only used for or raw materials mainly used for frontier technology products, and
- (iii) produce machinery or equipment which is indispensable for frontier technology products

(Managerial Advisory Services for SMIs)

• Management Diagnosis

The Management Diagnosis Project has been undertaken by the local governments with the subsidies from the central government since 1948. Each local government assigns officers for advisory service and is practicing the enterprise diagnosis and the advisory service with cooperation of experts for SMIs. Such enterprise diagnosis ranges from diagnosis for adaptation to the industrial renovation (sustainable business, renovation of business, advance into overseas market) to information diagnosis, and diagnosis for modernization of equipment. At present, the experts for SMIs diagnosis are grouped into three categories (i.e., industry, commercial and information) and there are 16,000 experts all over the country.

• Management Renovation and Dissemination Project

For the Management Renovation and Dissemination Project, each Chamber of Commerce and Industry undertakes the advisory service to small industry for development of management skill and for improvement of technical skill. The project was started in 1960. The project advisors have enough experience and knowledge and include like Certified Public Accountants, Licensed Tax Accountants and Licensed Expert for SMIs Diagnosis. There are 8,700 advisors in Japan. The fee of the advisory services are free for small enterprises.

2) Management and Information Support to SMIs

In Sri Lanka, some institutions provide SMIs with management and market information services. The National Institute of Business Management (NIBM) is a management institute organized under MCAID, and the Export Development Board (EDB) is a marketing support

institute under the Ministry of Internal and International Trade and Commerce and Muslim Religious Affairs and Shipping Development.

NIBM regularly offers training courses in the management field as a degree program, diploma program, certificate program, and short-term program. The number of persons who take lessons at NIBM are about 5,000 persons a year. NIBM also has a roster of professionals for extending management services to SMIs at cost.

EDB is organized to promote exports. It also functions as a center for (i) identification and creation of export-oriented projects and enhancement of export supply base, and (ii) provision of specialized services for export, market promotion, product development, and dissemination of trade information. In 1996, EDB established a Trade Information Network. Through three EDB provincial offices (in Kandy, Kurunegala and Galle), it provides product development and export market information services for SMIs under the program called the "Export-oriented SMI Development in Provinces." It is reported that about 230 persons in the Southern province, 250 persons in the Northwestern province, and 260 persons in the Central province have received EDB services.

In the case of Malaysia, the Malaysian SMIDEC provides various management and information support to SMIs. The **Industrial Linkage Program (ILP)** aims at fostering linkages between SMIs and large enterprises and/or multi-national enterprises for promotion of forward and backward integration among industries. As of the end of 1999, about 120 SMIs have been linked with large and/or multi-national enterprises with sales amount increased by RM 111 million. The Export Development Program (EDP) intends to assist SMIs to venture into export markets. Under this program, ITAF 1 and ITAF 4 schemes have been revised to facilitate SMIs' entry efforts into the export market. As of the end of 1999, about 1,550 projects had been approved with grants totaling RM 14.7 million. The Malaysian SMIDEC holds SMI Showcase (exhibition for SMIs) once a year. In October 1999, the SMI Showcase offered 296 booths for SMIs and attracted 3,560 trade visitors. The Global Supplier Program (GSP) is to promote competitiveness of SMIs to become global supplier to multi-national companies. To this end, the Malaysian SMIDEC has been collaborating with the Penang Skills Development Center and nine electronic multi-national companies located in Penang since March 1999. GSP aims at guiding and upgrading the technological capabilities of existing SMIs as reliable and competitive suppliers to the global operation of multi-national companies. It consists of (i) linkage opportunities for existing and potential suppliers, (ii) training for workers in technological and management skills, and (iii) promotion of partnership between SMIs and multi-national enterprises for development of new products or components through technology transfer.

In the case of Japan, various management and information services are offered to SMIs. A unique program is the **Information Officer Project** that extends information services to SMIs. The Japan Small and Medium Enterprise Corporation (JASMEC) has central and local information centers established in 1973-1989. Each center has a Small and Medium Enterprise Information Research System as a database system for literatures and documents related to SMIs. The **Software Advisor Project** and **Computerization Plaza Project** are to promote computerization of SMIs through dispatch of computer experts to SMIs and promote close communication between SMIs and computer experts.

3) Financial Support to SMIs

Some financial supports are extended to SMIs in Sri Lanka, mainly through the development finance institutions (DFIs). There is also a credit guarantee system though it is inactive at the moment.

NDB and DFCC are DFIs engaged in development finance. They are fundamentally private institutions, though 22% of NDB shares are still owned by the public sector. They play an important role in supplying long-term funding sources for the manufacturing sector. NDB and DFCC together supply about two thirds of total industrial financing, though their share to the total financial sector in terms of assets is only 3.2%. About 69% of NDB loans and 55% of DFCC loans were directed to the industrial sector. Although they still depend heavily on credits extended by the international financing institutions (e.g., IDA, ADB and JBIC), they started to issue debentures to raise their own funds to diversify their operations. SMI Lending (I to IV) sponsored by the World Bank and ADB has been extended through NDB and DFCC. It started in 1979 and ended in 1995 with total loans amounting to US\$184 million. The number of loans under each scheme and the value of each line of credit are summarized below.

Table 2.6 SMI I-IV Loans through DFIs

	SMI I	SMI II	SMI III	SMI IV	Total
Period	1979-81	1982-87	1988-91	1992-95	1979-95
No. of loans	1,741	2,491	2,439	9,065	15,736
Facility (Rs. million)	229	1,059	1,114	5,323	7,725
Facility (US\$ '000)	12,729	36,467	28,593	106,695	184,484

Source: National Development Bank

The World Bank, in its Implementation Completion Report (ICR), evaluates the SMI I-IV lending in such ways that (i) these loan schemes contributed to increase in employment

(about 138,000 persons), production, and export, (ii) performance of PCIs was satisfactory, (iii) the technical assistance portion was also implemented satisfactory, (iv) direct technical assistance to the private sector will be more effective than assistance through IDB, and (v) the government should re-examine the credit guarantee system. On the other hand, the Institute of Policy Study (IPS) evaluates the SMI I-IV that (i) the loans have been concentrated to Colombo area than rural areas, (ii) they have also been concentrated to medium scale enterprises rather than small enterprises, (iii) venture capital will also be necessary, (iv) loan procedures are rather complicated, and (v) technical and managerial assistance is additionally required.

SMILE (I and II) loans are on-lending schemes sponsored by the Japan Bank for International Cooperation (JBIC) for development of SMIs. Sub-loans are extended to enterprises with assets of less than Rs.10 million. SMILE-I has been disbursed in a short period, and SMILE-II is extended at present. Both loans have technical assistance portion (loans for technical consultation services taken by SMIs) though this portion has not been fully utilized.

In the case of Malaysia, financial support to SMIs is extended more deliberately, and SMIs have greater access to financing. The **Financial Packages for SMIs** introduced in 1997 provide SMIs with soft loans for new or expansion projects and working capital. The **Modernization and Automation Scheme (MAS)** aims at providing SMIs with soft loans for purchase of machinery and equipment to modernize and automate their operations. The **Quality Enhancement Scheme (QES)** provides soft loans to Bumiputera SMIs for purchase of machinery and equipment to improve production process and enhance productivity. These loans for SMIs are facilitated through the Malaysian SMIDEC. In addition, the **Fund for SMIs (FSMI)** established in 1998 assists SMIs in business expansion, diversification and export promotion.

In Japan, there are three public financial institutions which extend financial support to SMIs. The **Japan Finance Corporation for Small Business**, established in 1953, extends long-term loans to SMIs for equipment and working capital. The **National Life Finance Corporation**, established in 1949, extends loans for working capital to SMIs. Likewise, the **Shoko Chukin Bank** has been operating since 1949 to extend loans to industrial unions and their member SMIs.

4) Credit Guarantee System

Sri Lanka has a credit guarantee system established since 1978 as an internal unit of the Central Bank. The system, however, is inactive at the moment. Basically, the guarantee line is said to have been Rs.1,000 million with the guarantee fund being Rs.100 million and a guarantee multiplying ratio of 10 times. The maximum guarantee limit per enterprise was Rs.1.6 to 2.0 million.

It is not that the credit is guaranteed directly by the Central Bank, but that when a SMI asks a correspondent bank for a loan, and if the necessity of a loan is acknowledged by the correspondent bank, the correspondent bank requests the same amount of the loan to NDB. Furthermore, NDB asks the Central Bank for the approval and the "credit guarantee". As a result, the financing is realized by the correspondent bank with the form of, so to speak, agency loans by NDB. The correspondent bank pays the credit guarantee fee of 1% of the guarantee amount to the Central Bank and the Central Bank assumes the partial guarantee in proportion to the loan amount (less than 500 thousand rupee - 90%, more than 500 thousand rupee and less than 1 million rupee - 80%, more than 1 million rupee and less than 2 million rupee - 70% and more than 2 million rupee - 60%). The repayment of loan is made by SMI to the correspondent bank, and the correspondent bank remits the sum to NDB.

If a risk occurs, the Central Bank compensates to the correspondent bank. The guarantee operation is completed by mutually sharing the risk amount in portion to the partial guarantee ratio of the Central Bank and the correspondent bank. When the recovery of loan is made subsequently, the recovered amount is distributed among the Central Bank and the correspondent bank according to the partial guarantee ratio. However, no security measures such as reinsurance are prepared for the final loss of the Central Bank.

This system is complicated as a credit guarantee system. Various concerned parties such as SMIs (guarantors are involved in some cases), a correspondent bank, NDB, the Central Bank are involved in a case in a complicated manner, and the relationship of rights, calculation of bearings and procedures are complicated.

Therefore, the scale of guarantee has been rather small. The present outstanding guarantee amount is Rs.2,528 million, which exceeds the planned guarantee amount, and there is no possibility of new credit guarantee.

Historically, a credit guarantee system originated in a mutual guarantee system of an industrial union emerged in Europe at the beginning of the 20th century. Initially, a lot of

credit guarantee organizations in Europe were the closed system for union members. Japan, when transplanted this system, made it open to all SMIs. Therefore, there is considerable difference in the handling volume between the European type and Japanese type.

Development of a modern credit guarantee system in Japan is the result of trial and error over 50 years. Japan realized a large volume of guarantee or the "sea of credit guarantee". At present, the outstanding balance of guaranteed loan to SMIs runs 5 million cases with ¥50 trillion (about US\$500 billion). Consequently, Japan realized "the principles of large numbers" which means the decrease in burden for risks by handling large quantities. Such a success has enabled the system to play the role of making business steady and ensure social function of the guarantee system for SMIs which constitute the core of economic development. The following table shows the outline of credit guarantee systems in major countries.

Table 2.7 Credit Guarantee System in Major Countries

Country Name	Institution Name (Abbreviation)	Guarantee Ratio	Credit Guarantee Fee Rate	Number of Annual Acceptance	Recourse etc.
(Asia)					
INDONESIA	PT-ASKRINDO	70%	0.65%	59,729 (1996)	
	Perum-PKK	90%	1.5% - 6%	5,984 (1996)	
MALAYSIA	CGCMB	70% - 90%	0.5% - 1%	14.965 (1996)	
NEPAL	CGCN	75%	1.0% - 8%	47,856 (1996)	
PHILIPPINES	GFSME	60% - 90%	1.8% - 3%	252 (1996)	
	SBGFC	50% - 100%		422 (1996)	
SRI-LANKA	CBSL	60% - 90%	1.0%	-	
THAILAND	SICGC	80% (*2000)	2.0%	237 (1996)	
TAIWAN	SMBCGF	100%	0.75%	100,952 (1996)	
KOREA	KCGF	100%	1.0%	144,274 (1996)	
	KOTEC	100%	1.0% - 1.5%	40,359 (1996)	
JAPAN	CGC	100%	1.0%	1,562,514 (1996)	Corporation
					Re-Insurance 70%
				1,669,584-(*2001)	
VIETNAM	CGC	80%	2.0%	-	
(Europe and					
America)					
GERMANY	KGG	80% - 90%	0.5% - 1.0%	7,886 (1994)	
AUSTRIA	FGG	85%	0.6%	4,687 (1995)	Government
					Re-Guarantee 20%
SWITZERLAND	GB	100%	0.5% - 2.25%	671 (1993)	
FRANCE	SOFARIS	50% - 100%	0.4% - 0.6%	6,647 (1994)	
ITALY	CGS	50%	1.0% - 1.5%	1,827 (1994)	
G.BRITAIN	DTI (Govmt.)	70%	1.5%	7,484 (1995)	
NETHERLAND	MEA (Govmt.)	75% - 100%	-	3,533 (1994)	
SPAIN	SGR, SCM	100%	1.0% - 4.0%	9,542 (1995)	Company
					Re-Guarantee 50%
BELGIUM	MGC	80%	0.25% - 0.75%	3,723 (1993)	Corporation
					Re-Guarantee 50%
U.S. AMERICA	SBA (Govmt.)	90%	0.25% - 2.0%	599 (1995)	
CANADA	ISTC (Govmt.)	50% - 90%	1.0% - 2.0%	383 (1994)	

Source: NFCGC JAPAN 1997 "Credit Supplementation Systems in ASIA&EUROPE, NORTH AMERICA"

2.3 Major Constraints on SMIs

1) Major Constraints

Through the questionnaire survey and interviews with enterprises conducted in the course of the Master Plan Study for Industrialization, a lot of constraints on SMIs have been pointed out in the technical, managerial, financial and other fields. These constraints are briefly summarized below.

(Technical Constraints)

- The low productivity is one of the major constraints encountered by SMIs. The low
 productivity is caused by using obsolete and old production equipment and inadequate
 technology. It is difficult for SMIs to obtain loans to introduce modern production
 equipment and modern production technology.
- The lack of skilled labor is another constraint encountered by SMIs. Although Sri Lanka
 has several universities having faculties of science and engineering, their graduates are
 unavailable to SMIs. Some public vocational centers and private institutions offer
 training programs, but there is a serious difference between the requirements of SMIs
 and the actual educational curricula in public vocational centers and private institutions.
- The inadequate quality control is one of the major constraints on SMIs. The quality of their products does not meet the market requirements. Majority of industrialists, who did not take measures to improve the quality of their products, reported that they are short of technology and funds.
- The lack of technical skill for modern products is another major constraint on SMIs. The low technical level makes it difficult for SMI's to advance into the profitable industrial sector. The research and development (R&D) is significant for the improvement of technical skill for modern and profitable products. However, they are unable to implement R&D individually for technical and financial reasons.
- Another constraint on SMIs is a lack of market information. SMIs cannot expand their markets by their efforts due to the lack of information on both domestic and international markets.
- According to the questionnaire survey by the Economic Research Department in 1998, the majority of small scale industries (less than 50 employees) reported that they took some measures to improve quality of products, as shown in table 2.8. However, it is uncertain what kind of actions have been taken for application of new technology.

Table 2.8 Actions Taken for Product Quality Improvement by Small Industries

	Action taken		Type of actions taken			Reasons for not taking actions	
	Yes	No	New machines	New technology	Training	financial	Marketing
1 Food, beverages and tobacco products	122	70	38	64	18	49	19
2 Textiles, apparel and leather products	21	4	13	12	0	4	0
3 Wood and wood products	87	35	25	30	18	18	13
4 Paper and paper products	7	5	2	5	4	5	3
5 Chemical, rubber and plastic products	7	7	2	5	8	6	2
6 Non-metallic mineral products	47	14	7	21	15	12	6
7 Basic metal products	2	0	0	1	1	0	0
8 Fabricated metal products	40	7	11	18	10	8	2
9 Other products	11	15	1	8	3	4	6
All categories	344	157	99	164	77	106	51

Source: Economic Research Department, "Present Situation and Problems of SMI Enterprises"

(Managerial Constraints)

- Poor utilization of market information is one of the major problems encountered by SMIs.
 The lack of tools to use market information such as market information collection system and analysis system is an obstacle for SMIs against the satisfactory utilization of market information.
- The low management skill is another problem encountered by SMIs. For instance, due to
 poor profit control of SMIs, it is difficult for entrepreneurs to understand the profitability
 of their products and they continue production of both profitable and unprofitable
 products.
- The inadequate accounting, taxation, auditing practice is one of the major problems encountered by SMIs. For instance, most SMIs frequently do not take the physical inventory or do not apply depreciation of fix assets and does not introduce an auditing system. Such inadequate practices cause difficulty in obtaining loans from financial institutions.
- The poor linkage with large companies (sub-contracting) or among SMIs in similar industries (cooperative projects, joint projects) is another problem encountered by SMIs.
 Such poor linkage causes SMIs unprofitable in manufacturing, unstable business and lack of confidence.
- The lack of skill for documentation is also a constraint on SMIs. Many entrepreneurs of SMIs, typically small SMIs, find it difficult to prepare documentation to various institutes, such as tax report, financial report, documentation to get Government's

contracts, documents to banks for loans, and documents to large companies for establishing relationships with them.

(Financial Constraints)

- Most SMIs feel that the major difficulty is the borrowing from commercial banks due to inability to provide acceptable collateral, high interest rates, and inordinate delays in disbursement of loans.
- The premature venture capital industry in Sri Lanka is one of the constraints on SMIs.
 Venture capital in Sri Lanka is so new and so small that entrepreneurs establishing new enterprises or advancing into new business are unable to get a sufficient amount of investment from them.
- The demand for financial support is substantial. According to the questionnaire survey by the Economic Research Department, nearly 90% of the small industries having plans for improvement expect that financial support will be extended in one way or another, as shown below.

Table 2.9 Plans for Improvement and Expected Support

			Facilities expected			
	Yes	No	Financial	Training	Financial & Training	
1 Food, beverages and tobacco products	146	21	123	8	15	
2 Textiles, apparel and leather products	23	2	20	1	0	
3 Wood and wood products	103	18	99	2	2	
4 Paper and paper products	6	0	6	0	0	
5 Chemical, rubber and plastic products	10	2	9	1	0	
6 Non-metallic mineral products	31	5	24	3	4	
7 Basic metal products	3	0	3	0	0	
8 Fabricated metal products	38	6	35	2	1	
9 Other products	23	7	23	0	0	
All categories	383	61	342	17	22	

Source: Economic Research Department, "Present Situation and Problems of SMI Enterprises"

• The high demand for financial support has been also disclosed by the questionnaire survey by the Master Plan Study for Industrialization. The magnitude of requirements for the future borrowing in the target industries is summarized in table 2.10.

Table 2.10 Requirements for Financial Support by Subsector

(Rs. million)

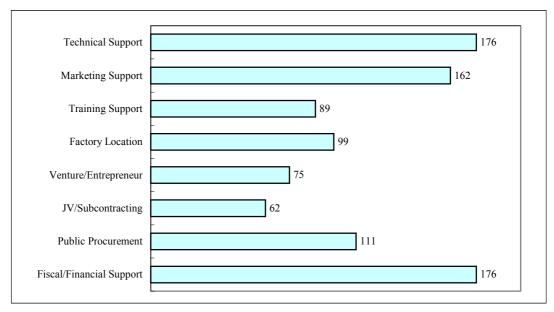
	Leather	Rubber	Plastic	Machinery	Electrical/ Electronic	Total
Public Loan	240	2,060	440	100	430	3.270
Commercial Loan	170	2,160	330	110	470	3.240
Total Borrowing Plan	410	4,220	770	210	900	6,510

Note: Data on the apparel sector have been incomplete.

Source: JICA/UNIDO Questionnaire Survey

(Public Support Expected by Industries)

According to the questionnaire survey conducted for the Master Plan Study for Industrialization, the industries in the target sub-sectors expect public support in technical, marketing, training, public procurement and fiscal/financial supports as shown below.



Note: Plural answers of 204 enterprises surveyed.

Source: JICA M/P Questionnaire Survey

Figure 2.1 Public Support Expected by Industries

2) Expected Roles of SMIDEC

To break through various constraints on SMIs as noted above, the Master Plan Study on Industrialization has proposed to set up the SMI Development Corporation (SMIDEC) in Sri Lanka. SMIDEC is expected to assume the roles as summarized on the following page.

(Roles for Technical Support)

To enhance productivity, quality, profitability and competitiveness of SMIs, technical support is considered to be indispensable. For extending technical support to SMIs, the following aspects are to be taken into account:

- (i) Institutionally, IDB has been in charge of extending technical assistance to SMIs. In fact, the World Bank sponsored SMI I-IV envisaged that technical support was extended by IDB. However, as evidenced through SMI I-IV, IDB has been less capable of extending required technical support to SMIs. IDB is not involved in the on-going technical assistance under SMILE I-II loans. Although IDB has some experts and specialists, they are not adequately qualified as consultants to extend professional advisory services to SMIs.
- (ii) Some local experts belong to the public research institutes, but they are not networked to provide consultancy services for SMIs. Experts and researchers in the academic circles are not organized to extend the advisory services to the private enterprises.
- (iii) Some professional associations have been organized (e.g., the Association of Rubber and Plastic Industry) and some public research centers are in operation (e.g., the Rubber Research Center). However, the relations among them are inadequate to extend technology developed and accumulated in the research centers to the private enterprises and their associations.
- (iv) Local consultants are quite limited in numbers and qualification to provide professional services in the industrial field, and guidance by expatriate consultants is considered to be indispensable.
- (v) Competitiveness Initiative is now promoted, with less attention to technical improvement for SMIs. Without technical support to SMIs, it will be difficult to enhance productivity and competitiveness.

Judging from the above circumstances, it is expected that SMIDEC will assume the role of extending technical support to SMIs. SMIDEC will mobilize domestic and foreign resources for technical support to improve capability of SMIs in production design, productivity improvement, quality control, engineering management, domestic and international marketing, and enhancement of competitiveness.

(Roles of Managerial Support)

Support for management and information services is also considered indispensable for development of SMIs. For the management and information support, the following aspects are taken into account:

- (i) Management skills, both industrial and financial, of SMIs are at the low level. Most SMIs have owner-managers and they are not well versed in management of enterprises.
- (ii) There are approximately 2,000 chartered accountants in Sri Lanka. They operate accounting firms, inclusive of several international accounting firms (e.g., KPMG, Arthur Andersen, Ernst & Young). However, they have less interest in extending their services to SMIs. They might be mobilized if proper organization is set up and adequate fee is payable in providing SMIs with the management services.
- (iii) Training for management has been made available through NIBM. However, the consultancy services extended to SMIs in industrial management are still limited.
- (iv) A number of SMIs applying for credits are found to be inadequate in book keeping and their access to loans has been limited for such reasons. SMIs should improve their accounting and management know-how to improve their access to finance and to improve their productivity and competitiveness.
- (v) Computerization for management is advanced mostly for large scale enterprises and JV with foreign enterprises, and it has been lagged for SMIs. It would be effective if the management advisory services and IT incubation promotion services are in a one-stop shop.

Judging from the above circumstances, it is expected that SMIDEC will assume the role of extending management and information services to SMIs. Combined with the technical services and IT incubation promotion services, SMIDEC will be able to effectively canalize the services required by SMIs.

(Role of Venture and Incubation Support)

Ventures and incubators are mostly SMIs at the initial stage. They are in need of technical, managerial and financial support during the start-up period. For promotion of ventures and incubations, the following factors are to be taken into account:

- (i) Seven venture capitals have been set up in Sri Lanka, but their investment performance has turned out to be disappointing. Recently, venture capitals have become less and less active.
- (ii) Poor performance by venture capitalists may be attributable partly to the low level of entrepreneurship. Some supportive measures will be required.
- (iii) Ventures and incubators have limited access to financial support. Some supportive measures are required to facilitate financial support to ventures and incubators.
- (iv) Risks have been high in investment in start-up enterprises, as no guarantee system has been effective.
- (v) There is a high demand for support of IT incubators, as the IT industry is growing rapidly and is expected to become one of the major industries for Sri Lanka.

From the above, it is expected that SMIDEC will assume the role to support venture and incubators, particularly promotion of incubation in the IT industry. However, it is not considered as recommendable that SMIDEC has a facility to extend credits to ventures and incubators by itself. Facilities for credits will better be entrusted to the existing banking systems, and SMIDEC's roles will be limited to the technical and managerial services and the credit guarantee services.

(Role of Financial Support)

Financial support is desperately needed by SMIs, but it will not be recommendable that SMIDEC itself has a facility for credits, as noted before. Consequently, the role of SMIDEC in financial support will be limited to the credit guarantee system. The following factors are taken into account in defining the roles of SMIDEC:

- (i) The Central Bank has a credit guarantee system operated for SMI I-IV loans. However, it is inactive at present. It is partly because the present outstanding guarantee amount (Rs.2,528 million) exceeds the planned guarantee amount. There is no possibility of new credit guarantee by the Central Bank.
- (ii) Most of the NDB and DFCC loans, as well as commercial loans, require 100% collateral. A number of SMIs find it difficult to provide collateral even through their plans for expansion or renovation is found to be viable.
- (iii) Incubation promotion, particularly in the IT industry, is quite important for future industrial and economic development of Sri Lanka. Usually, IT incubators have technology to develop but they are short of management and financial resources. For

- promotion of IT and other incubation, the credit guarantee system is expected to assume a decisive role.
- (iv) The credit guarantee system can be established and operated independently. However, if it is operated in combination with the technical and managerial services, the credit guarantee operation will become less risky and more efficient.

Judging from the above, it is expected that SMIDEC will assume the role to provide SMIs with the credit guarantee services. As noted before, SMIDEC itself will not extend loans to SMIs, but it will facilitate SMIs to obtain loans through the credit guarantee by SMIDEC.

III. ESTABLISHMENT OF SMIDEC

3.1 Objectives of SMIDEC

Through review of the current situation of the SMI sector in Sri Lanka, as well as the current status of public support and the constraints on SMIs, it has been clarified that the roles to be assumed by SMIDEC should be multiple. As noted in the foregoing Section, SMIDEC is expected to support SMIs in the following four aspects:

- (i) Technical and management support to SMIs, including support to improve productivity, quality control, marketing, profitability and to enhance competitiveness;
- (ii) Management and information support to SMIs, including support to improve accounting, management, and computerization;
- (iii) Venture and incubation promotion, particularly promotion of IT incubators, by means of technical, managerial and financial support; and
- (iv) Credit guarantee system to facilitate financial support to SMIs.

Four roles expected to SMIDEC are inter-related. In the event that SMIDEC assumes four functions at the same time, it will effectively serve as a "one-stop shop" in supporting sound development of SMIs in Sri Lanka.

SMIDEC is not an almighty institution in developing SMIs, but it will effectively facilitate the betterment of SMIs in Sri Lanka. If SMIDEC is combined with the on-going Competitiveness Initiative, as well as with the improvement programs proposed under the Master Plan Study for Industrialization, it will certainly have significant impacts on development of SMIs. It is reminded that SMIs account for 90% of industrial establishments, 70% of employment and 55% of gross value added in the industrial sector.

With the above in view, the objectives for establishment of SMIDEC will be defined in the following manner:

- ① SMIDEC is established to support self-efforts of SMIs technically, managerially and financially.
- 2 Through extending technical, managerial and financial support, SMIDEC will contribute for sound development of SMIs and consolidation of the industrial sector.

- 3 By contributing to sound SMI development, SMIDEC will support creation and stabilization of employment, as well as enhancement of production, productivity and competitiveness in the industrial sector.
- ④ SMIDEC will contribute to balanced regional and sectoral development all over the country.

Although it is not defined in the objectives, establishment of SMIDEC and promotion of SMIs will also contribute to alleviation of poverty caused by unemployment, undeveloped technology and management, and unbalanced distribution of resources.

3.2 Frameworks for Establishment of SMIDEC

In formulating a plan for establishment of SMIDEC, some principles for establishment of SMIDEC's functions are discussed, together with the predicted magnitude of demand for operations.

1) Framework for Advisory Services

Principles of Consultation Services

In Sri Lanka, there is neither fundamental legislation nor laws specifically enacted for development of SMIs, and neither ministry nor public institute has been solely responsible for policy making in relation to SMIs. It is quite different from the case of Malaysia and Japan as referred to in Chapter 2.2. Under such circumstances, SMIDEC is planned for establishment as a powerful institution to meet the requirements of SMIs for consultation on technical and management improvement, management information support, and venture/incubation promotion on the basis of the following five principles:

(1) Institute Specialized in Supporting SMIs

SMIDEC will be set up as the first institute specialized in supporting development of SMIs in Sri Lanka. It should be set up jointly by the public and private initiative. The services to be provided by SMIDEC will first be limited to SMIs, not SMEs, with the purpose of consolidating the basis and structure of manufacturing industries. This will not preclude the possibility of expanding its activities to SMEs in the future when SMIDEC's operations are expanded.

(2) Support Integrated into Poverty Reduction Strategy

As noted previously, the establishment of SMIDEC and support to SMIs will contribute to alleviation of poverty caused by unemployment, undeveloped technology and management, and unbalanced distribution of resources. In this context, it is encouraging that the Framework for Poverty Reduction in Sri Lanka has referred to the importance of SMI development. The establishment of SMIDEC is one of the strategic steps to be taken for poverty alleviation.

(3) One-stop-shop for Consultation Services

The services for technical and management advice, management information support, and venture and incubation promotion, as well as the services for credit guarantee, are to be provided at a one-stop-shop so as to facilitate SMIs in obtaining the required services. Within SMIDEC, on the other hand, the resources are combined so as to provide comprehensive services to SMIs. For instance, the management support is combined with the IT incubation promotion and, if required, with the credit guarantee services to support development of the IT industry.

(4) Support Complementary to On-going Programs

The technical and management advice, management information service and venture/incubation promotion, as well as the credit guarantee services, are complementary to the on-going programs for development of SMIs. For instance, the on-lending schemes (e.g., SMILE I and II sponsored by JBIC) can utilize the services to be provided by SMIDEC, while SMIDEC will sometimes count on technical assistance loans available through the existing schemes. The Competitiveness Initiative sponsored by USAID may also make use of technical consultation services available through SMIDEC.

(5) Canalization of Foreign Technical Cooperation

Various technical cooperation programs, bilateral and multi-lateral, have been extended through diversified agencies (e.g., MCAID, MVTRI, MOST, IDB, BOI, EDB). Future technical cooperation for development of SMIs may be canalized through SMIDEC as a specialized institute for SMI development.

Demand for Consultation Services

Possible demand for the consultation services to be provided by SMIDEC is estimated on the basis of the overview noted in Chapter 2.1.

- (1) According to the Annual Survey of Industries, 1996, about 3,030 industries (with employees of more than 25) were registered with MCAID. More than 60% of these industries are SMIs. On the other hand, the questionnaire survey by the Economic Research Department revealed that there were 20,190 small industries (with employees of less than 50) registered with local governments over the country. If 15-20% of these small industries are considered to be potential clients for SMIDEC's consultation services, it will amount to 3,000-4,000 SMIs. It is estimated that 10% of these potential clients or 300-400 SMIs would be annually attended to by the first-hand consultation, respectively for technical and management advice and management information service of SMIDEC. Judging from the questionnaire survey that 86% of surveyed industries is expecting technical support as shown Figure 2.1, this estimate appears to be conservative.
- (2) The Master Plan for Industrialization predicts that the gross value added (GVA) in the manufacturing sector would increase from Rs.136 billion in 1999 to Rs.215 billion in 2004 (average annual growth rate of 9.6%) and Rs.395 billion in 2010 (annual growth rate of 10.6% in 2005-2010). Likewise, several target industries are expected to grow more sharply if appropriate measures are taken.

Table 3.1 Expected GVA in Target Industries

	Gross Value Added (Rs. mullion)		Increase		Rate of SMIs	
	1999	2004	2010	2004/1999	2010/2004	(%)
Rubber industry	n.a.	14,200	33,500	-	2.37	74
Plastic industry	3,910	6,860	15,800	1.75	2.30	58
Machinery industry	600	6,000	30,000	10.00	5.00	98
Electric/Electronic	2,070	4,100	15,900	1.98	3.88	80
IT industry	1,820	10,500	27,000	5.77	2.57	91

Source: JICA Master Plan Study

In view of the above, it may be conservative to estimate that about 30-40% of the potential clients that received first-hand consultation of SMIDEC would receive the subsequent consultation services of SMIDEC at reasonable costs. It is provisionally planned under Scenario 1 that about 100 SMIs would receive the consultation services for technical and management advice and management information service, respectively.

(3) It is also planned that training services are provided by SMIDEC. In view of the facts that NIBM is currently serving about 5,000 trainees a year and that SMED is

offering 30-40 training courses, it is conservatively estimated that about 10% of NIBM trainees may be attracted by training at SMIDEC (about 500 persons a year) and about 20-30 courses are offered by SMIDEC, respectively for technical and management advice and management information service.

(4) It is expected that the IT industry is strategically promoted, and its GVA in 2010 is estimated to be nearly 15 times the value added in 1999, as indicated in the table above. The demand for IT incubation promotion is therefore predicted to be quite high. It may be conservative to estimate that about 50-60 ventures and incubators are recipients of SMIDEC's venture and incubation promotion services.

2) Framework for Credit Guarantee System

Principles of Credit Guarantee

According to the IMF report, the percentage of gross bad loan against total outstanding balance is 17% on an average and the percentage of bad loan uncovered by the reserve is 40% in Sri Lanka. Under such circumstances, the credit guarantee system should be set up as a powerful institution on the basis of the following five principles, in order not to make the systems "waste disposal" of bad loans:

(1) Highly Public Institution Networking Whole Country

It is expected that development of SMIs through financial support be deployed not for a limited extent but throughout the country as far as possible. Although the establishment of the credit guarantee organization proceeds first in the Greater Colombo areas for effectiveness of business, the system structure is to be planned for deployment all over the country. Also, it is desirable that an independent nature be maintained and the public nature be secured.

(2) Specialized Institution Conducting Proper Guarantee

It is important for the credit guarantee organization to have specialized knowledge and skill to research and examine the credit worthiness of SMIs. It should be a "full-time" function for examination and management of credit guarantee. Certain arrangement is needed to establish the independence of the credit guarantee organization in the organization of SMIDEC. Likewise, during the process of meeting the demands of SMIs asking for the credit guarantee and financial institutions asking for stable loan lending, the moral hazard of benefit, cozy relationship and corruption may take place. Propriety and justice are required in every stage of research and examination of SMIs,

as well as in management after the guarantee. The credit guarantee organization should study, train and develop this function voluntarily and independently.

(3) Open to All SMIs and Financial Institutions

The credit guarantee system is the business carried out in the difficulty of management of SMIs and in an unstable state of their financing. Basically, it is the system that is "to anticipate and hold the financial risk". For risk management, the following should be taken into account;

- (i) to avoid bad loans as much as possible and to promote "proper guarantee" by improving capabilities of research and examination;
- (ii) to realize the "principles of large numbers"; i.e., the larger the handling volume, the less the risk-sharing rate involved, creating the "sea of credit guarantee";

This "sea of credit guarantee" can be realized by providing wide opportunities for use of credit guarantee to SMIs and financial institutions and by setting up the network of handling contacts all over the country. It is a matter of course, in the earlier stage, that a strategy of giving priority to a stable and safe guaranteed borrower is needed.

(4) Possession of Large Current Assets and Effective Guarantee Multiplying Ratio
In order for SMIDEC to establish a social status in the financial economy in Sri Lanka,
"trustworthiness" of SMIDEC and the credit guarantee organization itself should be
established. The base to establish the trustworthiness is to make a "cluster" of funds as
soon as possible. Such funds should always be kept in a possession with high liquidity
in order to surely and quickly carry out subrogation payment triggered by unexpected
accidents. Naturally, the investment into speculation must be strictly prohibited.
Carefulness is also expected in respect of a huge sum to acquire real estate for business
purposes at the earlier stage.

Fund in possession must be proportionally deposited to correspondent financial institutions according to the performance of credit guarantee. This deposit is welcomed by the financial institution as a proof of credit guarantee and enhances the trustworthiness of credit guarantee organization itself. It will also serve for inducement of further usage of credit guarantee by such financial institutions.

The guarantee multiple rates publicly show the "trustworthiness" of the credit guarantee system. This is the representation by the credit guarantee organization to undertake the guarantee as much as the fund in possession. Most of the guarantee multiplying ratios of the credit guarantee organizations in the neighboring countries

are 10 to 20 times. In the case of Japan, it is 50 times actually. If the guarantee multiplying ratio is 10 times, it means that if accidents take place 10% of the time, such accidents are within the solvency by own-funds and management can be maintained. By realizing the "sea of credit guarantee" and decrease in the risk ratio, it becomes possible to lower this multiple ratio and to provide the merit of credit guarantee to more SMIs and financial institutions.

(5) Human Resources Institution with Proficiency and High Morality

The current economic society is said to be the IT era. Computers are indispensable for all research, examination, management, statistics and general control in the credit guarantee. However, the real character of credit guarantee organization is the "human resources institution". The essence of credit guarantee business lies in the power of insight, analysis and judgment of a person who "digs up" the creditworthiness of SMIs. Also, warmhearted humanity is indispensable with the person who steps into the site of SMIs, gives advice to them, guides and helps them. It goes without saying that moral hazards must not exist. The success of a credit guarantee organization lies in obtaining such human resources. A net of human resources recruitment must be put up widely, and the negative factor of favoritism and recruitment through personal contact must be avoided. The capability of recruited human resources must be enhanced by reasonable training and further graded up through jobs. Development of the credit guarantee organization depends on whether it can continuously maintain the capability of human resources of dedicated and professional "credit guarantors" who are neither sub-agents of financial institutions nor staffs of the governmental agencies.

Demand for Credit Guarantee

Possible demand for credit guarantee is estimated on the basis of the loan amount for industrial use of DFIs and commercial banks. In 1998, total amount of credits and industrial credits were as follows:

Table 3.2 Industrial Loans in 1998

(Unit: RS million)

Bank	Total Loans	Rate of Industrial Use	Industrial Loans
NDB	31,206	69%	21,532
DFCC	16,206	55%	8,913
Commercial Banks	241,335	12%	28,960
Total	288,747		59,405

Sources: NDB, DFCC

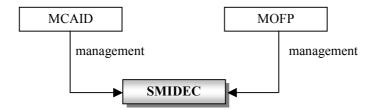
In the event that the credit guarantee is taken out for 5%, 10% and 20% of the industrial loans, the demand for guarantee is estimated to be around Rs.3 billion, 6 billion and 12 billion respectively. Consequently, it is envisaged that the scale of guarantee would range from RS.2 billion to Rs.10 billion at the initial stage.

3.3 Legal Frameworks

The legal status of SMIDEC is discussed here, as the legal status determines the feature of SMIDEC itself to some extent, as well as the functions and activities of SMIDEC. The following four alternatives of legal status are conceived for establishment of SMIDEC:

• Alternative 1: As specific governmental institute

With a specific legislation, SMIDEC will be established as a specific governmental institute. In this case, SMIDEC should be established under the MCAID and MOFP, because SMIDEC's functions include both industrial and financial matters.



(Advantage)

- As it is a governmental institute, similar to other governmental institutes, it may receive fiscal support from the government for both initial capital and annual budget supports.
- As a subordinate institution under MOFP and MCAID, the coordination among other institutes under those ministries will be relatively easy.
- As established through the legislation procedure, consensus over the government and public institution will be relatively easy.

(Disadvantage)

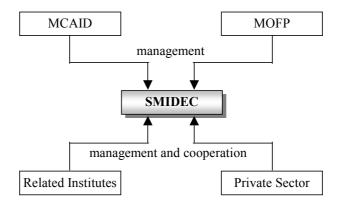
- The management may fall into bureaucratism and become inefficient to reflect SMI's demands. Quality of services may be degraded.
- It is likely that the profit control system will not be effectively maintained for its management and the financial control may become loose.
- It will hardly use the active resources of the private sector.
- The scale and the level of its activity will depend on the budget and human resource of

the government.

- As a new legislation is required, its establishment will require a longer period.
- It may be considered that strengthening of other existent institutes would be more rational and effective than the establishment of SMIDEC.

• Alternative 2: As semi-governmental management corporation

This alternative is to incorporate SMIDEC as a semi-governmental management corporation. A specific legislation will be required. In this case, SMIDEC should be established jointly by MCAID, MOFP, the related institutes, and the private sector.



(Advantage)

- As it is a semi-governmental institute, similar to other public institutes, it can receive fiscal support from the government for both initial capital and annual budget supports.
- As a semi-governmental institute, it is possible to receive human resources in the public institutions.
- As a subordinate institution under MOFP and MCAID, coordination among other institutes under those ministries will be relatively easy.
- As established through the legislation procedure, consensus over the government and public institutions will be relatively easy.
- Utilization of the active resources of the private sector is relatively easy if compared with Alternative 1.

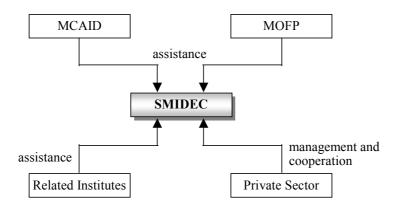
(Disadvantage)

- The management responsibility may be unclear. In fact, a large number of the semi-governmental management institutions could not achieve sound operation worldwide.

- If and when the government comes into power, the management may fall into bureaucratism and become inefficient. With the government fiscal support, such a case is likely to occur.
- If the participation of the private sector is limited, it is likely that the profit control system will not be effectively maintained for its management and the financial control may become loose.
- The scale and the level of its activity will depend on the budget and human resource of the government.
- As a new legislation is required, its establishment will require a longer period.

• Alternative 3: As public company

This alternative is based on the concept that SMIDEC will be established as a public company. The necessity of specific legislation depends on circumstances. In this case, SMIDEC will be established by the public participation (MCAID and MOFP), the related institutes, and the private sector.



(Advantage)

- As the private sector comes into power, it is easy to reflect SMIs' demand on its activities
- It may receive fiscal support from the government as an initial capital contribution.
- The management responsibility will be clearer and more responsible management will be expected.
- As more investment from the private sector is introduced, the oversight by the private sector will be more strict, rational and effective for management.
- It is likely to use profit control system for its management and the disciplined fiscal control will be expected.
- If the profit control will work well and appropriate profit is earned, it can up-grade its operation scale and support level steadily.

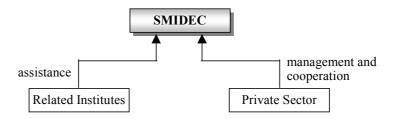
- It can be established in a short period.

(Disadvantage)

- As a private institute, coordination with the public institutes will be relatively difficult.
- As annual fiscal support from the government is unavailable, it is likely that the fiscal footing will be weak.
- If it is established without public legislation, consensus should be made through specific procedures.

• Alternative 4: As private corporation or company

SMIDEC may be established as a complete private corporation or company. In this case, a specific legislation is not required. SMIDEC is established by the private institutes and organizations. In this case, SMIDEC will be totally managed by the private sector.



(Advantage)

- As the private sector comes into power, it is easy to reflect SMIs' demand on its activities.
- The management responsibility will be clearer and more responsible management will be expected.
- As more investment from the private sector is introduced, the oversight by the private sector will be more strict, and more rational and effective management will be expected.
- It is likely to use profit control system for its management and the disciplined fiscal control will be expected.
- If profit control works well, it will upgrade the operation scale to grow steadily.
- It can be established in a short period.

(Disadvantage)

- Without fiscal support from the government for initial capital, it is difficult to prepare enough capital at the initial stage.
- As the annual fiscal support by the government is unavailable, it is possible that the fiscal footing will be weak, particularly for the credit guarantee system.

- As a private institute, coordination with the public institutes concerned with SMIs will be relatively difficult.
- As it is a complete private company, it is likely that it will be unable to receive credit worthiness from SMIs and that the status will be low in the entire policy for SMI development.

Through a comparative study among the four alternatives above, it is recommended that SMIDEC be organized as a "**Public Company**" (Alternative 3 above) as far as it is financially viable. Major reasons are:

- (i) SMIDEC should be a credit-worthy institute with the participation of both the public and private sectors. Responsibility for management should be clear and transparent.
- (ii) SMIDEC should mobilize the active private power for management and make it efficient and profit-oriented.
- (iii) SMIDEC should be in a position to mobilize the public and private resources for its operation and management.
- (iv) Legislative procedures for establishment and operation of SMIDEC should be as simple as possible.

IV. FUNCTIONS OF SMIDEC

4.1 Technical and Management Advice (TMA)

1) Background

The Master Plan Study for Industrialization pointed out various constraints in promoting industrialization. Among others, technical and management constraints are quite serious, particularly in the SMI sector.

Through the factory inspections, it has been noted that many SMIs are using obsolete equipment for production and their technological levels are quite low. Little effort has been made for quality control, as well as research and development. Thus, productivity of SMIs remains at a low level. Without improvement in production technologies and production management, it is unrealistic for SMIs to enhance competitiveness under the global economy.

Public supports to SMIs have been limited in the field of technological and managerial improvement. Likewise, there has been little linkage with the academia for SMIs' technological improvement. It is based on such background that SMIDEC intends to assist SMIs in obtaining advice on technology and management of manufacturing activities.

2) Issues to be Addressed

To enhance the technological and managerial level of SMIs in Sri Lanka, various issues are to be addressed. Major issues are listed below.

(i) Lack of human resources in SMIs:

Sri Lanka has 11 universities, and some of them have faculties of science and engineering. Unfortunately, graduates from such faculties are unavailable for the factory level manufacturing activities, as most of them become managers for office works. On the other hand, vocational training programs provided by MVTRI are, in general, inadequate for employee in the manufacturing sector, inclusive of SMIs, as most of their courses (e.g., carpentry, beauty care, hairdressing) are not designed for employees in the manufacturing sector.

Despite the fact that SMIs have limited opportunities to employ highly educated people, some factory owners and their employees have accumulated skills in their respective manufacturing activities. These SMIs should be a target for improvement, so that their technological and managerial levels are enhanced for improvement of their productivity and profitability.

(ii) Obsolete production equipment:

Most of the equipment in SMIs is obsolete and old, and there remains much to be improved or renovated. SMIs are unfamiliar with modern production equipment and facilities. Together with the financial support, technical advice is required to modernize these equipment and production technologies to enhance their competitiveness in the domestic and international markets. At the same time, production lines in SMIs are inadequately designed or arranged, though 5-S movements have been introduced gradually. Renovation of equipment and improvement of production lines would require technological support.

(iii) Inadequate quality control:

As pointed out in the Master Plan Study for Industrialization (Phase-II), the quality control systems have not been adequately applied in SMIs, and the quality of their products does not meet the requirements of markets. Quality control should be more widely disseminated among SMIs in order to make their products competitive in the domestic and international markets. Technical, as well as financial support, is required for SMIs.

(iv) Lack of research and development:

SMIs pay little attention to research and development (R&D), as they are technically and financially unable to do it individually. SMIs are not in a position to consult with the academia in product design and research activities, though there might be a possibility for such a consultation if and when several SMIs are organized and jointly ask for consultation. Unless SMIs are supported in one way or another in research and development, they can hardly expect technological upgrading and enhancement in product design.

(v) Inadequate management of factory operation:

Through the factory inspection, it is observed that many SMIs have unused or less frequently used equipment and facilities in their factory, partly due to the undeveloped subcontract system in Sri Lanka. Some other SMIs remain production lines or facilities even for unprofitable products. Factory management is quite important even for SMIs to improve their productivity and profitability. SMIs are in need of advice for improvement of production management at their factories.

(vi) Lack of market information:

One of the major issues of SMIs is how to find customers in domestic and international markets. Their domestic channels for marketing are quite limited. As for marketing overseas, they mostly depend on exporters who are not well-versed in actual

market demands and requirements. In the event that SMIs are grouped by speciality, they would have more channels for marketing, and the groups would be able to make use of the Internet for marketing. Market information is not limited to export markets. As for import of raw materials and components, the groups might possibly procure them jointly from the world markets in the most attractive manner, reducing the costs of such procurement.

3) Objectives of TMA

Technical and management advice (TMA) is one of the four functions of SMIDEC. The objectives of incorporation of TMA in SMIDEC are listed below.

- TMA is to support SMIs by means of technical consultation on production and management of the manufacturing activities, aiming at enhancing their productivity, profitability and resultant competitiveness.
- ② TMA is to support SMIs in providing training programs for entrepreneurs and employees.
- 3 TMA is to support SMIs in promoting linkages among factories of similar products and linkages with the academic circles for promotion of new technologies and for R&D.
- ④ TMA is to facilitate SMIs in obtaining credits for renovation of their equipment and facilities.
- ⑤ TMA is to support SMIs in marketing research to find out customers in domestic and international markets.

These objectives will be combined with the objectives of other functions of SMIDEC (i.e., MIS, VIP and CGO) in extending the supporting services for SMIs.

4) Services to be Provided by TMA

To achieve the objectives noted above, it is proposed that the following services be provided by TMA:

(1) First-hand Consultation:

SMIs are invited to contact SMIDEC for first-hand consultation on technical and management issues they encounter. TMA, after a request by a SMI is filed, will review

the facilities, assets, production records and other data provided to TMA at the time of application for the first-hand consultation.

TMA, after review of the data and information, will send a team of consultants for inspection of the production factory. The consultants' team will inspect the production activities at the factory, and review the financial records for factory management. After the inspection at the factory, for one to three days depending on the magnitude of problems involved, the team will give some diagnosis to the factory, together with some recommendations for improvement.

The first-hand consultation should be extended free of charge as far as SMIDEC can receive technical assistance of foreign experts from the international cooperation agencies and as far as SMIDEC operation turns out to be financially viable.

(2) Consultation Services

SMIs, after the first-hand consultation, will obtain the consultation services to be extended by TMA. The consultation services will range from advice on product design to management of production line, quality control, rearrangement of equipment and facilities, energy saving, productivity enhancement, upgrading technology and introducing new technology, R&D activity, marketing research and other requirements suggested through the first-hand consultation. Among others, in order to develop SMIs in sub-contracting category, the assistance for exploitation of their own unique production know-how is important because such unique know-how is essential to have some advantage over other sub-contractors. While, for the independent SMIs, the assistance for marketing research is necessary to encourage them to take effort of R&D and upgrading technology (involves in introducing new technology) because such assistance would ensure them to obtain new markets in both domestic and international markets for their new products.

TMA's consultation services will be extended first by foreign experts assisted by the local experts. TMA's services will be charged at cost or at the rate agreed between the SMI and TMA. The cost of such services might possibly be payable by credit as far as the technical assistance loan of JBIC's SMILE-II is available at NDB.

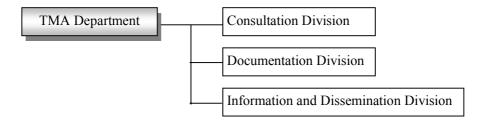
In some cases, SMILE-II credit is found to be a relatively heavy burden on some SMIs. TMA, in such a case, will find out or organize a group of factories having a similar program for technical and managerial improvement, so that they can share the amount of credit.

(3) Training Services:

TMA will also extend the services for training of entrepreneurs and their employees. It will organize workshops and seminars for training and dissemination of technologies in such fields as quality control, total quality management, product design, production line management, etc. The concept and the structure of workshops and seminars are created by the team of local experts with the cooperation of foreign experts from international cooperation agencies. These workshops and seminars will be held at a reasonable charge to the participants.

5) Organization of TMA

It is proposed that TMA be organized in the following manner:



The "Consulting Division" will be responsible for the first-hand consultation and the consultation services for SMIs. While, the "Documentation Division" will be responsible for management of documentation related to every service extended by TMA. The "Information and Dissemination Division", on the other hand, will be in charge of: (i) collection of technologies and technical know-how to be issued by other organizations; and (ii) dissemination of technical information and promotion of R&D in close cooperation with the Technical Centers organized under the public institute, as well as with the academia.

Operation of the TMA Department will be assisted by a team of foreign experts to be assigned under a technical cooperation program of the international cooperation agencies. Desirably, this technical cooperation is extended in a flexible manner so that the foreign experts are called upon in accordance with the requirements. It is also desirable that the technical cooperation program last at least for two years and that the local experts be upgraded to professional consultants by the foreign experts.

At the same time, TMA will roster local experts specialized in respective field of technology. The roster will first start with the experts available at the public research institutes (e.g., the Rubber Research Institute) and at the universities. They will join the

first-hand consultation and the consultation services, and will be trained by the foreign experts as professionals. The local experts will be remunerated for the time actually spent for the services. After the termination of the technical cooperation by foreign experts, the professional local consultants will assume the responsibility of extending the consultation services.

TMA will be able to mobilize managers of FDIs and local companies successfully operated in Sri Lanka (e.g., FDK Lanka Ltd., I-E Technics Ltd.) as lecturers for the training services.

6) Cooperating Agencies

Operation of TMA will count on the cooperation to be extended by other public institutes and academia. The cooperating agencies for TMA will include, but not be limited to, the following:

(i) IDB

IDB has some technology centers specialized in specific technology and engineering. These centers have experts specialized in respective fields of technology. Technical advice extended so far by IDB will be strengthened through TMA activities as IDB experts are trained to be professional consultants through working together with the foreign experts.

(ii) EDB

EDB is a subordinate institute under the Ministry of Internal and International Trade and Commerce and Muslim Religious Affairs and Shipping Development. EDB has a Trade Information Network established in 1996 and five Cyber Trader Centers set up in 1999. These network and centers will offer a tool to search for potential demand overseas. TMA will coordinate with EDB particularly in the promotion of export markets for SMIs. Coordination will also be made for e-service in marketing the products of SMIs.

(iii) Public Research Institutes:

The public research institutes (e.g., the Rubber Research Institute) will also be one of the cooperating agencies for TMA. Experts in these research institutes will work jointly with the foreign experts to extend the consultation services for SMIs. These experts will also cooperate in the training services to be extended by TMA.

(iv) Academia

Professors and teaching staff at the universities may also be registered in the roster of TMA as local experts in respective fields of specialties. They will be invited to the

training services to be extended by TMA. Through working for the consultation services, they will be able to acquire practical engineering and to get familiar with the actual problems encountered by SMIs. These experiences might be reflected in their teaching at the universities.

(v) NDB

NDB operates and manages SMILE loans extended by the financial cooperation of JBIC. SMILE-II has a program for technical assistance loan at concessional terms. TMA will coordinate with NDB in extending this technical assistance loan to SMIs when they get the consultation services through TMA.

7) Capacity Building

To make TMA sustainable in operations, it is important to train local experts and staffs of TMA as consultants. During the period of at least two years from the commencement of TMA operations, it will have foreign experts mobilized in accordance with the requirements for the consultation services. During this period, the local experts in the TMA roster and staffs of TMA will be trained by the foreign experts to become professional consultants. Such training will be made on-the-job through the first-hand consultation and the consultation services.

Local staff at TMA will also be trained on how to manage operations of TMA, particularly the way of management of the consultation services and the way of advice to SMIs. They will be trained on how to coordinate with other SMIDEC operations, including CGO (Credit Guarantee Organization). SMIDEC will also assist the local experts in getting training overseas

4.2. Management Information Service (MIS)

1) Background

As pointed out in the previous sections and in the Master Plan Study report, SMIs in Sri Lanka are not well versed in administration and management of enterprises. Through interviews with SMI enterprises, it has been verified that SMIs have weakness in management control, accounting systems, auditing system, marketing research, documentation to external institutes. Although efforts have been made by MID and related institutes to strengthen these management capabilities, there still remains much to be improved in enhancing the capability of management to make operation of SMIs profitable and competitive.

In recent years, a considerable number of enterprises have introduced computer aided accounting and management systems, particularly enterprises forming joint ventures with foreign investors. Most SMIs, however, have not computerized their management systems yet. Moreover, their accounting systems and auditing system are inadequate to apply loans when required. They have not adopted physical inventory of tangible assets or apply depreciation of fixed assets appropriately and they have not introduced the right auditing system, for instance.

SMIs, typically small industries, also have weakness in filing to various institutes such as tax report, financial report, documents to the government for getting the government's business, documents to banks for obtainment of loans, and documents to large companies for establishing relationships with them.

Various public supports in management field are necessary for development of SMIs in Sri Lanka. However, public supports to SMIs in the fields of administration, management, and documentation have been limited, except for the training courses offered by NIBM. Although it is reported that NIBM has been operated effectively and financially sound, order-made courses to meet the actual requirements of SMIs have not been offered.

It is based on such background that MIS intends to assist SMIs in management advice on administration, documentation, accounting, auditing and other services, with the close cooperation of TMA and other functions of SMIDEC.

2) Issues to Be Addressed

To enhance the management capabilities of SMIs in Sri Lanka, various issues are to be addressed. Major issues are listed below.

(i) Lack of industrial management

A large number of SMIs operate in the manufacturing of several products, both profitable products and unprofitable products. Due partly to the lack of market information and research, they are not capable of evaluating marketability and profitability of each product in medium and long terms. It appears suggestible that SMIs are more specialized in manufacturing products that are profitable, abandoning the production of unprofitable products. Likewise, the equipment-labor ratio and other factors should be taken into account for improvement of their industrial management.

(ii) Inadequate accounting practices:

Most SMIs are not well versed in accounting, taxation and auditing practices. In

applying credits, SMIs are found to maintain inadequate accounting practices and unable to get credits for their manufacturing activities. Tax declaration of SMIs is often found inadequate. Practices of physical inventory and depreciation are not properly maintained. These practices should be improved for sound promotion of SMIs in Sri Lanka.

(iii) Lack of linkage among enterprises:

Vertical and horizontal linkages among enterprises will usually enhance profitability in manufacturing. The case of the Malaysian SMIDEC and Japan Small and Medium Enterprise Corporation (JASMEC) are appropriate examples. The Malaysian SMIDEC carries out a special program called the "Linkage Program" to promote vertical linkages (subcontracting), and JASMEC undertakes a program called the "Encouraging Fellowship Project" to promote horizontal linkages (collaboration). The vertical linkage or subcontract is quite important for SMIs to have stable customers for their specialized products. As the subcontracting system has not been developed yet in Sri Lanka, it is required that SMIDEC will also assist SMIs in promoting linkage among manufactures in the SMI sector.

(iv) Difficulties in documentation to external institutes

Many SMIs, particularly small industries, feel difficulty in filing to various institutes such as tax report, financial report, documents to the government for getting the government's business, documents to banks for the obtaining of loans, and documents to large companies for establishing relationships with them.

3) Objectives of MIS

Management Information Service (MIS) is one of the four functions of the proposed SMIDEC. Incorporation of the MIS function in SMIDEC has the following objectives:

- ① MIS is to support SMIs in analyzing management of industrial enterprises, suggesting appropriate industrial management practices and management methods.
- ② MIS is to support SMIs in maintaining sound accounting, taxation and auditing practices.
- ③ MIS is to support SMIs in promotion of vertical and horizontal linkages to enhance their stability in marketing and their profitability in operation.
- 4 MIS is to support SMIs in making various documents to external institutes.

These objectives will be combined with the objectives of other functions of SMIDEC in extending the supporting services to SMIs.

4) Services to Be Provided by MIS

To achieve the above objectives, it is proposed that the following services be provided by MIS Department of SMIDEC:

(1) First-hand Consultation:

SMIs are invited to contact SMIDEC for the first-hand consultation on management issues, as in the case of TMA for technical consultation. MIS, after the request of SMIs is filed, will review and analyze the financial data and management information provided to MIS at the time of application for the first-hand consultation. Any financial data and management information presented by SMIs will be kept confidential within MIS.

MIS, after review of the data and information, will send a team of consultants for inspection of the actual situation in management control practices. The consultants' team will inspect the actual practices of accounting, taxation, auditing, personal affairs, etc. It will also interview the owner and executive staffs and review the financial records and related documents. After the inspection, MIS will prepare a diagnosis, pointing out the inadequate aspects of the accounting practices and/or industrial management. When difficulties on documentation to external institutes are found, MIS will offer some assistance for such documentation. These findings will be explained to the applicant, together with the recommendable follow-up actions.

The first-hand consultation may be provided free of charge, as far as SMIDEC can receive assistance of foreign experts from the international cooperation agencies and as far as SMIDEC operation turns out to be financially viable.

(2) Consultation Services:

After the first-hand consultation, SMIs will obtain the consultation services in specific field. MIS's services at this stage will range from practical advice on improvement of management control, to joint discussion for promotion of linkages and practical assistance in promotion of markets. For instance, MIS will assist a SMI or a group of SMIs in constructing a management control system (involving accounting system, cost accounting system, auditing system, etc.).

The consultation services of MIS will be extended either by foreign experts or local experts. The services of MIS will be charged at cost or at the rate agreed upon between

the SMI and MIS. The cost of such services might possibly be payable by credit as far as the technical assistance loan of JBIC's SMILE-II is available through NDB.

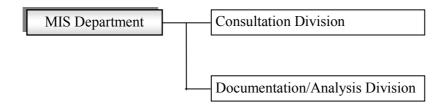
(3) Training Services:

MIS will extend the services for training of entrepreneurs and their employees. It will organize itself some workshops and seminars for training and dissemination of practical application of management control system, market promotion practices, subcontracting system, and filing to external institutes. The concept and the structure of workshops and seminars are created by the team of local experts with the cooperation of foreign experts from international cooperation agencies. These workshops and seminars will be held at a reasonable charge to the participants.

It is not an intention of MIS to have a workshop similar to that offered by the other institutes (e.g., NIBM and SMED). Training will be more specialized in the enhancement of management capacity of SMIs and demand oriented. If and when the ready-made workshop is more appropriate, MIS will introduce the existing training programs offered by such institutes.

5) Organization of MIS

It is proposed that MIS be organized in the following manner:



The "Consultation Division" will be responsible for the first-hand consultation and follow-up consultation services. Meanwhile, the "Documentation and Analysis Division" will be responsible for maintaining the related documents, keeping them confidential within MIS

Operation of the MIS Department will be first assisted by a foreign expert to be assigned under a technical cooperation program of the international agency with the cooperation of local experts. MIS will have a minimum number of its proper staff for consultation. These local experts will be trained by the foreign expert through on-the-job training.

MIS will roster local experts specialized in respective fields of management. Chartered accountants specialized in management consulting of SMIs will be filed in this roster, and they will be mobilized when the consultation services are required. These outside consultants will be remunerated for the time actually spent for the services. In view of the fact that a number of chartered accountants are available in the local offices of the international auditing firms and other domestic firms, the services of MIS will have less difficulty in maintaining its operation even after the termination of the foreign expert's services.

6) Cooperating Agencies

MIS Department will count on cooperation to be extended by other public, semi-public and private institutes, as well as the academia. The cooperating agencies for MIS will include, but not limited to, the following:

(i) NIBM

NIBM is a management institute organized under MCAID. NIBM regularly offers the training courses and has a roster of professionals for extending the management services. Their training courses are offered at reasonable charges. MIS will coordinate with NIBM in the consultation services and training programs. It is not an intention of MIS to compete with NIBM, but to collaborate with each other for mutual benefit.

(ii) SMED

SMED is a project of the Federation of Chamber of Commerce & Industry in Sri Lanka in collaboration with the Friedrich-Naumann-Siftung of Germany formed for promotion of SMEs. It has a roster of outside professionals to extend their services to SMEs at a reasonable cost. MIS will coordinate with SMED in carrying out the consultation services. While SMED's window is open to any SMEs, MIS's services are extended for the time being to the manufacturing industries.

(iii) Accounting and Auditing Firms

In Sri Lanka, there are approximately 2,000 chartered accountants, and many of them are employed by world-known auditing firms (e.g., KPMG, Arthur Andersen and Ernst & Young). MIS will coordinate with these firms, other domestic firms or individual chartered accountants to extend the consultation services. Those outside consultants may be remunerated at a reasonable fee.

7) Capacity Building

MIS will have less difficulty in maintaining its operation, compared with TMA operations, because the local consultants and chartered accountants are readily available in Sri Lanka. However, MIS's proper staff will have to be trained at the initial stage of MIS operations through on-the-job training by the foreign expert. MIS local staff will also be trained how to manage operations of MIS, particularly the way to manage the consultation services and the manner of advice to SMIs. They will also be trained how to coordinate with other SMIDEC operations, especially TMA, as integrated services are often required by SMIs.

4.3 Venture and Incubation Promotion (VIP)

SMIDEC's Venture and Incubation Promotion window (VIP) is comprised of two arms, i.e., Venture Promotion and Incubation Promotion. The Venture Promotion aims at providing and facilitating services to small start-up enterprises in the manufacturing sector and entrepreneurs with the objective to assist them to grow into full-fledged companies. The priority will be given to 'policy-driven industries' as defined by the Master Plan Study for Industrialization, such as leather, electronics/electric, plastic and machinery¹. Incubation Promotion will incubate start-up IT (Information Technology) companies and entrepreneurs in order to help them market their products and become successful IT companies.

4.3.1 Venture Promotion

1) Issues to Be Addressed

(i) Young and small venture capital industry

The venture capital industry in Sri Lanka is relatively new with the history of only a decade and with only seven participants. Most of them are subsidiaries of banks and set up after the government introduced tax incentives for the industry.²

Investment performance of the industry for the past decade has been quite disappointing with only one 'Good' performance and 32 'Lost' cases out of 101 total investments. In recent years, the venture capital firms have become less and less active. Of all the seven venture capital firms, only three are said to be active now. According to the research done on the venture capital industry in Sri Lanka by TIPS, the average

IT sector is excluded from the Venture Promotion as it is fully taken care of by the IT Incubation Promotion.

² Tax incentives given to the industry include tax deduction of investments to venture capital firms for several years and tax exemption of venture funds for ten years.

annual investment per fund was 3.2 between 1993 and 1996 and dropped drastically to 0.6 between 1997 and 1999.

(ii) Venture capital industry in Sri Lanka getting away from small companies

Performance of the investments to start-up companies has been less active than that of the investments to existing companies. According to the TIPS research, 36.8% of all the investments made into start-up companies between 1991 and 1999 were 'Lost' and 36.7% 'Fair', while those of existing companies were 22% and 46.9%, respectively. Further, the investment performance of existing companies has been improving over the decade but that of the start-up companies remains poor. Combined figure of investments with 'Lost' and 'Poor' performances was still high at 50% for start-up companies in the period of 1997-1999 but that of the existing companies was none. Considering the risks involved in the investments into small start-up companies, the industry in general is moving away from SMIs into larger companies, with the exception of the IT industry.³

(iii) Low level of entrepreneurship

Poor performance by the venture capitalists and its reluctance towards SMIs could also be attributable to the low level of entrepreneurship in Sri Lanka. The Master Plan Study for Industrialization has also pointed out the lack of entrepreneurship as one of the major problems for SMIs. In fact, the concept of venture capital firms is not widely known to SMIs yet. As such, the demand for venture capital funds from the venture companies or entrepreneurs is not strong and those who do apply for the funds are not necessarily aware of what venture capital firms expect from them. Such issues include building mutual confidence with partners (especially with venture capitalists and financial institutions), developing good quality business plans, having high moral as entrepreneurs with long-term commitment to their work and showing efforts of bringing in their own money and other private source funds before going for financial help to the third parties.

2) Objectives of Venture Promotion

Entrepreneurship with young and innovative ideas is indispensable for the sustainable growth of the manufacturing sector in any country. The Venture Promotion arm of VIP aims at activating entrepreneurship in Sri Lanka by increasing people's awareness and assisting the entrepreneurs to become full-fledged companies with professional advice and services in areas such as technology, marketing, management and finance. The priority is given to

IT start-up companies are the only exception as they require relatively small amount of seed money and the time required for marketing the products is short as 1 to 2 years.

policy-driven industries – electronics/electric, leather, machinery and plastics as defined in the Master Plan Study for Industrialization.

3) Services Provided by Venture Promotion

Venture Promotion will provide and facilitate the following services to the venture companies/entrepreneurs. Services mentioned under (i) below are provided to the general public. Services mentioned in (ii) below are provided and facilitated to the selected venture companies/entrepreneurs. Services (ii) are in principle demand-driven by recipients.

- (i) Promoting Entrepreneurship and Marketing Activities of Venture Promotion
 In order to increase the public's awareness about entrepreneurship, the Venture
 Promotion team will hold workshops targeted at students of universities and
 professionals of institutes about forming their innovative ideas into companies and
 becoming entrepreneurs. Important issues such as high morale as entrepreneur,
 long-term commitment to the work and building strong mutual confidence with
 partners (e.g., financial institutions) are also lectured. The concept of venture capital
 firms will be introduced to them.
- (ii) Providing and Facilitating Consulting and Financial Services

 Consulting advice in the following areas of expertise is also offered to venture companies and entrepreneurs to help them become full-fledged companies:

Technical Advice (to be provided by Venture Promotion)

- Technical advice on design, development, processing productivity, and production

Marketing Advice (to be provided by Venture Promotion)

- Marketing and sales advice of the products both to domestic and foreign markets
- Advice on strategic partnerships

Management Advice (to be provided by Venture Promotion)

- Accounting and financial management
- Legal matters

Financial Advice (to be facilitated by Venture Promotion)

- Venture Capital Funds

Venture Promotion will assist the venture companies/entrepreneurs in developing the business plans to be presented to venture capital firms. It will also lecture on other things expected by venture capital firms such as building strong mutual confidence and putting in their own money and other private source funds. After all, the venture capital firms invest in innovative ideas and in the people themselves.

- Bank Loans

VIP will introduce the recipients to the Technical Assistance program of SMILE Loan⁴. VIP will also try to arrange special agreements with banks in Sri Lanka to provide loans to the venture companies and entrepreneurs on the basis of a credit guarantee provided by CGO. Loan conditions should be negotiated on a case by case basis depending on the maturity and size of individual companies. The same kind of advice and services offered to recipients in acquiring venture capital funds are also given to them in acquiring loans from banks.

Assistance in stock listing

In return for the services provided and facilitated to the recipients, VIP will retain the right to take a stake in them when it appears to be it appropriate.

4.3.2 Incubation Promotion (IT Industry)

1) Issues to Be Addressed

(i) Small-scale IT Industry

Turnover of the IT (Information and Technology) service industry in Sri Lanka (exclusive of telecommunications and broadcasting) was estimated to be Rs.3,944 million in 1998 according to the questionnaire survey conducted by JICA under The Master Plan Study for Industrialization. The value added by the IT industry is estimated to be Rs.1,820 million in 1998, which is equivalent to only 0.2% of GDP of the same year, or 0.3% of the world IT industry market in 1997.

(ii) Potential growth in IT Industry

Albeit from a low level, the IT industry in Sri Lanka has been expanding. For instance, exports of computer software are expected to grow at an annual average growth rate of 25% between 1996 and 2002 according to the National Export Development Plan submitted in January 1998. Such exports are expected to be Rs.935.69 million in 2000. In order for the industry to grow further, however, the Master Plan Study for Industrialization raises the following issues to be solved. SMIDEC's IT Incubation Promotion aims to address to these issues.

Manpower Development

- Shortage of supply capacity of technical personnel
- Obsolete equipment and education materials in training organizations

⁴ JBIC's SMILE loan has Technical Assistance program, which is provided to the SMI sector for upgrading the technology at 0% and 3% annual interest rate.

Infrastructure

- Capacity and speed of telecommunications line

Market

- Small domestic market
- Limited market channel to foreign market

Financial Constraints

- Limited access to concessionary loans targeted at SMI sector or BOI incentives.

2) Objectives of IT Incubation Promotion

Incubation Promotion for the IT industry aims at incubating the innovative ideas in the IT industry. It aims at providing the start-up IT companies or entrepreneurs with innovative and marketable ideas with infrastructure, technological advice, marketing and management advice and financial assistance for the period of up to two years and assist them in starting their own businesses and contribute to the development of the IT industry in Sri Lanka.

3) Services Provided/Facilitated by IT Incubation Promotion

IT Incubation will provide and facilitate the services required by the incubatees. Products of IT enterprises are marketed through telecommunications and thus the high-level telecommunications service at reasonable cost is a key to enhance the IT service industry. SMIDEC will not have infrastructure but facilitate its provision to the incubatees by IT incubators.

Hands-on consulting advice in the following areas of business is also offered to the incubatees to help them become full-fledged companies. Financial assistance to the incubatees will also be facilitated by Incubation Promotion. Even a small amount of seed money makes a big difference in establishing an IT service enterprise. VIP will introduce the recipients to Technical Assistance program of SMILE loan. VIP will also arrange special agreements with banks in Sri Lanka to provide concessionary loans to the incubatees backed up by CGO's credit guarantee.

Incubation Promotion will provide and facilitate the following services to the incubatees:

- (i) Infrastructure (to be facilitated by Incubation promotion)
 Incubation Promotion will arrange in order that the following infrastructure will be provided by the IT incubator. The IT incubatees will pay subsidized monthly rent to the IT incubator for using the following facilities.
 - An office space

- Computers, furniture and equipment
- Dedicated internet services⁵ (including hosting the incubatee's Website)
- Communications facilities
- Secretariat services
- (ii) Technical Advice (to be provided by Incubation Promotion)
 - Advice on IT technology
 - Advice on product development
- (iii) Marketing advice (to be provided by Incubation Promotion)
 - Marketing and sales advice of the products both to domestic and foreign markets
 - Advice on strategic partnerships
- (iv) Management Advice (to be provided by Incubation Promotion)
 - Accounting and financial management
 - Legal matters
- (v) Financial Assistance (to be facilitated by Incubation Promotion)
 - Facilitating equity investment from venture capital funds
 - Facilitating the access to the concessionary bank loans through special agreement with banks supported by the credit guarantee system as well as the access to Technical Assistance program of SMILE loan
 - Helping the incubatees develop business plans to seek funds from other sources
 - Assistance on stock listing

4.3.3 Proposed VIP Organization

1) Organization of VIP

VIP Staff

SMIDEC's VIP (Venture and Incubation Promotion) will have a director and four other full-time professional staff. Two professional staff will focus on the activities of Venture Promotion while the other two will specialize in the activities of IT Incubation Promotion. Two professional staff for Venture Promotion are expected to have background in finance. Two professional staff of IT Incubation Promotion should have background in ventures capital investment and IT. It is expected that some of these professionals will be seconded from venture capital companies under DFIs. VIP will also have five assistants preferably with the background in finance and IT industry,

⁵ The IT Incubator will provide facilities to protect the IT incubatees' ideas and products from the hackers.

and one secretary. Five assistants are expected to be seconded from state banks. In total, VIP will comprise 11 staff.

Committees for Venture Promotion and IT Incubation Promotion

VIP will have the Committees for Venture Promotion and IT Incubation Promotion, which are comprised of the specialists listed below. Their main tasks are to provide required advice to the venture companies and incubatees. They are also expected to help VIP create the network of professionals in relevant fields in Sri Lanka and to screen the applicants. Consulting services from the members of the Committee are expected to be provided free of charge. In return for these services, they are expected to benefit from their constant contacts with venture companies and incubatees to be able to learn from their ideas and products as well as to judge the best investment timing. When the recipients become successful in later years, they will also be invited to be members of the Committee.

Venture Promotion Committee

- Venture Capitalists
- Private Enterprises
- Professors/researchers at Universities
- SMIDEC's team

Incubation Promotion Committee

- IT Incubator
- IT Companies
- Venture Capitalists
- Professors/researchers at Universities
- SL Association for Software Industry
- Software Exporters' Association
- SMIDEC's team

Member Consultants for VIP

VIP will register specialists in technology, finance, legal issues, accounting, marketing and management as member consultants to work on short-term contract basis for pre-determined amount of fees. Whenever there is a demand for advice, which VIP team cannot provide, they will contact the member consultants to give required advice and services to the customers. Most of the members are selected from the cooperative organizations mentioned below. When the recipients become successful, they will automatically become member consultants. Most of the member consultants provide services for both Venture Promotion and IT Incubation Promotion.

2) Cooperating Agencies

VIP plans to build the network of the following cooperative organizations to give full-range services to the venture companies/incubatees in the respective areas of business. The VIP team will facilitate these services to the venture companies/incubatees based on their requirements. In fact, building the network with these organizations becomes very important

for the success of VIP. The Committee for Venture Promotion and the Committee for IT Promotion are expected to play a big role in building the strong and wide network for VIP. Most of the following organizations are expected to become the cooperative organizations for both Venture Promotion and IT Incubation Promotion.

(i) Private Enterprises

They are expected to provide information on the trend of the relevant industry as well as advice on technology to the recipients. They could also be funding sources for the recipients. These companies are requested to allow their employees to become member consultants for VIP and work on a short-term contract basis for a pre-determined fee. When the recipients become successful in later years, they will also provide the technological advice to their posteriors.

(ii) IT Incubator

The IT Incubator will house the incubatees in its IT Incubation Center equipped with the infrastructure facilities. The IT Incubator is expected to play a big role for the IT Incubation Program. The IT Incubation team and the IT Incubator will work as partners and become instructors/mentors for the incubatees. Whichever becomes the main instructor/mentor of a particular incubatee, provides and facilitates required consulting and financial services to the incubatee. IT Incubator becomes the main instructor/mentor for those incubatees of which it decides to hold a stake. The stake is expected to constitute the exit route for it in later years in return for the services it gives to them. On the other hand, the IT Incubation team will become the main instructor/mentor for those incubatees of which the IT Incubator does not wish to hold a stake. In such case, VIP takes a stake in the incubatee, which is expected to be sold at the stock market in later years if it is listed. In the event that the Technopark is established, the Technopark will also become a cooperative agency to provide the infrastructure facilities to the IT companies.

(iii) BII (Bureau of Infrastructure Investment)

BII is a subordinate institution under the Board of Investment (BOI), which in turn comes under the Ministry of Constitutional Affairs and Industry Development (MCAID). Since April 2000, BII operates 'Software Park', where large floor space and Internet services are provided to exported-oriented software companies at a subsidized rate for the period of three years. IT incubatees with relatively advanced business plans may be located at BII's Software Park.

(iv) Universities and Institutes

As the Master Plan Study for Industrialization argues, the strengthening of the relatively weak linkage between the industry and academia is important to efficiently utilize the available resources and to develop high-level technology in Sri Lanka. Universities and Institutes are expected to provide R&D facilities and libraries as well as advice on R&D technology to recipients of VIP. These Universities and Institutes are requested to allow their staff to become member consultants for SMIDEC's VIP and work on a short-term contract basis for a pre-determined fee. For instance, Universities and Institutes specialized in IT technology (e.g, SLLTI, University of Colombo, University of Morotowa and University of Candy) are expected to provide facilities and students for part-time work (for example for programming) as well as advice on IT technology to the incubatees. In return for the services they provide, the Universities and Institutes are also expected to gain from collaborative activities with the recipients of VIP.

(v) Venture Capital Companies

Using their wide network of professionals, Venture Capital Companies are expected to provide management and marketing advice both for domestic and foreign markets. They are also expected to give the recipients advice on forming strategic partnerships with other companies and listing the shares on the stock markets including foreign ones. They will provide financial management advice and may provide equity funds to the recipients, either by itself or introducing other venture capitalists including foreign firms.

(vi) EDB (Export Development Board)

EDB is a subordinate institution under the Ministry of Internal and International Trade and Commerce and Muslim Religious Affairs and Shipping Development. It started 'Trade Information Network' in 1996, which is the website carrying information on companies, products, trade events and market researches. EDB has also been operating five 'Cyber Trader Centers' in the island since 1999 to promote e-service. EDB's five Cyber Trader Facility offices in the island are expected to function as windows for VIP by marketing its activities and services to venture companies and entrepreneurs in the regions.

(vii) Accounting Firms and Law Firms

Accountants will provide advice on book keeping and financial management while lawyers give advice on legal matters to venture companies/entrepreneurs. These firms are requested to allow their employees to become member consultants for VIP and work on a short-term contract basis for a pre-determined fee. It is important to increase

the awareness of entrepreneurs in keeping correct accounts, which is one of the things they tend to neglect and in times cause trouble with financial institutions.

(viii) Consultants registered with TMA and MIS

VIP will also have access to professional consulting by the consultants registered with TMA and MIS of SMIDEC.

4.4 Credit Guarantee Organization (CGO)

1) Basic Concept of Credit Guarantee

"Credit Guarantee" to be conducted by SMIDEC shall not be the system to add credits as a mercy from the high-ranking position to SMIs. Rather, its task is an active and forward-looking one which is to dig up credit worthiness and potentiality of business which are buried in various SMIs in Sri Lanka by proper examination and to realize their prosperity by providing support.

It is a task to seek creative enjoyment, thinking together, working together, searching for and raising the potentiality of business. This is the occupation relating to finance and credit, and all participating persons are required to have higher ethics, justice and sense of mission. Taking all possible measures to prevent moral hazards is an essential factor on which the existence of the guarantee system depends.

The credit guarantee examines and evaluates the credit worthiness of a SMI and realizes the financing by guaranteeing their financial debts to financial institutions. If a risk arises, the credit guarantee organization promptly makes payment in subrogation on behalf of the SMIs of their debts to financial institutions.

Concerned parties to credit guarantee are (i) SMIs, (ii) financial institutions and (iii) the credit guarantee organization. The following basic contracts are entered into among the three parties to realize credit guarantee and finance at the same time.

- (i) SMIs ⇔ credit guarantee organization
 Credit guarantee consignment contract
- (ii) Financial institution ⇔ credit guarantee organization
 Credit guarantee agreement
 Guarantee contract (individual)

(iii) Financial institution ⇔ SMIsBanking transaction contractLoan contract (individual)

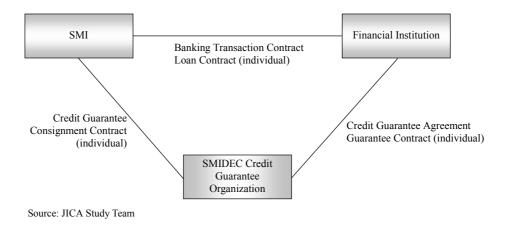


Figure 4.1 Tripartite Contract Relation of Credit Guarantee

2) Functions of Credit Guarantee

It is appropriate that a new credit guarantee organization that meets the requirement of the modern credit guarantee system is attached to SMIDEC as the one having the following contents:

(1) Coverage

Credit Guarantee Organization (CGO) is placed as a core operating organization of SMIDEC. It engages in the "credit guarantee of financing for SMIs" as the dedicated institution of the credit guarantee.

- Due to the underdevelopment of related systems, the credit guarantee for discount of bills is to be deferred.
- The credit guarantee for the transfer of existing obligation, speculation fund, refinancing fund and fund of consumption for life are not handled.

In order to provide the function of SMIDEC and its benefit universally and to make the base for credit guarantee more firmly fixed by realizing the "sea of credit guarantee", the expansion and opening of coverage (SMIs and financial institutions) are the inevitable requirements. On the other hand, it is important to make good use of this system strategically in the industry type groups and regions which are expected to develop as the national policy under the market economy, and it is one of merits of the establishment of this system.

(i) Definition of SMIs : Conformity to the definition of MCAID and SMIDEC

(ii) Covered industry type: Indication of industry type corresponds to the relevant

government ordinance.

Self-regulation by preparing the "list of strategic industry type for credit guarantee organization" is one of the methods. The strategic industries may include the IT related industry, hi-tech venture related enterprises, manufacturing industry of export related products, industry type to create employment, regional agriculture related industry and manufacturing industry of traditional craft products.

(2) Financial institutions

At present, the structure of private commercial banks and government policy banks is similar to a considerable extent. However, in the future, it is expected that a group of banks which meet active demand of fund in the private sector will appear in line with the economic growth. Expectations in respect of finance companies (25) and union banks / CRB (1,295) are also important. Basically, an image should be created that SMIDEC is a financing function.

(3) Guarantee Ratio

Although the guarantee ratio of 100% (in Japan, Korea and Taiwan) is an ideal for independence of the credit guarantee organization, at the unknown stage of establishing the credit guarantee organization, the "partial guarantee" is to be adopted for purposes of utilizing research data of financial institutions by decreasing the share of loss for the credit guarantee organization and by asking responsibility sharing to the institution, as well as by creating a tense relationship to exclude moral hazards on both sides of financial institutions and the credit guarantee organization. Judging from the current state of surrounding countries, the guarantee ratio of 80% is to be adopted.

(4) Guarantee Multiplying Ratio

One of the benefits of credit guarantee is the high effectiveness of input into the fund. Although an input of 1 billion rupee is only a loan of 1 billion rupee for the case of direct financing, the sum is operated at 10 times when it is put into the credit guarantee organization. Therefore, if the risk is kept within 10%, it is possible to realize, the new loans of 10 billion rupee to SMIs. On the other hand, if the credit guarantee

organization undertakes the credit guarantee exceeding their ability, it goes bankrupt by the huge burden of shared amounts. The guarantee multiplying ratio explicitly represents the creditworthiness of the credit guarantee organization itself, and therefore the credit guarantee organization should draw up its proper multiplying ratio carefully in the light of all of its management analysis and business plan.

In Sri Lanka, the Central Bank applied the multiplying ratio of 10 times before, and SMIDEC will follow this multiple rate for the time being. The guarantee multiplying ratio of 10 times means explicitly that even if an accident takes place 10% of the time, the full guaranteed amount (subrogation) is possible with own-funds. At the same time, this means that the credit guarantee organization promises to all involved personnel the sound management which never causes accidents over 10% of the time.

(5) Credit Guarantee Fee Rate

The credit guarantee fee has a different character from other fees such as interest, research fee, handling charge, insurance premium or registration fee. This is the specific fee as the source of income to maintain and manage the credit guarantee organization.

Practically, the fee is obtained by deducting operating profits (interest on deposits minus interest on loans) gained by depositing into banks of own-funds (such as the fundamental properties) from the grand total of expenses of the credit guarantee organization (personnel expenses and expenses for property), guaranteed losses (which is obtained by deducting subsequently recovered amount from the subrogated payment) and various reserves (for maintenance of guarantee business), which is collected by the credit guarantee organization from the users of credit guarantee (SMIs).

The credit guarantee fee rate is decided in accordance with the actual management of the credit guarantee organization. However, it is decided by the judgment at the foundation stage having no managerial performances. In such a case, the rate is often fixed at a lower rate for alleviating the burden of the SMIs as much as possible.

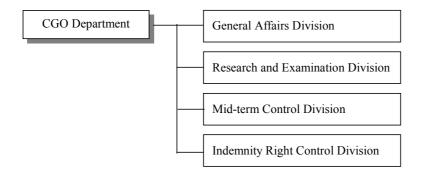
In Sri Lanka, although the Central Bank applied 1% for the previous system, the interest of operating funds in Sri Lanka are at high levels. Therefore, it is considered that the fee rate of 2% is reasonable. In this case, if the partial guarantee of 80% is applied, the 2% fee becomes the actual income rate of 1.6% (at full operation period).

(6) Nationwide Organization

Although establishment of SMIDEC is a premise, the credit guarantee organization is expected to develop not as a promotional institution of some regions but as the active institution covering Sri Lanka in its entirety with a view to promoting SMIs and the public interest in promoting financial understandings. At the initial stage, operations will be concentrated to the Metropolitan area. However, it is necessary to plan for expansion of the network (5 - 6 branch offices) all over the country even at the initial stage and to include such planning in the business plan.

3) Organization of CGO

The administration of the credit guarantee organization is composed of the following four divisions:



(i) General Affairs Division:

Operation planning, management information, computerized network management, public relations, and internal auditing.

(ii) Research and Examination Division:

Qualification review for credit worthiness of SMIs as well as general examination of their financial situation

(iii) Mid-term Control Division:

Monitoring of credit guaranteed debts as well as assistance of management for SMIs

(iv) Indemnity Right Control Division:

Dealing with long-term recovery, assistance in restructuring for SMIs and lawsuit

For the reasonable and effective realization of these credit guarantee operations, the mobilization of general control functions and the fulfillment of regional networks are indispensable. The computer system to control operation of credit guarantee is on the premise.

V. OPERATIONS OF SMIDEC

5.1 Operations of Technical and Management Advice (TMA)

1) TMA Operations

Advertisement

TMA, especially at the initial stage, will require advertisement of its existence and activities to SMIs. Such advertisement will be undertaken by the officers of SMIDEC, as well as on Internet home page of SMIDEC. Advertisement through respective chambers will also be effective.

First-hand consultation

TMA is to first analyze the background of the applicant by the application document . Then, TMA dispatches a consulting team to SMIs and the consultants will perform a first-hand inspection of the factory, review of documents and interview with owner and executive managers. Such first-hand consultation can be classified into the two types: (i) technical consultation on productivity, quality control, machinery and equipment, workmanship and other technical issues, and (ii) consultation on applicability for financial assistance through the existing schemes (e.g., SMILE loan T/A scheme) and for the credit guarantee scheme of SMIDEC.

After the first-hand consultation, the consulting team will prepare a document including the observation results and recommendations for the consultation and inform them to the applicant. Then, the Documentation Division will make such documents in order, keep them in confidence, summarize them, analyze them and prepare a summarized paper including the current issues requested by SMIs, technical issues and its measures to be solved. The Information and Dissemination Division will make such a summarized paper in order.

The first-hand consultation is to be extended free of charge as far as SMIDEC can receive technical assistance of foreign experts from the international cooperation agencies and as far as SMIDEC operation turns out to be financially viable.

Consultation services

SMIs, after the first-hand consultation, will obtain the consultation services to be extended by TMA's professional consultants. TMA will dispatch a consulting team to the applicant for analysis and consultation, upgrading of productivity, improvement in production technologies, development of new products by the introduction of new technology, marketing for new products, and other consulting services in technological fields requested

by the applicant. SMIs usually, unlike large scale industries, cannot clearly define the scope and objectives of the consultation service. Therefore, the TMA's consultation service will first define its scope and objectives through discussion with the owner or top management. At such a stage, creation of some unique production know-how will be one of the major objectives for consultation. On the other hand, creation or introduction of new technology and equipment for development of new products and marketing for new products will be the major subject of consultation for an independent SMI.

After such consultation the consulting team will prepare a document including the results of consultation and recommendations for improvement, and inform them to the applicant. Then, the Documentation Division will make such documents in order, analyze them and prepare summarized papers of the consultation services. While, the Information and Dissemination Division will make such summarized papers in order.

TMA's consultation services will be charged at cost or at the rate agreed upon between the SMI and TMA. The cost of such services might possibly be payable by credit as far as the technical assistance loan of JBIC's SMILE-II is available through NDB. In some cases, SMILE-II credit is found to be a relatively heavy burden on a SMI. TMA, in such a case, will find out or organize a group of factories having a similar program for technical and managerial improvement, so that they can share the costs for the consulting services.

Training services

TMA will offer the technological training programs for SMIs. The contents of those programs are prepared by the TMA staff in charge of training, with the cooperation of foreign experts from international cooperation agencies. The attendants of those training programs are charged at reasonable cost. Some TMA training services can mobilize managers of successful enterprises in Sri Lanka both locally and internationally as lecturers of training programs.

Foreign consultants

The consultation service for a SMI frequently requires well experienced consultants, but it is difficult at present to find out such capable consultants in Sri Lanka that have specialized experiences and wide knowledge that can meet the technical and engineering requirements of SMIs. Therefore, at least at the initial stage of SMIDEC, it is required that capable foreign experts be sent by the international cooperation agencies to SMIDEC and such foreign experts will train local experts. It is desirable that such support of the international cooperation agencies be extended at least for 2 years and be executed in a flexible manner depending on the requirement of SMIDEC for the rational and effective training for local

experts in Sri Lanka. At the initial stage of SMIDEC, the first-hand consultations and consultation services are led by such foreign experts.

Local consultants

TMA will maintain a roster of qualified local experts in respective fields of technology. Such local experts will be selected from the public and private sectors, including technical centers of IDB, marketing specialists of EDB, engineers of the public research centers (e.g., Rubber Research Institute), and local consulting firms. TMA registered local experts will be assigned to the consultation services on a short-term contract basis. They will be trained by foreign experts through on-the-job training and will be expected to be international level consultants. As the local experts are trained, the foreign experts will decrease their participation in such services and the participation of local experts will be increased gradually.

TMA staff

The staff of TMA is proposed to be organized as tabulated below. These staff will also be trained by the foreign consultants for efficient and effective operation of TMA.

Information Consulting Documentation and Common Total Department Division Dissemination Division 1 1 Department Manager 3 1 1 5 Local expert Assistant 1 1 2 Secretary 1 1 2 2 9 Total 3

Table 5.1 Staff of TMA

2) Business Prospects

First-hand consultation

(The first period)

In the first period, the foreign experts will conduct the first-hand consultation services and the local experts will participate in such services as assistants. The number of cases and total cost of services under Scenario 1 are calculated with some assumptions as follows:

Assumption

Man/day of foreign experts: 125 man/day

Average man/day of foreign experts per case: 1 day

Average man/day of local assistants per case: 2 days

Remuneration for local assistants: Rs. 2,000/day

Calculation

Number of cases: 125/1=125 cases Average cost per case: $2\times2,000=Rs.4,000$

Total cost: 125×4,000=Rs. 500,000

(The second period)

Through the services in the first period, the foreign experts train the local experts and it might be expected that some local experts reach the level of being capable of providing the services by themselves to some extent, and the foreign experts will decrease their participation in the services. The number of cases and total cost of the services in the second period are calculated with some assumptions as follows:

Assumption

Man/day of foreign experts: 62.5 man/day

Average man/day of foreign experts per case: 0.5 day

Man/day of local experts: 125 man/day

Average man/day of local experts per case: 1 day

Remuneration for local experts: Rs. 5,000/day

Average man/day of local assistants per case: 2 days

Remuneration for local assistants: Rs. 2,000/day

Calculations

Number of cases by foreign expert: 62.5/0.5=125 cases Average cost per case by foreign expert: $2\times2,000=$ Rs. 4,000

Total cost of foreign experts: $125\times4,000=$ Rs. 500,000

Number of cases by local experts: 125/1=125 cases

Average cost per case by local expert: $1\times5,000+2\times2,000=\text{Rs. }9,000$ Total cost of local experts: $125\times9,000=\text{Rs. }1,125,000$

Total cost: 500,000+1,125,000=Rs. 1,625,000

(The third period and thereafter)

In the third period and thereafter, local experts will conduct the first-hand consultation and other experts will participate in such services as assistants. The number of first-hand consultation will be dependent on the man/day of the local expert. The number of cases and total cost of the services in the third period and thereafter are calculated with some assumptions as follows:

Assumption

Man/day of local experts: 250 man/day

Average man/day of local expert per case: 1 day

Remuneration for local experts: Rs. 5,000/day

Average man/day of local assistant per case: 2 days

Remuneration for local assistant: Rs. 2,000/day

Calculation

Number of cases by local experts: 250/1=250 cases

Average cost per case: $1\times5,000+2\times2,000=\text{Rs. }9,000$ Total cost: $250\times9,000=\text{Rs. }2,250,000$

Table 5.2 Operation of TMA First-hand Consultation

	Number of first-hand consultation	Revenue (Thousand Rs.)	Expenditure (Thousand Rs.)	Profit (Thousand Rs.)
First period	125	0	500	-500
Second period	250	0	1,625	-1,625
Third period	250	0	2,250	-2,250

Consultation services

(The first period)

In the first period, foreign experts will conduct consultation services and the local experts will participate in such services as assistants. The number of cases, total revenue and total cost of the services in the first period are calculated with some assumptions as follows:

Assumption

Man/day of foreign experts: 125 man/day

Average man/day of foreign experts per case: 5 days

Fee for foreign experts charged to applicant: Rs. 20,000/day

Average man/day of local assistants per case: 10 days

Remuneration for local assistants: Rs. 2,000/day Fee for local experts charged to applicant: Rs. 5,000/day

Calculation

Number of cases: 125/5=25 cases

Average fee per case: $5\times20,000+10\times5,000=\text{Rs.}\ 150,000$

Total revenue: 25×150,000=Rs. 3,750,000

Average cost per case: $10\times2,000=\text{Rs. }20,000$ Total cost: $25\times20,000=\text{Rs. }500,000$

(The second period)

Through the services in the first period, the foreign experts train the local experts and it might be expected that local experts might grow to some extent. The foreign experts will decrease their participation in the services. The number of cases, total revenue and total cost of the services in the second period are calculated with some assumptions as follows:

Assumption

Man/day of foreign experts: 187.5 man/day

Average man/day of foreign experts per case: 2.5 days

Fee for foreign experts charged to applicant: Rs. 20,000/day

Average man/day of local experts per case: 10 days

Remuneration for local experts: Rs. 2,000/day
Fee for local experts charged to applicant: Rs. 5,000/day

Calculation

Number of cases: 187.5/2.5 = 75 cases

Average fee per case: $2.5 \times 20,000 + 10 \times 5,000 = \text{Rs. } 100,000$

Total revenue: 75×100,000=Rs. 7,500,000

Average cost per case: $10\times2,000=$ Rs. 20,000

Total cost: 75×20,000=Rs. 1,500,000

(The third period and thereafter)

In the third period and thereafter, local experts will conduct consultation services and other experts will participate in such services as assistants. The number of cases, total revenue and total cost of the services in the third period and thereafter are calculated with some assumptions as follows:

Assumption

Man/day of local experts: 500 man/day

Average man/day of local experts per case: 5 days

Fee for local experts charged to applicant: Rs. 20,000/day Remuneration for local expert: Rs. 5,000/day

Average man/day of other experts per case: 10 days

Remuneration for other experts: Rs. 2,000/day
Fee for other expert charged to applicant: Rs. 5,000/day

Calculation

Number of cases: 500/5 = 100 cases

Average fee per case: $5\times20,000+10\times5,000=\text{Rs.}\ 150,000$ Total revenue: $100\times150,000=\text{Rs.}\ 15,000,000$ Average cost per case: $5\times5,000+10\times2,000=\text{Rs.}\ 45,000$

Total cost: 100×45,000=Rs. 4,500,000

Table 5.3 Operation of TMA Consultation Services

	Number of consultation service	Revenue (Thousand Rs.)	Cost (Thousand Rs.)	Profit (Thousand Rs.)
First period	25	3,750	500	3,250
Second period	75	7,500	1,500	6,000
Third period	100	15,000	4,500	10,500

Training services

(The first period)

In the first period, the foreign experts will be mobilized to prepare and execute training programs together with the TMA officer in charge of training services. The number of cases and attendants, total revenue and total cost of the training services are calculated with some assumptions as follows:

Assumption

Man/day of foreign experts: 62.5 man/day
Average man/day of foreign experts: 5 days/program

Average attendants per program: 20 persons
Average fee for participants: Rs. 4,000
Man/day of local experts per program: 10 days

Remuneration for local expert: Rs. 2,000/day
Other operational cost per program: Rs. 50,000

Calculation

Number of programs: 62.5/5=12 programs Number of attendants: $12\times20=240$ persons

Total revenue: 240×4,000=Rs. 960,000

Expense for creation of program: $10\times2,000=$ Rs. 20,000

Total cost: $12\times(20,000+50,000)$ =Rs. 840,000

(The second period)

In the second period, the foreign experts will support the execution of training programs. However, in the second period, the programs that are prepared in the first period can be also offered, with some improvement. The number of programs and attendants, total revenue and total cost of the services in the second period are calculated with some assumptions as follows:

Assumption

Previous programs: 12 programs Man/day of foreign experts: 62.5 man/day

Average man/day of foreign experts: 5 days/program (new)
Average man/day of local experts: 5 days/program (updating)

Average attendants per program: 20 persons Average fee for participation: Rs. 4,000

Average man/day of local experts: 10 days/program (new)

Remuneration for local expert: Rs. 2,000/day
Other operational cost per program: Rs. 50,000

Calculation

Number of programs: 12+62.5/5=24 programs Number of attendants: $24\times20=480$ persons

Total revenue: $480\times4,000=$ Rs. 1,920,000 Expense for creation of program: $10\times2,000=$ Rs. 20,000

Expense to update program: 5×2,000=Rs. 10,000

Total cost: $12\times(20,000+50,000) + 12\times(10,000+50,000)$

=Rs.1,560,000

(The third period and thereafter)

In the third period and thereafter, local experts will conduct training programs. While, the training programs that are prepared in previous periods can be offered, some programs will not meet the demands of SMIs and will be abandoned. The number of programs and attendants, total revenue and total cost of the services in the third period and thereafter are calculated with some assumptions as follows:

<u>Assumption</u>

Number of previous programs: 24 programs

Number of programs to be updated: 12 programs

Number of programs to be abandoned: 12 programs

Number of new programs: 12 programs

Average attendants per program: 20 persons Average fee for participant: Rs. 4,000

Average man/day of local assistants: 5 days/program (updating)

Average man/day of local experts: 5 days/program (new)
Average man/day of local assistants: 10 days/program (new)

Remuneration for local expert:

Rs. 5,000/day

Remuneration for local assistants:

Rs. 2,000/day

Other operational cost per program:

Rs. 50,000

Calculation

Number of programs: 24+12-12=24 programs Number of attendants: $24\times20=480$ persons

Total revenue: 480×4,000=Rs. 1,920,000

Expense for creation of program: $5\times5,000+10\times2,000=$ Rs. 45,000

Expense to update program: $5\times2,000=$ Rs. 10,000

Total cost: $12\times(45,000+50,000)+12\times(10,000+50,000)$

=Rs. 1,860,000

Table 5.4 Operation of TMA Training Services

	Number of training programs	Revenue (Thousand Rs.)	Cost (Thousand Rs.)	Profit (Thousand Rs.)
First period	12	960	840	120
Second period	24	1,920	1,560	360
Third period	24	1,920	1,860	60

Other expenditure

Although the employee's cost of TMA will depend on the experience and ability of the officers actually employed, a trial calculation is made as follows:

Table 5.5 Employee's Cost of TMA

(Thousand Rs.)

	Salary per year	Person	Total
Manager	840	1	840
Local expert	600	5	3,000
Assistant	300	2	600
Secretary	200	1	200
Total		9	4,640

Apart from these employees' costs, SMIDEC's total general administration costs will be allocated to TMA in proportion to the number of employees. The total operation costs, including general administration costs, will be discussed in Chapter 5.5

Summary of TMA business

The number of case, revenue, cost and profit under Scenario 1 are estimated as summarized below.

Table 5.6 Summary of TMA Business (Scenario 1)

(Thousand Rs.)

		Number of case	Revenue	Cost	Profit
First period	First-hand consultation	125	0	500	-500
	Consultation service	25	3,75,0	500	3,250
	Training services	12	960	840	120
	Employee's Cost	-	-	4,640	-4,640
	Total	-	4,710	6,480	-1,770
		Number of case	Revenue	Cost	Profit
Second period	First-hand consultation	250	0	1,625	-1,625
	Consultation service	75	7,500	1,500	6,000
	Training services	24	1,920	1,560	360
	Employee's Cost	-	-	4,640	-4,640
	Total	-	9,420	9,325	95
		Number of case	Revenue	Cost	Profit
On and after Third period	First-hand consultation	250	0	2,250	-2,250
	Consultation service	100	15,000	4,500	10,500
	Training services	24	1,920	1,860	60
	Employee's Cost	-	-	4,640	-4,640
	Total	-	16,920	13,250	3,670

In the event that the first-hand consultation and the consultation service of TMA are increased by 50% on and after the third period (Scenario 2 and 3 for Financial Analysis), the revenue, cost and profit are estimated as follows:

Table 5.7 Summary of TMA Business (Scenario 2 and 3)

(Thousand Rs.)

		Number of case	Revenue	Cost	Profit
On and after Third period	First-hand consultation	375	0	3,375	-3,375
	Consultation service	150	22,500	6,750	15,750
	Training services	24	1,920	1,860	60
	Employee's Cost	-	-	4,640	-4,640
	Total	-	24,420	16,625	7,795

5.2 Operations of Management Information Service (MIS)

1) MIS Operations

Advertisement

MIS, especially at the initial stage, will require advertisement of its existence and activities to SMIs. Although such advertisement will be undertaken by the officers of SMIDEC, the advertisement through respective chambers will be effective. SMIDEC's home page on Internet will show procedures for application.

First-hand consultation

MIS is to first analyze the background of the applicant by the application document. Then, MIS dispatches a consulting team to SMIs and the consultants will perform management diagnosis through observation of the actual management practices, review various management documents and interview with the owner and the executive managers. During the management diagnosis, if some difficulties in filing some documents to external institutions are found or the applicant presents some questions concerned with such filing, the consultants will give some guidance for preparation of such documents at that time. Such first-hand consultation can be classified into the two types: (i) management diagnosis for accounting, management, computerization, financial analysis, and other services, and (ii) management consultation on applicability for financial assistance through the existing schemes (e.g., SMILE loan T/A scheme) and credit guarantee of SMIDEC.

After the first-hand consultation, the consulting team will prepare a document including observations and recommendations of the consulting and inform them to the applicant. Then, the Documentation and Analysis Division will make such documents in order and keep them in confidence.

The first-hand consultation is to be extended free of charge as far as SMIDEC can receive technical assistance of foreign experts from the international cooperation agencies and as far as SMIDEC operation turns out to be financially viable.

Consultation services

SMIs, after the first-hand consultation, will obtain the consultation services to be extended by MIS's professional consultants. MIS will dispatch a consulting team to the applicant for analysis and consultation for management control system (personnel management system, sales management system, purchase management system, budget control system, and accounting system), marketing system (construction of marketing in formation collection and analysis system) and other consultation services in management fields requested by the applicant. SMIs usually, unlike large scale industries, cannot clearly define the scope of the consultation service. Therefore, the MIS's consultation service will first define its scope and objectives through discussion with the owner or the top management. At such a stage, cooperation or coordination between the applicant and other sub-contracting industries will be an issue of consultation on sub-contracting. While, for independent industries, how to share roles, how to share production processes among similar industries, how to advertise their products' advantage to markets, and how to collect and analyze market information will be major issues. On the other hand, personnel management, sales management, purchasing management, budget control, accounting and auditing will be major issues for both sub-contracting and independent industries.

After the consultation service, the consulting team will prepare a report of the consultation and recommendation for improvement, and inform it to the applicant. Then, Documentation and Analysis Division will make such documents in order and keep them in confidence.

MIS's consultation services will be charged at cost or at the rate agreed between the SMI and MIS. The cost of such services might possibly be payable by credit as far as the technical assistance loan of JBIC's SMILE-II is available through NDB. In some cases, SMILE-II credit is found to be a burden on a SMI. MIS, in such a case, will find out or organize a group of factories having a similar program for managerial improvement, so that they can share the cost for the consulting services.

Training services

MIS will offer the management training programs for SMIs. The programs will be prepared by MIS staff in charge of training services, with the cooperation of foreign experts from international cooperation agencies. The attendants of those training programs are charged at reasonable cost. Some MIS training programs can mobilize managers of successful enterprises, both local and international, in Sri Lanka as lecturers, as in the case of training under TMA.

Foreign consultants

Management consultation services for SMIs are characterized by a variety of services, viz., the applicant may request for all management issues, such as financial issues, sales issue, purchasing issue, labor issue, etc. Therefore, the consultants are required to have general, overall, practical experiences and wide knowledge. Therefore, at least during the initial stage of SMIDEC operations, it is required capable foreign experts be sent by the international cooperation agencies to SMIDEC and such foreign experts will train local experts. It is desirable that such support of the international cooperation agencies will last at least 2 years and such dispatch will be executed in a flexible manner depending on the requirement of SMIDEC for the effective support to SMIs, and for the rational and effective training of local experts in Sri Lanka. At the initial stage of SMIDEC, the first-hand consultations and consultation services are led by such foreign experts.

Local consultants

MIS will keep a roster of qualified local experts selected from the public and private sectors, including management specialists of NIBM and local or international auditing offices. MIS registered local experts will be assigned to the consultation services on a short-term contract basis. An indefinite quantitative contract may possibly concluded with some auditing offices. Local experts will be trained by foreign experts through on-the-job training and will be expected to be the international level consultants. As the local experts are trained, the foreign experts will decrease their participation in such services and the participation of local experts will be increased gradually.

MIS staff

The staff of MIS, including a department manager and a secretary, is to be recruited as shown below

Table 5.8 Staff of MIS

	Common	Consulting Department	Documentation and Analysis Division	Total
Department Manager	1			1
Local expert		3	1	4
Assistant			1	1
Secretary	1			1
Total	2	3	2	7

2) Business Prospects

First-hand consultation

(The first period)

In the first period, the foreign experts will conduct the first-hand consultation and the local experts will participate in such service as assistants. The number of cases and total cost of the services in the first period are calculated as follows:

Assumption

Man/day of foreign experts: 125 man/day

Average man/day of foreign experts per case: 1 day Average man/day of local assistants per case: 2 days

Remuneration for local assistants: Rs. 2,000/day

Calculation

Number of cases: 125/1=125 cases Average cost per case: $2\times2,000=$ Rs. 4,000

Total cost: 125×4,000=Rs. 500,000

(The second period)

Through the services in the first period, the foreign experts train the local experts and it might be expected that some local experts reach the level of being capable of providing the services by themselves to some extent, and the foreign experts will decrease their participation in the services. The number of cases and total cost of the services in the second period are calculated as follows:

Assumption

Man/day of foreign experts: 62.5 man/day

Average man/day of foreign experts per case: 0.5 day

Man/day of local experts: 125 man/day

Average man/day of local experts per case: 1 day

Remuneration for local experts: Rs.5,000/day

Average man/day of local assistants per case: 2 days

Remuneration for local assistants: Rs.2,000/day

Calculation

Number of cases by foreign experts: 62.5/0.5=125 cases Average cost per case by foreign experts: $2\times2,000=Rs.4,000$

Total cost by foreign experts: $125\times4,000=$ Rs. 500,000

Number of cases by local experts: 125/1=125 cases

Average cost per case by local experts: $1\times5,000+2\times2,000=\text{Rs.} 9,000$ Total cost by local experts: $125\times9,000=\text{Rs.} 1,125,000$

Total cost: 500,000+1,125,000=Rs. 1,625,000

(The third period and thereafter)

In the third period and thereafter, local experts will lead the first-hand consultation. The number of cases and total cost of the services in the third period and thereafter are calculated as follows:

Assumption

Man/day of local experts: 250 man/day

Average man/day of local experts per case: 1 day

Remuneration for local experts: Rs.5,000/day

Average man/day of local assistants per case: 2 days

Remuneration for local assistants: Rs.2,000/day

Calculation

Number of cases by foreign experts: 250/1=250 cases

Average cost per case: $1\times5,000+2\times2,000=\text{Rs. }9,000$ Total cost: $250\times9,000=\text{Rs. }2,250,000$

Table 5.9 Operation of MIS First Hand Consultation

	Number of first-hand consultation	Revenue (Thousand Rs.)	Expenditure (Thousand Rs.)	Profit (Thousand Rs.)
First period	125	0	500	-500
Second period	250	0	1,625	-1,625
Third period	250	0	2,250	-2,250

Consultation services

(The first period)

In the first period, foreign experts will conduct consultation services and the local experts will participate in such service as assistants. The number of cases, total revenue and total cost of the services in the first period are calculated as follows:

Assumption

Man/day of foreign experts: 125 man/day

Average man/day of foreign experts per case: 5 days

Fee charged to applicant for foreign experts: Rs. 20,000/day

Average man/day of local experts per case: 10 days

Fee charged to applicant for local experts: Rs. 5,000/day Remuneration for local experts: Rs. 2,000/day

Calculation

Number of cases: 125/5=25 cases

Average fee charged to applicant per case: $5\times20,000+10\times5,000=$ Rs. 150,000

Total revenue: $25 \times 150,000 = \text{Rs. } 3,750,000$ Average cost per case: $10 \times 2,000 = \text{Rs. } 20,000/\text{case}$ Total cost: $25 \times 20,000 = \text{Rs. } 500,000$

(The second period)

Through the services in the first period, the foreign experts train the local experts and it might be expected that local experts might grow to some extent. The foreign experts will decrease their participation in the service. The number of cases, total revenue and total cost of the services in the second period are calculated as follows:

Assumption

Man/day of foreign experts: 187.5 man/day per year

Average man/day of foreign experts per case: 2.5 days

Fee charged to applicant for foreign experts: Rs. 20,000/day

Average man/day of local experts per case: 10 days

Fee charged to applicant for local experts: Rs. 5,000/day Remuneration for local experts: Rs. 2,000/day

Calculation

Number of cases: 187.5/2.5= 75 cases

Average fee per case: $2.5 \times 20,000 + 10 \times 5,000 = \text{Rs. } 100,000$

Total revenue: 75×100,000=Rs. 7,500,000

Average cost per case: $10\times2,000=\text{Rs. }20,000$ Total cost: $75\times20,000=\text{Rs. }1,500,000$

(The third period and thereafter)

In the third period and thereafter, the local experts will lead consultation services. The number of cases, total revenue and total cost of the service in the third period and thereafter are calculated as follows:

Assumption

Man/day of local experts: 500 man/day

Average man/day of local expert per case: 5 days

Fee charged to applicant for local expert: Rs. 20,000/day Remuneration for local expert: Rs. 5,000/day

Average man/day of local assistants per case: 10 days

Fee charged to applicant for local assistants: Rs. 5 ,000/day Remuneration of local assistants: Rs. 2,000/day

Calculation

Number of cases: 500/5 = 100 cases

Average fee per case: $5\times20,000+10\times5,000=\text{Rs.}\ 150,000$ Total revenue: $100\times150,000=\text{Rs.}\ 15,000,000$ Average cost per case: $5\times5,000+10\times2,000=\text{Rs.}\ 45,000$ Total cost: $100\times45,000=\text{Rs.}\ 4,500,000$

Table 5.10 Operation of MIS Consultation Services

	Number of consultation service	Revenue (Thousand Rs.)	Cost (Thousand Rs.)	Profit (Thousand Rs.)	
First period	25	3,750	500	3,250	
Second period	75	7,500	1,500	6,000	
Third period	100	15,000	4,500	10,500	

Training services

(The first period)

In the first period, the foreign experts will be mobilized to prepare and execute training programs jointly with the MIS officer in charge of training services. The number of cases and attendants, total revenue and total cost of the service in the first period are calculated as follows:

Assumption

Man/day of foreign experts:

Average man/day of foreign experts:

5 days/program

Average attendants per program:

20 persons

Average fee charged to attendants:

Rs.4,000

Man/day of local experts per program:

10 days

Remuneration for local expert: Rs.2,000/day
Other operational cost per program: Rs.50,000

Calculation

Number of programs: 62,5/5=12 programs

Number of attendants: $12\times20=240$ persons

Total revenue: $240\times4,000=\text{Rs}.960,000$ Expense for the creation of program: $10\times2,000=\text{Rs}.20,000$

Total cost: $12 \times (20,000+50,000) = \text{Rs.}840,000$

(The second period)

In the second period, the foreign expert will support the execution of training programs. However, in the second period, the programs that are prepared in the first period can be also offered with some improvement. The number of programs and attendants, total revenue and total cost of the services in the second period are calculated as follows:

Assumption

Previous programs: 12 programs
Man/day of foreign experts: 62.5 man/day

Average man/day of foreign experts: 5 days/program (new)
Average man/day of local experts: 5 days/program (updating)

Average attendants per program: 20 persons Average fee charged to attendants: Rs.4,000

Average man/day of local experts: 10 days/program (new)

Remuneration for participating local experts: Rs. 2,000/day

Other operational cost: Rs. 50,000/program

Calculation

Number of programs: 12+62,5/5=24 programs Number of attendants: $24\times20=480$ persons

Total revenue: $480\times4,000=Rs.1,920,000$ Expense for creation of program: $10\times2,000=Rs.20,000$ Expense to update program: $5\times2,000=Rs.10,000$ Total cost: $12\times(20,000+50,000)+12\times(10,000+50,000)$ =Rs.1,560,000

(The third period and thereafter)

In the third period and thereafter, local experts will lead training programs. While the training programs that are prepared in previous periods can be offered, some previous training programs will not meet the demands of SMIs and will be abandoned. The number of programs and attendants, total revenue and total cost of the services in the third period and thereafter are calculated as follows:

Assumption

Number of previous programs:

Number of programs to be updated:

Number of programs to be abandoned:

Number of newly created programs:

Average attendants per program:

Average fee charged to attendants:

24 programs

12 programs

20 persons

Rs. 4,000

Average man/day of local experts: 5 days/program (new)
Average man/day of local experts: 5 days/program (updating)
Average man/day of local assistants: 10 days/program (new)

Remuneration for local experts:

Rs. 5,000/day

Remuneration for local assistants:

Rs. 2,000/day

Other operational cost:

Rs. 50,000

Calculation

Number of programs: 24+12-12=24 programs Number of attendants: $24\times20=480$ persons

Total revenue: 480×4,000=Rs. 1,920,000

Expense for creation of program: $5\times5,000+10\times2,000=$ Rs. 45,000

Expense to update program: $5\times2,000=\text{Rs. }10,000$

Total cost: $12\times(45,000+50,000)+12\times(10,000+50,000)$

=Rs. 1,860,000

Table 5.11 Operation of MIS Training Services

	Number of training programs	Revenue (Thousand Rs.)	Cost (Thousand Rs.)	Profit (Thousand Rs.)
First period	12	960	840	120
Second period	24	1,920	1,560	360
Third period	24	1,920	1,860	60

Other expenditures

Although the employees' cost of MIS will depend on the experience and ability of the officers actually employed, a trial calculation is made as follows:

Table 5.12 Employees' Cost of MIS

(thousand Rs.)

	Salary per year	person	Total
Department	840	1	840
Manager			
Local expert	600	4	2,400
Assistant	300	1	300
Secretary	200	1	200
Total		7	3,740

Apart from these employees' costs, SMIDEC's total general administration costs will be allocated to MIS in proportion to the number of employees. The total operation costs, including general administration costs, will be discussed in Chapter 5.5.

Summary of MIS business

The number of case, revenue, cost and profit under Scenario 1 are estimated as summarized below.

Table 5.13 Summary of MIS Business (Scenario 1)

(Thousand Rs.)

		Number of case	Revenue	Cost	Profit
First period	First-hand consultation	125	0	500	-500
	Consultation service	25	3,750	500	3,250
	Training services	12	960	840	120
	Employees' Cost	-	-	3,740	-3,740
	Total	-	4,710	5,580	-870
		Number of case	Revenue	Cost	Profit
Second period	First-hand consultation	250	0	1,625	-1,625
	Consultation service	75	7,500	1,500	6,000
	Training services	24	1,920	1,560	360
	Employees' Cost	1	1	3,740	-3,740
	Total	-	9,420	8,425	995
		Number of case	Revenue	Cost	Profit
On and after Third period	First-hand consultation	250	0	2,250	-2,250
	Consultation service	100	15,000	4,500	10,500
	Training services	24	1,920	1,860	60
	Employees' Cost	-	-	3,740	-3,740
	Total	-	16,920	12,350	4,570

In the event that the first-hand consultation and the consultation services of MIS are increased by 50% on and after the third period (Scenario 2 and 3 for Financial analysis), the revenue, cost and profit are estimated as follows:

Table 5.14 Summary of MIS Business (Scenario 2 and 3)

(Thousand Rs.)

		Number of case	Revenue	Cost	Profit
On and after Third period	First-hand consultation	375	0	3,375	-3,375
	Consultation service		22,500	6,750	15,750
Training services		24	1,920	1,860	60
	Employees' Cost	-	-	3,740	-3,740
	Total	-	24,420	15,725	8,695

5.3 Operations of Venture and Incubation Promotion (VIP)

1) VIP Operations

Venture Promotion of VIP will be operated in three stages as outlined below. VIP's Venture Promotion team will be responsible for all the operations but it will outsource some of the services to outside professionals and organizations whenever necessary.

- (i) Promoting Entrepreneurship and Marketing the Activities of Venture Promotion Activities of the Venture Promotion are advertised to the public. It will also hold workshops targeted at students of the universities and professional adults in order to introduce the concept of venture capital firms, inspire them to develop their ideas into a formation of their own companies and to become entrepreneurs.
- (ii) Selection of the Venture Companies/Entrepreneurs to be Serviced
 Applicants are first screened by their business plans. Then the Committee of Venture
 Promotion will interview the selected candidates. The Committee is comprised of
 SMIDEC's Venture Promotion team, venture capitalists, private enterprises and
 professors/researchers of Universities.

Target companies/entrepreneurs are small start-up companies or entrepreneurs with innovative and marketable ideas in the manufacturing sector. A target number of recipients of service will be 15 per each three-month course. A group of companies from a particular sector may be selected for the same course for better efficiency and efficacy.

(iii) Providing and Facilitating Services for the Period of Three Months

Once accepted to the Venture Promotion, the recipients will work out the program of services they would like to receive discussing well with the Venture Promotion Team.

They will receive the three-month course in technology, marketing, management and finance at their plants and/or SMIDEC. Some of the programs are customized to the needs of individual companies and some are the standard programs which are to be given to a group of recipients at the same time. Those recipients successfully implementing the advice are eligible to apply for the next three-month course. One recipient is eligible for receiving up to three different courses for the total period of nine months. The recipients are requested to bear the total consulting fees. It is expected that the higher the course becomes, the more customized the content of services will be. Two three-month courses for 25 total recipients will be organized in the first year and three three-month courses for 45 total recipients will be held from the second year. Those recipients successfully completing the most advanced course of Venture Promotion may be introduced to the SMIs under TMA and MIS programs for discussing the opportunities of subcontracting the products depending on the requirements of both parties. For many start-up companies, it would be important to first build a stable customer base in the domestic market before launching into the export market.

Venture Promotion will not provide all the required services to the venture companies/entrepreneurs by itself, as it would be costly and not practical to employ full-time professionals of many different fields in-house. Venture Promotion will not entirely outsource the services to outside professionals or organizations either, because such a measure might not be sustainable in the long run. Rather, Venture Promotion together with recipients will work out the program of services they need and facilitate provision of such services in technology, marketing, management and finance.

On the other hand, IT Incubation Promotion of VIP will be operated in four stages as described below

(i) Marketing SMIDEC's IT Incubation Promotion

SMIDEC's IT Incubation Promotion is advertised to the public. It will also hold workshops for the students of the universities in order to inspire them to develop their ideas on IT and become entrepreneurs.

(ii) Selection of Candidate Incubatees

Applicants are first screened by their business plans. Then selected candidates will give a presentation to the Committee for IT Incubation Promotion, which is comprised of SMIDEC's IT Incubation Promotion team, IT Incubator, venture capitalists, IT enterprises and professors/researchers of Universities.

Target incubatees are start-up IT companies or people with innovative and marketable ideas in the area of IT business. The target number of incubatees in service will be 15 in the first year of operation and 15 new incubatees will join every year. The number of incubatees in service will be 30 from the second year onwards.

Table 5.15 Number of Incubatees in Service at the End of the Year

1st Year	2nd Year onwards		
15	30		

(iii) Providing and Facilitating Services to Incubatees Up to Two Years

Once accepted to be an incubatee, the company/entrepreneur will work at IT Incubator's Incubation Center together with the IT Incubation Promotion team in order to develop its idea to become a marketable product and to become a full-fledged company. IT Incubation Promotion team and the IT incubator will mentor them and organize brainstorming sessions to incubatees as well as facilitate provision of required advice in technology, marketing, management and finance to them by member consultants.

IT Incubation Promotion will not provide all the required services to incubatees by itself as it would be costly and not practical to employ full-time professionals of many different fields in-house. IT Incubation Promotion will not entirely outsource the services to IT Incubator either because such a measure might not be sustainable in the long run. Instead IT Incubation Promotion and IT Incubator will become partners and both will try to provide and facilitate the services to the incubatees.

(iv) Graduating Incubatees from IT Incubation Promotion

The incubatees are automatically requested to move out of the IT Incubation Center after two years, when their contract with the IT Incubation Promotion ends. If they wish to move out of the Center earlier, the Committee for IT Incubation Promotion needs to approve it mainly based on the maturity of their products and funding possibilities.

2) Staffing

VIP (Venture and Incubation Promotion) will have the following number of full-time employees:

Table 5.16 Number of VIP's Full-time Employees

	1st Year	2nd Year onwards	
Director	1	1	
Professional Staff	2	4	
Assistant	3	5	
Secretary	1	1	
Total	7	11	

VIP will be comprised of 11 staff (one director, four professional staff, five assistants and one secretary) from the second year of operation. Two professional staff will focus on the activities of Venture Promotion while the other two specialize in the activities of IT Incubation Promotion. Two professional staff for Venture Promotion is expected to have background in finance. Two professional staff of IT Incubation Promotion should have background in ventures capital investment and IT. It is expected that some of these professionals will be seconded from venture capital companies under DFIs. VIP will also have five assistants preferably with the background in finance and IT industry, and one secretary. Five assistants are expected to be seconded from state banks. In the first year of operation, VIP will have two professional staff, one for each promotion activity and 3 assistants.

3) Operation Balance

Costs

In principle, the recipients of VIP will bear 100% of the consulting fees. They are requested to pay pre-determined consulting fees when receiving services from member consultants. Consulting services by the VIP staff and members of the Committees, however, are provided free-of-charge to the recipients. They will also pay the standard fees to BII and EDB whenenver they require their services. In addition to the consulting fees, IT incubatees will pay a monthly rent to the IT Incubator for using the facilities of IT Incubation Center. VIP will negotiate with member consultants regarding the amount of fees to be borne by the recipients. But the payment is directly made between the recipients and the consultants, and not through VIP. Unlike TMA and MIS, VIP will not take any commissions for facilitating services to the recipients since VIP's customers are mainly small start-up companies and entrepreneurs with a limited amount of capital.

The majority of VIP's costs, therefore, will be made up of employees' costs. The following is a summary of the monthly cost of each employee category and annual costs of the employees:

Table 5.17 Annual Cost of VIP (Scenario 1)

(Rs. Thousand)

(
	Monthly Cost	Monthly Cost 1st Year		2nd Year onwards			
	per Employee	Number	Annual Cost	Number	Annual Cost		
Director	105	1	1,260	1	1,260		
Professional Staff	76	2	1,820	4	3,640		
Assistant*	0	3	0	5	0		
Administrative Cost	-	-	2,469	-	2,298		
Total	-	7	3,323	11	5,143		

^{*}Note: Costs of five assistants are expected to be borne by the state banks from which they are seconded.

Table 5.18 Annual Cost of VIP (Scenario 2 and 3)

(Rs. Thousand)

	Monthly Cost	1st Year		2nd Year onwards		3rd Year onwards	
	per Employee	Number	Annual Cost	Number	Annual Cost	Number	Annual Cost
Director	105	1	1,260	1	1,260	1	1,260
Professional Staff	76	2	1,820	4	3,640	6	5,460
Assistant*	0	3	0	5	0	8	0
Secretary	20	1	243	1	243	1	243
Total	-	7	3,323	11	5,143	16	6,963

^{*}Note: Costs of five assistants are expected to be borne by the state banks from which they are seconded.

Apart from the employees' costs, SMIDEC's total general administration costs are to be borne by VIP in proportion to the number of employees. VIP's annual costs will be Rs. 5,143,000 from the second year onwards in Scenario 1. In Scenario 2 and 3, VIP's annual costs are expected to be Rs. 6,963,000.

Income

Both Venture Promotion and Incubation Promotion will hold some stake in promising recipient companies, which is expected to be sold to the third party to bring return to VIP in later years. The following tables summarize the VIP's return from selling shares of recipient companies in each scenario.

Table 5.19 Return from Selling Shares of Recipients (Scenario 1)

(Rs. Thousand)

		1	2	3	After 3
	No. of Recipients	25	45	45	45
	Recipients with Stakeholding (25%)	6	11	11	11
Venture	Success Rate (%)	-	-	20	20
Promotion	No. of Success Cases	-	-	1.3	1.3
	Average Return per Case (Rs. 3.5 MN)	-	-	3,500	3,500
	Return	0	0	4,375	7,875
	No. of Recipients	15	15	15	15
	Recipients with Stakeholding (50%)	8	8	8	8
Incubation	Success Rate (%)	-	-	20	20
Promotion	No. of Success Cases	-	-	1.5	1.5
	Avanaga Datum man Caga (Da 2.5 MNI)		_	3,500	3,500
	Average Return per Case (Rs. 3.5 MN)	_		2,000	2,000
	Return	0	0	5,250	5,250

Table 5.20 Return from Selling Shares of Recipients (Scenario 2 and 3)

(Rs. Thousand)

		1	2	3	4	After 4
	No. of Recipients	25	45	68	68	68
	Recipients with Stakeholding (25%)	6	11	17	17	17
Venture	Success Rate (%)	-	-	20	20	20
Promotion	No. of Success Cases	-	-	1.3	2.3	3.4
	Average Return per Case (Rs.3.5MN)	-	-	3,500	3,500	3,500
	Return	0	0	4,375	7,875	11,813
	No. of Recipients	15	15	23	23	23
	Recipients with Stakeholding (50%)	8	8	11	11	11
Incubation	Success Rate (%)	-	-	20	20	20
Promotion	No. of Success Cases	-	-	1.5	1.5	2.3
	Average Return per Case (Rs.3.5MN)	-	-	3,500	3,500	3,500
	Return	0	0	5,250	5,250	7,875
	Total Gross Return to VIP	0	0	9,625	13,125	19,688

Venture Promotion is expected to take a holding in 25% of the total recipient companies each year, of which 20% is estimated to bring return to VIP at the average amount of Rs.3.5 million per case from the third year of operation. Incubation Promotion, on the other hand, is expected to have a holding in 50% of the incubatees, of which 20% is estimated to bring profits to VIP at the average amount of Rs.3.5 million per case from the third year of operation. Total amount of return from selling shares in recipient companies is expected to be Rs.13,125 from the fourth year for Scenario 1 and Rs. 19,688 from the fifth year of operation for Scenario 2 and 3.

Operation Balance of VIP

The operation balance of VIP based on the above income and costs estimates are summarized as follows.

Table 5.21 Operation Balance of VIP (Scenario 1)

(Rs. Thousand)

	1	2	3	After 3
Income	0	0	9,625	13,125
Expense	3,323	5,143	5,143	5,143
Balance	-3,323	-5,143	4,482	7,982

Table 5.22 Operation Balance of VIP (Scenario 2 and 3)

(Rs. Thousand)

Year	1	2	3	4	After 4
Income	0	0	9,625	13,125	19,688
Expense	3,323	5,143	6,963	6,963	6,963
Balance	-3,323	-5,143	2,662	6,162	12,725

Annual net effect of the VIP activities is expected to be Rs.7,982,000 from the third year in Scenario 1 and Rs. 12,725,000 from the fifth year in Scenario 2 and 3.

5.4 Operations of Credit Guarantee Organization (CGO)

1) CGO Operations

Those SMIs which desire to receive the borrowing from financial institutions by using credit guarantee is required to apply the guarantee to the contact offices of SMIDEC and the financial institutions (see procedure 1 of the flow shown in Figure 5.1). Upon receipt of this guarantee application, the credit guarantee organization (CGO) conducts an overall research and examination for the SMI in question. In addition to an on-the-spot survey, the record of transaction with financial institutions is utilized (procedure 2). If the SMI in question is found to be qualified, CGO accepts the guarantee to a financial institution (procedure 3). Upon receipt of this acceptance, the financial institution promptly executes financing to the SMI in question (procedure 4). Operating funds financed are utilized by the SMI in question and are repaid by them in accordance with the terms and conditions of repayment (procedure 5).

If an accident arises to the SMI in question and the repayment becomes difficult, the postponement or change of loan conditions is made according to the agreement between the credit guarantee organization and the financial institution. If such recovery measure becomes deadlocked, the credit guarantee organization makes payment, upon request of the

financial institutions, in subrogation of the balance to the financial institution on behalf of the SMI in question (procedure 6). In this case, a partial guarantee system of 80% is applied on the basis of responsibility sharing and deterrence effect of moral hazards. The remaining 20% becomes the own risk assumed by the financial institution. Consequently, the debts owed by the SMI in question to the financial institutions become discharged, and CGO gets the indemnity right against the SMI in question. As a matter of course, the adjustment is carried out with the financial institution in respect to share allocation and indemnity right.

Subsequently, the relationship becomes a two-party between CGO and the SMI in question. CGO assists the recovery of the SMI in question and continues to collect repayment over the long term (procedure 7) and, after elapse of a prescribed period, makes the outstanding balance as the final loss and writes off the residual indemnity right using its own funds.

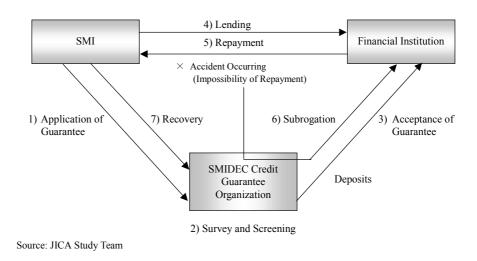


Figure 5.1 Flows of Credit Guarantee System

2) Business Scale

For establishment of CGO, the following steps will be required to be taken by SMIDEC:

Step-1: Define rules and regulations,

Appointment of senior staff,

Definement through CGO Committee

Step-2: Financial arrangement/plan,

Staff training

Business planning

Operational networking

Step-3: Full operation and expansion of business

Re-arrangement of rules and regulations

At the initial step, it is important that the following policy be established by CGO:

- (i) Arrangement should be made so that CGO shall be jointly supervised by MOPF and MCAID.
- (ii) A "Council for Research of Credit Guarantee System" shall be set up by representatives of both public and private sectors. The Council will direct and advise the management of CGO.

Three (3) alternative scales of CGO operations have been studied as outlined in the following.

(1) Small Scale Plan

(similar to the Central Bank credit guarantee system)

* Paid-up Capital Rs.200 million

* Scale of Guarantee Rs.2,000 million (Multiplying ratio of 10 times)

* Number of Credit per year 1,000 cases

Note:

- (a) Since the new organization aims at exploring the new type of financing for SMIs, there will be little possibility of competition with the Central Bank credit guarantee system. As a trial case for CGO, the new system is designed so that the relevant financial institutions will find it easy to cooperate.
- (b) When the performance is put on a stabilized track, the new system will be expanded to the next step, learning from the operation of the new system.
- (c) Since the scale of the new system is small, recruitment of human resources and training can be done effectively.
- (d) The initial expenditure will be a burden, but the balance of incomes and expenditures will be restored in three years.
- (e) Since the scale of the system is small, a network of branch offices will not be completed.

(2) Medium Scale Plan:

(reasonable scale to make CGO clear as a new credit guarantee system)

* Paid-up Capital Rs.500 million

* Scale of Guarantee Rs.5,000 million (Multiplying ratio of 10 times)

* Number of Credit per year 2,000~2,500 cases

Notes:

- (a) Sri Lanka will have a full-scale, independent credit guarantee system. It will produce an effect of smooth financing among various types of financial institutions towards SMIs.
- (b) The amount of paid-up capital will be at a reasonable level, and the new system will become the focus of interest among the public and private sectors.
- (c) This system requires to strengthen its management base by executing real business at its earlier stage, e.g., arrangement of regulations, formation of business, recruiting human resources and training.
- (d) Because of its operation scale, it will be evaluated socially and it will contribute to maintaining the system.
- (e) A nation-wide network is scheduled for completion in five years.

(3) Large Scale Plan:

(similar to international standard as a financial and economic institution)

* Paid-up Capital Rs.1,000 million

* Scale of Guarantee Rs.10,000 million (Multiplying ratio of 10 times)

* Number of Credit per year 4,000~5,000 cases Notes:

- (a) Credit guarantee will be set up, having a similar standard to that of neighboring countries.
- (b) The scale of credit guarantee is considerably large, and this system can provide SMIs and financial institutions with the effect of credit guarantee in a uniform manner.
- (c) Even at this scale, the system will not reach at the "Sea of Credit Guarantee". Enhancement of the guarantee multiplying ratio (up to 15-20 times) will be studied when operations become efficient.
- (d) Strengthening of human and the alliance with other organization will become moe important.
- (e) A nation-wide network will be completed in a relatively early stage.

3) CGO Business Prosepcts

Annual cash flow from operation of CGO is estimated for three alternative scenarios based on the following assumptions:

Assumptions:

(a) Loan Conditions

Loan repayment period : Five years on installment basis

Grace period : Two years

Borrowing rate : 8% (net of inflation)

Average amount of the loan : Rs.2 MN in the first two years and

Rs.2.5 MN from the 3rd Year

Default rate during the grace period : 0%

Default rate during the repayment period : 4% of outstanding loan and its

interest each year

(b) Guarantee Conditions

Guarantee coverage : 80% of loan and interest payment
Rate of collection after the default : 50% (collectable in the same year)
Rate of guarantee fee : 1.6% of outstanding loan each year

(It increases from 30% in the 1st year, 50% in the 2nd, 60% in the 3rd, 80% in the 4th and 100% of the full guarantee rate in the 5th year

onwards)

Amount of newly guaranteed loans every year : Rs.2 billion in Scenario 1 and

Rs.3.5 billion in Scenario 2

(c) Employee and Administrative Costs

Average number of loans handled by one specialist : 125

Number of assistants to be hired : One assistant for three specialists

Cost of employees a month : Rs.105,000 for the director

Rs.76,000 for specialistRs.30,000 for assistants

(1) Scenario 1

Scenario 1 follows the Medium Scale Plan as noted above. The table below summarizes total employees' costs based on the above assumptions. Total employees' costs are estimated to be Rs.20.7 million from the fourth year of operation under Scenario 1.

Table 5.23 Cost of Employees (Scenario 1)

(Rs. Million)

	1st Year		2nd Year	2nd Year onwards 3rd Y		ar onwards	4th Year onwards	
	Number	Annual Cost	Number	nnual Co	Number	Annual Cost	Number	Annual Cost
Director	1	1,260	1	1,260	1	1,260	1	1,260
Professional Staff	8	7,296	16	14,592	17	15,504	19	17,328
Assistants	3	1,080	5	1,800	6	2,160	6	2,160
Total	12	9,636	22	17,652	24	18,924	26	20,748

The following table is a summary of CGO's cash flow for Scenario 1. Credit guarantee fees and guarantee loss are expected to be Rs.93.6 million and Rs.66.9 million respectively from

the fifth year of operation. Annual balance of CGO before administration costs is estimated to be Rs.5.9 million after the fourth year onwards.

Table 5.24 CGO Cash Flow (Scenario 1)

(Rs. Million)

	1	2	3	4	After 4
Guaranteed Loan	2,000	4,000	5,280	5,874	5,852
Number of Loans	1,000	2,000	2,112	2,350	2,341
Average Loan Amount	2.0	2.0	2.5	2.5	2.5
Total Revenue	9.6	32.0	50.7	75.2	93.6
Credit Guarantee Fee	9.6	32.0	50.7	75.2	93.6
Total Expenses	9.6	17.7	53.5	77.4	87.7
Employees' Cost	9.6	17.7	18.9	20.7	20.7
Total Guarantee Loss	0	0	34.6	56.7	66.9
Loan issued in 1st year	0	0	34.6	22.1	10.6
Loan issued in 2nd year	0	0	0	34.6	21.8
Loan issued in 3rd year	0	0	0	0	0
Loan in the 1st year	0	0	0	0	0
Balance	0.0	14.3	-2.8	-2.2	5.9

(2) Scenario 2 and 3

Scenario 2 and 3 follow the Large Scale Plan of the CGO business scale. The table below summarizes total employees' costs under Scenario 2 and 3. Total employees' costs are estimated to be Rs.35.3 million from the fourth year of operation under Scenario 2 and 3.

Table 5.25 Cost of Employees (Scenario 2 and 3)

(Rs. Million)

	Monthly Cost	1st Year		2n	2nd Year		3rd Year		4th Year onwards	
	per Employee	Number	Annual Cost	Number	Annual Cost	Number	Annual Cost	Number	Annual Cost	
Director	105	1	1,260	1	1,260	1	1,260	1	1,260	
Professional Staff	76	14	12,768	28	25,536	30	27,360	33	30,096	
Assistants	30	5	1,800	9	3,240	10	3,600	11	3,960	
Total	-	20	15,828	38	30,036	41	32,220	45	35,316	

The following table is a summary of CGO's cash flow for Scenario 2 and 3. Credit guarantee fees and guarantee loss are expected to be Rs.163.9 million and Rs.117.2 million respectively from the fifth year of operation. Annual balance is estimated to be Rs.11.4 million from the fourth year onwards.

Table 5.26 CGO Cash Flow (Scenario 2 and 3)

(Rs. Million)

	1	2	3	4	After 4
Guaranteed Loan	3,500	7,000	9,240	10,280	10,241
Number of Loans	1,750	3,500	3,696	4,112	4,097
Average Amount	2.0	2.0	2.5	2.5	2.5
Total Revenue	16.8	56.0	88.7	131.6	163.9
Credit Guarantee Fee	16.8	56.0	88.7	131.6	163.9
Total Expenses	15.8	30.0	92.7	134.5	152.5
Employees' Cost	15.8	30.0	32.2	35.3	35.3
Total Guarantee Loss	0	0	60.5	99.2	117.2
Loan issued in 1st year	0	0	60.5	38.7	18.6
Loan issued in 2nd year	0	0	0	60.5	38.1
Loan issued in 3rd year	0	0	0	0	60.5
Balance	1.0	26.0	-4.0	-2.9	11.4

5.5 Financial Results of SMIDEC

Financial results of SMIDEC are estimated for three alternative scenarios. Scenario 1 is the base case with the operation as explained in Chapters 5.1 to 5.4. Scenario 2 and 3 are the cases with 50% operation expansion of TMA, MIS and VIP from the third year of operation in comparison to Scenario 1. CGO's guaranteed loan amount under Scenario 2 and 3 is estimated to be 75% higher than under Scenario 1.

1) Operation Income

As explained in Chapter 5.1 and 5.2, both TMA and MIS are expected to generate revenues by providing consultation and training services to SMIs. VIP, on the other hand, will not receive any commission from enterprises/entrepreneurs receiving consulting services but expects some capital gains. CGO's income comes from 1.6% credit guarantee fees charged to the companies making bank borrowings. Overall annual income from the operation is now expected to be Rs.140.6 million under Scenario 1 and Rs.232.4 million under Scenario 2 and 3 from the fifth year of operation onwards.

Table 5.27 Operation Income of SMIDEC (Scenario 1)

	1	2	3	4	After 4
TMA	4,710	9,420	16,920	16,920	16,920
MIS	4,710	9,420	16,920	16,920	16,920
VIP	0	0	9,625	13,125	13,125
CGO	9,600	32,000	50,688	75,192	93,635
Total	19,020	50,840	94,153	122,157	140,600

Table 5.28 Operation Income of SMIDEC (Scenario 2 and 3)

(Rs. Thousand)

	1	2	3	4	After 4
TMA	4,710	9,420	24,420	24,420	24,420
MIS	4,710	9,420	24,420	24,420	24,420
VIP	0	0	9,625	13,125	19,688
CGO	16,800	56,000	88,704	131,587	163,862
Total	26,220	74,840	147,169	193,552	232,389

2) Operation Cost of SMIDEC

Total operation costs of SMIDEC by Department are summarized below for each scenario. In addition to the cost of employees estimated in Chapter 5.1 to 5.4, general administration costs are estimated. SMIDEC's total general administration costs are allocated to each Department in proportion to the number of employees of each Department. General administration costs include office rent, costs of other employees including C.E.O., accountant, human resource manager, general administration staff and the secretary to C.E.O., office equipment costs, utility costs, telephone charges and other miscellaneous general administration costs.

Scenario 1:

The following tables are the summary of SMIDEC 's general administration costs and the administration costs allocated to each Department. Total administration costs of SMIDEC are expected to be Rs.7.6 million from the fifth year of operation under Scenario 1.

Table 5.29 SMIDEC's General Administration Costs (Scenario 1)

	1	2	3	4	After 4
Office Rent	0.8	1.2	1.2	1.3	1.3
Telephone Charges	0.6	0.8	0.9	0.9	0.9
Electricity	0.3	0.4	0.4	0.4	0.4
PC	3.6	1.7	0.2	0.2	0.0
Photocopier, Printer	0.4	0.4	0.4	0.4	0.0
Furniture	0.6	0.1	0.1	0.1	0.0
Fax, Phone	0.1	0.1	0.1	0.1	0.0
Stationary	0.1	0.1	0.1	0.1	0.1
Internet	0.3	0.3	0.3	0.3	0.3
Four general staff	1.4	1.4	1.4	1.4	1.4
Auditor	0.3	0.3	0.3	0.3	0.3
President's Cost	1.4	1.4	1.4	1.4	1.4
Miscellaneous (including advertisement)	2.5	2.0	1.7	1.7	1.5
Total	12.3	10.2	8.6	8.7	7.6

^{*1} accountant, 1 general administrator, 1 HR staff and 1 secretary

Note: PCs, photocopiers, printers, facsimiles, phones and furniture are to be renewed every seven years.

 Table 5.30
 Administration Cost Allocated to Each Department (Scenario 1)

(Rs. Thousand)

	0	1	2	3	4	After 4
TMA	1,537	3,175	1,880	1,510	1,474	1,293
MIS	1,195	2,469	1,462	1,175	1,147	1,006
VIP	1,195	2,469	2,298	1,846	1,802	1,580
CGO	2,049	4,233	4,596	4,028	4,259	3,736
Total	5,977	12,346	10,237	8,559	8,681	7,615

The following table is the total operation cost of each Department including the administration cost. TMA's cost is expected to be slightly higher than that of MIS due mainly to difference in required number of employees. VIP's costs consist mainly of employment costs while majority of CGO's costs are guaranteed losses. Guaranteed losses are expected to occur from the third year after the two-year grace period of the first guaranteed loans is over. Overall annual operation costs of SMIDEC will be Rs. 126.1 million under Scenario 1 from the fifth year of operation. During the establishment period, approximately Rs.6 million is expected to be required for administrative costs including advertisement, employment costs, office rent, office equipment cost, furniture and company formation related charges.

Table 5.31 Total Operation Cost of SMIDEC (Scenario 1)

	0	1	2	3	4	After 4
TMA	1,537	9,655	11,205	14,760	14,724	14,543
MIS	1,195	8,049	9,887	13,525	13,497	13,356
VIP	1,195	5,792	7,441	6,989	6,945	6,723
CGO	2,049	13,869	22,248	57,512	81,685	91,433
Total	5,977	37,365	50,781	92,786	116,850	126,055

Scenario 2 and 3:

The below tables are the summary of SMIDEC 's general administration costs and the administration costs allocated to each Department under Scenario 2 and 3. Total general administration costs of SMIDEC are expected to b Rs.11.0 million from the fifth year of operation under Scenario 2 and 3.

Table 5.32 SMIDEC's Total Administration Costs (Scenario 2 and 3)

(Rs. Thousand)

	0	1	2	3	4	After 4
Office Rent	444	1,331	2,012	2,259	2,383	2,383
Telephone Charges	28	748	1,091	1,216	1,278	1,278
Electricity	18	478	697	777	817	817
PC	550	4,560	2,640	960	480	0
Photocopier, Printer	400	400	400	400	400	0
Furniture	319	799	160	160	160	0
Fax, Phone	100	200	100	100	100	0
Stationary	500	156	156	156	156	156
Internet	650	390	390	390	390	390
Cost of 4 Employees*	358	1,430	1,430	1,430	1,430	1,430
Auditor	0	336	336	336	336	336
President's Cost	225	1,350	1,350	1,350	1,350	1,350
Miscellaneous (including advertisement)	1,257	4,262	3,767	3,337	3,248	2,849
Total	4,848	16,440	14,528	12,870	12,527	10,989

^{*1} accountant, 1 general administrator, 1 HR staff and 1 secretary

Note: PCs, photocopiers, printers, facsimiles, phones and furniture are to be renewed every seven years.

Table 5.33 Administration Cost Allocated to Each Department (Scenario 2 and 3)

	0	1	2	3	4	After 4
TMA	1,015	3,441	2,012	1,587	1,464	1,284
MIS	789	2,676	1,565	1,234	1,139	999
VIP	789	2,676	2,459	2,821	2,603	2,283
CGO	2,255	7,646	8,493	7,228	7,321	6,422
Total	4,848	16,440	14,528	12,870	12,527	10,989

The following table summarized total operation cost including general administration cost by Department under Scenario 2 & 3. It is expected to be Rs.202.8 million from the fifth year of operation onwards.

Table 5.34 Total Operation Cost of SMIDEC (Scenario 2 and 3)

(Rs.Thousand)

	0	1	2	3	4	After 4
TMA	1,015	9,921	11,337	18,212	18,089	17,909
MIS	789	8,256	9,990	16,959	16,864	16,724
VIP	789	5,999	7,601	9,784	9,566	9,246
CGO	2,255	23,474	38,529	99,928	141,824	158,900
Total	4,848	47,651	67,457	144,883	186,343	202,779

3) Operation Balance of SMIDEC

SMIDEC's operation balance is expected be positive in the third year of operation under both scenarios. Operation balance after the fifth year is expected to be Rs.14.5 million under Scenario 1 and Rs. 29.6 million under Scenario 2 and 3.

Table 5.35 Overall Operation Balance (Scenario 1)

(Rs.Thousand)

	0	1	2	3	4	After 4
TMA	-1,537	-4,945	-1,785	2,160	2,196	2,377
MIS	-1,195	-3,339	-467	3,395	3,423	3,564
VIP	-1,195	-5,792	-7,441	2,636	6,180	6,402
CGO	-2,049	-7,469	3,352	-6,824	-6,493	2,202
Total	-5,977	-21,545	-6,341	1,367	5,307	14,545

Table 5.36 Overall Operation Balance (Scenario 2 and 3)

	1	2	3	4	5
TMA	-5,211	-1,917	6,208	6,331	6,511
MIS	-3,546	-570	7,461	7,556	7,696
VIP	-5,999	-7,601	-159	3,559	10,441
CGO	-6,674	17,471	-11,224	-10,238	4,962
Total	-21,431	7,383	2,286	7,208	29,610

5.6 Management System of SMIDEC

1) Policy Making and Coordination

In Sri Lanka, the policy for development of SMIs has not been clearly defined. There is no fundamental legislation or laws specifically enacted for development of SMIs, and no ministry nor public institute has been solely responsible for the policy making procedure. In general, "policy" is composed of (i) ultimate purpose, (ii) concrete objectives, and (iii) concrete measures. The policy for SMIDEC should be defined accordingly. In this context, it is provisionally proposed that the "ultimate purpose" of incorporation of SMIDEC is to realize economic and social development of Sri Lanka through development of SMIs and equitable distribution of resources available in the country. The "concrete objectives" of SMIDEC should be defined by MCAID, MOPF and the related ministries, referring to the four objectives proposed in Chapter 3.1.

The "concrete measures" of SMIDEC should be confirmed by the Board of Directors of SMIDEC. The SMIDEC's functions are proposed to be (i) Technical and management advice, (ii) Management information services, (iii) Venture and incubation promotion, and (iv) Credit guarantee organization. These functions should be confirmed and the respective activities should be defined more clearly. Depending on the legal status of SMIDEC, the board of directors will be composed of the representatives from the government (MCAID and MOFP), the related public institutes, the related financial institutions, and the related private sector organizations.

In accordance with the decision of the board of directors, respective functions and activities of SMIDEC are to be implemented in cooperation with the other related institutes, the respective financial institutions, and the respective private sector organizations. The board of directors may organize some special committees composed of outside experts for approval and review of the performance.

2) Organization of SMIDEC

SMIDEC is to be incorporated as a "public company" with the equity capital contributed by the government of Sri Lanka, the public institutes, the private sector, and the international financial institutions. Under the board of directors, president and three executive directors will be appointed for operational management. Five departments will manage each function and general administration of SMIDEC. Provisionally, SMIDEC's organization is proposed as shown below.

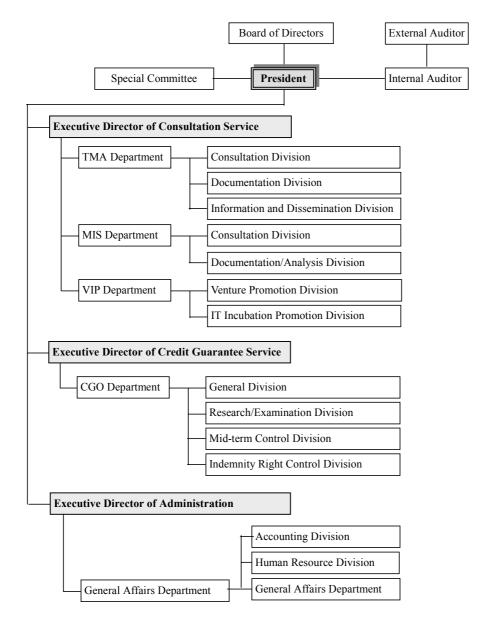


Figure 5.2 Proposed Organization of SMIDEC

3) Operational Management

For operation of SMIDEC, two alternative management systems are conceived as follows:

- (i) Operational management by President and Executive Directors individually appointed by the Board of Directors; and
- (ii) Operational management through contract to a private management firm or consortium.

The first scenario of management is the ordinary system of management that the Board of Directors will individually appoint the President and Executive Directors who will in turn nominate all the staff and officers of SMIDEC. A key issue of this system is whether the Board of Directors can appoint the qualified President and Executive Directors to take responsibility of SMIDEC operations.

The second scenario of management is the outsourcing management system that the Board of Directors will retain a private management consulting firm or consortium that will be responsible for the entire operations of SMIDEC. The contracted management firm or consortium may nominate the President, Executive Directors and all the staff of SMIDEC. A key issue of this system is whether a management consulting firm, either local, international or their consortium, interested in this kind of business is available. When the management firm itself is incorporated by partners as an unlimited liability company and unable to take risks, it may set up another limited liability company specifically for management of SMIDEC.

In the event that such management firms or consortia are available, SMIDEC can invite them to submit their proposals and negotiate with the best offered on the contract terms and conditions. When the management firm considers it too risky to manage the credit guarantee organization or other functions of SMIDEC, a possible solution may be to negotiate and decide on a risk sharing system between the management firm and SMIDEC.

4) Auditing System

There is a superior auditing system in Sri Lanka that is similar to the British auditing system. There are approximately 2,000 chartered accountants and several member firms of international auditing in Sri Lanka. SMIDEC as a public company must take external audit and submit an audit report to the Inland Revenue Department. SMIDEC must also have an internal auditor to maintain rational and effective operations.

5.7 Procedures for Establishment of SMIDEC

The procedures to set up SMIDEC as a "public company" with public and private partnership are summarized below. All the process could take three to seven weeks.

- (1) MCAID prepares the draft of the Memorandum and Articles of Association (MAA) with the help of a lawyer.
- (2) MCAID sends the MAA to related ministries including the Treasury, the Ministry of Finance and Planning, Attorney's General and the Ministry of Rural Industries for observation.
- (3) The Minister of MCAID submits the MAA together with the paper explaining the concept of SMIDEC and gets the Cabinet's approval for the Government institutions investing into SMIDEC. The concept may include the following issues:
 - 1) Objectives of SMIDEC
 - 2) Positioning of SMIDEC in pursuing the strategy for SMI sector development in the country
 - 3) Organization and management of SMIDEC
 - 4) Functions of SMIDEC
 - 5) Operational mechanism and sustainability of SMIDEC
 - 6) Financial arrangement of SMIDEC and return on investment for investors
 - 7) Request for tax holiday for SMIDEC as well as tax relief for the investors and lenders to SMIDEC
 - 8) Social and economical impact of SMIDEC on Sri Lanka
- (4) MCAID gets the approval of the name of SMIDEC from the Registrar of the Companies.
- (5) MCAID submits the MAA in draft to the Registrar of the Companies for approval.
- (6) MCAID submits the approved MAA and four Companies Forms (Form 5, 36A, 46 and 47A) to the Registrar of the Companies.
- (7) The Registrar of the Companies issues 'Certificate of Incorporation'.
- (8) SMIDEC submits the Form 37 to the Registrar of Companies making the required statutory declaration.
- (9) The Registrar of Companies issues 'Certificate to Commence Business' to SMIDEC.

(10) SMIDEC commences business.

A draft of the Memorandum of Association and the Articles of Association is attached for reference in ANNEX 1.

VI. FINANCIAL ANALYSIS

A provisional plan of financial analysis assumes that SMIDEC will be established as a "public company" with public and private participation including international/foreign financial institutions. Three types of financial arrangement for SMIDEC are discussed for alternative scenarios.

6.1 Assumptions for Financial Analysis

1) Source and Cost of Financing

Three alternative scenarios are considered as follows:

Scenario 1:

Scenario 1 is the base case with the operation size of SMIDEC as large as explained in Chapters 5.1 to 5.4. SMIDEC will be financed by domestic source alone with equity capital of Rs.450 million and the government grant of Rs.200 million. The equity holding ratio will be 55.6% for the private sector and 44.4% for the government of Sri Lanka.

Table 6.1 SMIDEC's Source of Financing (Scenario 1)

(Rs. Million)

	0	1	Total	% to Total
Equity				
MCAID	200	0	200	30.8%
DFIs	50	50	100	15.4%
State Banks	25	25	50	7.7%
Private Banks	25	25	50	7.7%
Other domestic organizations	25	25	50	7.7%
Grant			0	0.0%
MOFP	200	0	200	30.8%
Total	525	125	650	100%

It is assumed that SMIDEC will start paying dividends to the investors from the third year of operation when total operation balance turns positive. Dividend amounts are assumed to be 6% (net of inflation) of the respective investment amount for each investor.

Scenario 2:

Scenario 2 is the case with 50% operation expansion of TMA, MIS and VIP from the third year of operation in comparison to Scenario 1. CGO's guaranteed loan amount under Scenario 2 is estimated to be approximately 75% higher than under Scenario 1.

In addition to the financing amount of Rs.650 million assumed under Scenario 1, Scenario 2 plans to employ long-term loans of Rs.1,250 million from international financial institutions at the end of the second year of operation. Total financing amount is expected to be Rs.1.9 billion.

Table 6.2 SMIDEC's Source of Financing (Scenario 2)

(Rs. Million)

	0	1	2	Total	% to Total
Equity					
MCAID	200	0	0	200	10.5%
DFIs	50	50	0	100	5.3%
State Banks	25	25	0	50	2.6%
Private Banks	25	25	0	50	2.6%
Other domestic organizations	25	25	0	50	2.6%
Grant				0	0.0%
MOFP	200	0	0	200	10.5%
Loan				0	0.0%
Foreign Institutions	0	0	1,250	1,250	65.8%
Total Inflow	525	125	1,250	1,900	100%

Dividend conditions will be the same as in the case of Scenario 1. The loan conditions of the international financial institutions are assumed to be as follows:

50% of the total loan (Rs.625 million):

Repayment period : 40 years (including the grace period)

Grace period : 8 years

Annual interest rate : 1.0% p.a. during the grace period and 1.5%

thereafter (net of inflation)

50% of the total loan (Rs.625 million):

Repayment period : 30 years (including the grace period)

Grace period : 10 years

Annual interest rate : 3.3% p.a. (net of inflation)

Scenario 3:

As far as the operation size is concerned, Scenario 3 will be the same as Scenario 2. The difference between Scenarios 2 and 3 is financial arrangement. In addition to the Rs.650 million financing amount assumed under Scenario 1, Scenario 3 plans to receive Rs.400 million equity investment at the set-up period and long-term loans of Rs.850 million in the second year of operation both from international financial institutions. Total financial amount will be Rs.1.9 billion. Equity holding ratio will be 47.1% for international financial institutions, 29.4% for the private sector and 23.5% for the government of Sri Lanka.

Table 6.3 SMIDEC's Source of Financing (Scenario 3)

(Rs. Million)

Year	0	1	2	Total	% to Total
Equity					
Foreign Institutions	400	0	0	400	21.1%
MCAID	200	0	0	200	10.5%
DFIs	50	50	0	100	5.3%
State Banks	25	25	0	50	2.6%
Private Banks	25	25	0	50	2.6%
Other domestic organizations	25	25	0	50	2.6%
Grant				0	0.0%
MOFP	200	0	0	200	10.5%
Loan					
Foreign Institutions	0	0	850	850	44.7%
Total	925	125	850	1,900	100%

Dividends for the international investors are assumed to be 6% of the equity. The conditions of the loans and dividends to the domestic investors will be the same as in Scenario 1 and 2.

2) Currency and Inflation

The exchange rates adopted for the analysis are shown below, which were the rates as of February 2001.

1 US dollar = 85 Sri Lankan rupees

1 US dollar = 116 Japanese yen

SMIDEC's cash flow statements are prepared net of inflation. Real domestic borrowing rate is assumed to be 8% while surplus cash of SMIDEC is assumed to generate real interest income of 4% per annum.

3) Tax Incentives

SMIDEC's cash flow analysis assumes that a tax-holiday status is granted to SMIDEC. Investments to SMIDEC are also assumed to receive tax relief in order to give incentives to the domestic private investors.

6.2 Financial Evaluation

1) Evaluation of Scenario 1

Table 6-4 is the summary of 20-year Cash Flow of SMIDEC under Scenario 1. SMIDEC generates sufficient amount of profit to pay the dividends to the investors and stay positive even on annual basis throughout the period. Accumulated cash flow is expected to be Rs.803 million in the 10th year and Rs.1,051 million in the 20th year of operation. SMIDEC under Scenario 1 is financially viable.

Project internal rate of return (IRR) of SMIDEC in Scenario 1 is summarized as follows:

10years 15 years **TMA** 15.5% 19.8% MIS 42.1% 43.7% VIP 26.9% 30.3% CGO -1.7% 8.9% Total 23.2% 23.4%

Project IRR of SMIDEC (Scenario 1)

2) Evaluation of Scenario 2

Table 6-5 is the summary of 20-year Cash Flow of SMIDEC under Scenario 2. Accumulated cash flow is expected to reach Rs.2.3 billion in the 10th year and Rs.2.5 billion in the 20th year of operation. Scenario 2 is also financially viable.

IRR of the project under Scenario 2 is summarized as follows:

	10years	15 years
TMA	50.4%	51.7%
MIS	79.0%	79.5%
VIP	31.7%	35.1%
CGO	17.1%	24.4%
Total	43.4%	45.5%

Project IRR of SMIDEC (Scenario 2)

3) Evaluation of Scenario 3

Table 6-6 is the summary of 20-year Cash Flow of SMIDEC under Scenario 3. Accumulated cash flow is expected to be Rs.2.2 billion in the 10th year and Rs.2.3 billion in the 20th year of operation. Scenario 3 is also financially viable.

Project evaluation of Scenario 3 is the same as in Scenario 2.

4) Evaluation of Each Function

Scenario 1:

Based on IRR estimated above, MIS is the most profitable function, followed by VIP, TMA and CGO.

Cash flow from operation under Scenario 1 is prepared for each of the four functions in Table 6-7. MIS is estimated to turn positive in the third year on the annual basis. TMA will turn positive in the third year annually and sixth year on the accumulated basis. VIP's annual cash flow is expected to turn positive from the third year and its accumulated cash flow will turn positive in the fifth year. CGO's operational balance will turn positive in the fifth year while the accumulated cash flow is estimated to be black in the eighth year of operation.

Scenario 2 and 3:

Based on IRR estimated above, MIS is the most profitable function, followed by TMA, VIP and CGO.

Cash flow from operation under Scenario 2 is prepared for each of the four functions in Table 6-8. MIS is estimated to turn positive in the third year both on annual and accumulated basis. TMA will turn positive in the third year annually and in the fourth year on the accumulated basis. VIP's annual cash flow is expected to turn positive from the fourth year but its accumulated cash flow will turn positive in the sixth year. CGO's operation balance will turn positive in the fifth year while the accumulated cash flow is estimated to be black in the seventh year of operation.

Profitability of each function improves under Scenario 2 and 3 in comparison to the Scenario 1. Improvement is especially significant in the case of CGO.

Table 6-9 summarizes the salient features of the alternative three scenarios.

6.3 Risk Analysis

Risk analysis of the SMIDEC operations is made for each of the four functions as summarized in the table below.

	TMA	MIS	VIP	CGO
Scenario 1	The number of	The number of	The success	The default rate
	consulting	consulting	rate of the	may increase to
	services may	services may	recipients may	4.9% to remain
	decline by up to	decline by up to	decline up to	financially
	49% to stay	56% to stay	12.5% to stay	positive.
	operationally	operationally	operational	
	positive.	positive.	positive.	
Scneario 2 & 3	The number of	The number of	The success	The default rate
	consulting	consulting	rate of the	may increase to
	services may	services may	recipients may	5.6% to remain
	decline up to	decline by up to	decline up to	financially
	41% to stay	49% to stay	11% to stay	positive.
	operationally	operationally	operationally	
	positive.	positive.	positive.	

Operations of TMA, MIS and VIP involve less risks, while CGO involves a relatively high risk when the default rate gets higher than 5%. In such a case, an additional grant by the government would be required. If the government grant is increased by Rs.200 million (totaling Rs.400 million), the default rate of the CGO operations up to 6.5% may be acceptable to make the financial cash flow positive.

Table 6.4 SMIDEC Cash Flow Statement (Scenario 1)

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Table 6.5 SMIDEC Cash Flow Statement (Scenario 2)

Year	0	1	2	3	4	5	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Inflow																					
Equity																					
Foreign Institutions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCAID	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DFIs	90	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0)
State Banks	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Private Banks	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other domestic organizations	25	25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grant																					
MOFP	200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Loan																					
Foreign Institutions	0	0	1,250	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Interest Income	7	23	31	92	77	62	81	83	85	88	68	91	16	95	93	93	94	95	96	26	86
Total Inflow	532	148	1,281	92	77	62	81	83	85	88	68	91	91	95	63	93	94	95	96	26	86
Outflow																					
Net Operating Cost	5	21	-7	-2	<i>L</i> -	-30	-30	-28	-24	-26	-28	-29	-30	-30	-28	-24	-26	-28	-29	-30	-30
Principal Payment																					
Foreign Institutions	0	0	0	0	0	0	0	0	0	0	20	20	12	51	15	51	51	51	51	51	2
Interest Payment																					
Foreign Institutions	0	0	0	27	27	27	27	27	27	27	30	30	30	50	27	56	25	23	22	21	19
Dividend Payment			0																		
Foreign Institutions	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MCAID	0	0	0	12	12	12	12	12	12	12	12	12	12	17	17	12	12	12	12	12	12
DFIs	0	0	0	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
State Banks	0	0	0	3	3	3	3	3	3	3	3	3	3	3	8	3	3	3	3	3	.,
Private Banks	0	0	0	3	3	3	3	3	3	3	3	3	3	3	8	3	3	3	3	3	.,
Others	0	0	0	3	3	3	3	3	3	3	3	3	3	3	8	3	3	3	3	3	.,
Total Outflow	5	21	<i>L</i> -	52	47	24	24	25	30	27	48	48	82	<i>LL</i>	77	80	92	73	71	69	89
Annual Net Cashflow	527	126	1,288	24	30	25	22	88	99	09	41	43	14	12	91	13	18	22	24	28	30
A commulated Cashflow	104	027	,,,	1000	100	0 = 0	10,	,		000	, ,					į	9, ,		000		

Table 6.6 SMIDEC Cash Flow Statement (Scenario 3)

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7			0	0	0	0	0	0		0		0	08	08		-28		0		18		24	12	9	3	3	3	41	39
9			0	0	0	0	0	0		0		0	62	62		-30		0		18		24	12	9	3	3	3	40	36
5			0	0	0	0	0	0		0		0	<i>LL</i>	17		-30		0		18		24	12	9	3	3	3	40	38
4			0	0	0	0	0	0		0		0	92	92		-2		0		18		24	12	9	3	3	3	62	14
3			0	0	0	0	0	0		0		0	75	75		-2		0		18		24	12	9	3	3	3	29	8
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Year	Inflow	Equity	Foreign Institutions	MCAID	DFIs	State Banks	Private Banks	Other domestic organizations	Grant	MOFP	Loan	Foreign Institutions	Interest Income	Total Inflow	Outflow	Net Operating Cost	Principal Payment	Foreign Institutions	Interest Payment	Foreign Institutions	Dividend Payment	Foreign Institutions	MCAID	DFIs	State Banks	Private Banks	Others	Total Outflow	Annual Net Cashflow

Table 6.7 Cash Flow Statement by Function (Scenario 1)

							ľ					Ì	Ì	Ì	Ì	Ì					
	0	1	2	3	4	9	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-1.5	-4.9	-1.8	2.2	2.2	2.4	2.4	1.6	2.0	2.2	2.2	2.4	2.4	2.4	1.6	2.0	2.2	2.2	2.4	2.4	2.4
Accumulated Balance	-1.5	-6.5	-8.3	-6.1	-3.9	-1.5	0.8	2.5	4.5	6.7	9.0	11.3	13.7	16.1	17.7	19.7	22.0	24.2	26.6	29.0	31.3
SIM																					
	0	-	2	3	4	5	9	7	8	6	10	Ξ	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-1.2	-3.3	-0.5	3.4	3.4	3.6	3.6	3.0	3.3	3.5	3.5	3.6	3.6	3.6	3.0	3.3	3.5	3.5	3.6	3.6	3.6
Accumulated Balance	-1.2	-4.5	-5.0	-1.6	1.8	5.4	8.9	11.9	15.2	18.7	22.1	25.7	29.2	32.8	35.8	39.1	42.5	46.0	49.5	53.1	56.7
VIP							Ī	ľ	ŀ	ľ	ľ	ŀ	ŀ	ŀ	ľ	Ī	ŀ	ŀ	Ī		
VIP																					
	0	-	2	33	4	ç	9	/	80	6	01		12	13	14	15	91	1)	18	19	50
Annual Balance from Operation	-1.2	-3.3	-5.1	4.9	8.5	8.7	8.7	7.8	8.2	8.5	8.5	8.7	8.7	8.7	7.8	8.2	8.5	8.5	8.7	8.7	8.7
Accumulated Balance	-1.2	-4.5	-9.7	-4.7	3.8	12.5	21.2	28.9	37.2	45.7	54.2	67.9	71.6	80.3	88.1	96.4	104.9	113.4	122.1	130.8	139.5
090																					
	0	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-2.0	-4.3	8.6	-6.8	6.9-	2.2	2.2	0.1	1.1	1.8	1.8	2.2	2.2	2.2	0.1	1.1	1.8	1.8	2.2	2.2	2.2
Accumulated Balance	-2.0	-6.3	3.4	-3.4	-9.9	7.7-	-5.5	-5.4	-4.3	-2.5	-0.7	1.5	3.7	5.9	0.9	7.1	8.9	10.7	12.9	15.1	17.3
Total																					
	0	-	2	3	4	2	9	7	8	6	10	Ξ	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-6.0	-15.9	2.4	3.7	7.6	16.8	16.8	12.5	14.6	16.0	16.0	16.8	16.8	16.8	12.5	14.6	16.0	16.0	16.8	16.8	16.8
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Table 6.8 Cash Flow Statement by Function (Scenario 2)

	0	-	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-1.0	-5.2	-1.9	6.2	6.3	6.5	6.5	6.4	5.9	6.1	6.3	6.4	6.5	6.5	6.4	5.9	6.1	6.3	6.4	6.5	6.5
Accumulated Balance	-1.0	-6.2	-8.1	-1.9	4.4	10.9	17.4	23.8	29.6	35.8	42.1	48.5	55.0	61.5	6.7.9	73.8	79.9	86.2	97.6	99.1	105.6
MIS																					
	0	-	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-0.8	-3.5	9.0-	7.5	7.6	7.7	7.7	7.6	7.2	7.4	7.6	7.6	7.7	7.7	7.6	7.2	7.4	7.6	9.7	7.7	7.7
Accumulated Balance	-0.8	-4.3	-4.9	2.6	10.1	17.8	25.5	33.1	40.3	47.7	55.2	62.8	70.5	78.2	82.8	93.0	100.4	108.0	115.6	123.3	131.0
VIP																					
	0	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-0.8	-6.0	9.7-	-0.2	3.6	10.4	10.4	10.2	9.3	8.6	10.1	10.2	10.4	10.4	10.2	9.3	8.6	10.1	10.2	10.4	10.4
Accumulated Balance	-0.8	-6.8	-14.4	-14.5	-11.0	-0.5	6.6	20.1	29.4	39.1	49.3	59.5	6.69	80.4	9.06	8.66	109.6	119.7	130.0	140.4	150.8
093																					
	0	1	2	3	4	2	9	7	8	6	10	11	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-2.3	-6.7	17.5	-11.2	-10.2	5.0	2.0	4.3	1.7	3.1	4.1	4.3	5.0	5.0	4.3	1.7	3.1	4.1	4.3	2.0	5.0
Accumulated Balance	-2.3	-8.9	8.5	-2.7	-12.9	-8.0	-3.0	1.3	3.0	6.1	10.1	14.5	19.4	24.4	28.6	30.3	33.4	37.5	41.8	46.8	51.8
Total																-	-				
	0	-	2	3	4	2	9	7	8	6	10	1	12	13	14	15	16	17	18	19	20
Annual Balance from Operation	-4.8	-21.4	7.4	2.3	7.2	29.6	29.6	28.4	24.1	26.4	28.1	28.6	29.6	29.6	28.4	24.1	26.4	28.1	28.6	29.6	29.6
Accimulated Balance	4.0	000	001	00,	, ,	• • •															000,

Table 6.9 Alternative Three Scenarios of SMIDEC

		Operation Size from the 5th Year	Number of Employees	Financing Amount	Source of Financing	Project IRR	Cash Flow
	TMA &	First-hand Consultation (250), Consultation (100)			Equity: Private: Rs.250MN		
	MIS	Training (24) for each division	53	Rs.650 MN	MCAID: Rs.200MN	32.8% (10 yrs)	Sustainable
Scenario 1	VIP	75 start-ups			Grant:	33.4% (15 yrs)	
	ODO	Guarantee of Rs.5.9 billion			Government: Rs.200MN		
		Ioan					
	TMA	First-hand Consultation (375),			Equity:		
	ઝ	Consultation (150)			Private: Rs.250MN		
	MIS	Training (24) for each division			MCAID: Rs.200MN		
Scenario 2	VIP	91 start-ups	77	Rs.1.9 BN	Loan:	43.4% (10 yrs)	Sustainable
		Guarantee of Rs.10.3 billion			Foreign: Rs.1,250MN	45.5% (15 yrs)	
	090	loan			Grant:		
					Government: Rs.200MN		
					Equity:		
					Private: Rs.250MN		
					MCAID: Rs.200MN		
Scenario 3		Same as Scenario 2		Rs.1.9 BN	Foreign: Rs.400MN	(Same as	Sustainable
					Loan:	Scenario 2)	
					Foreign: Rs.850MN		
					Grant:		
					Government: Rs.200MN		

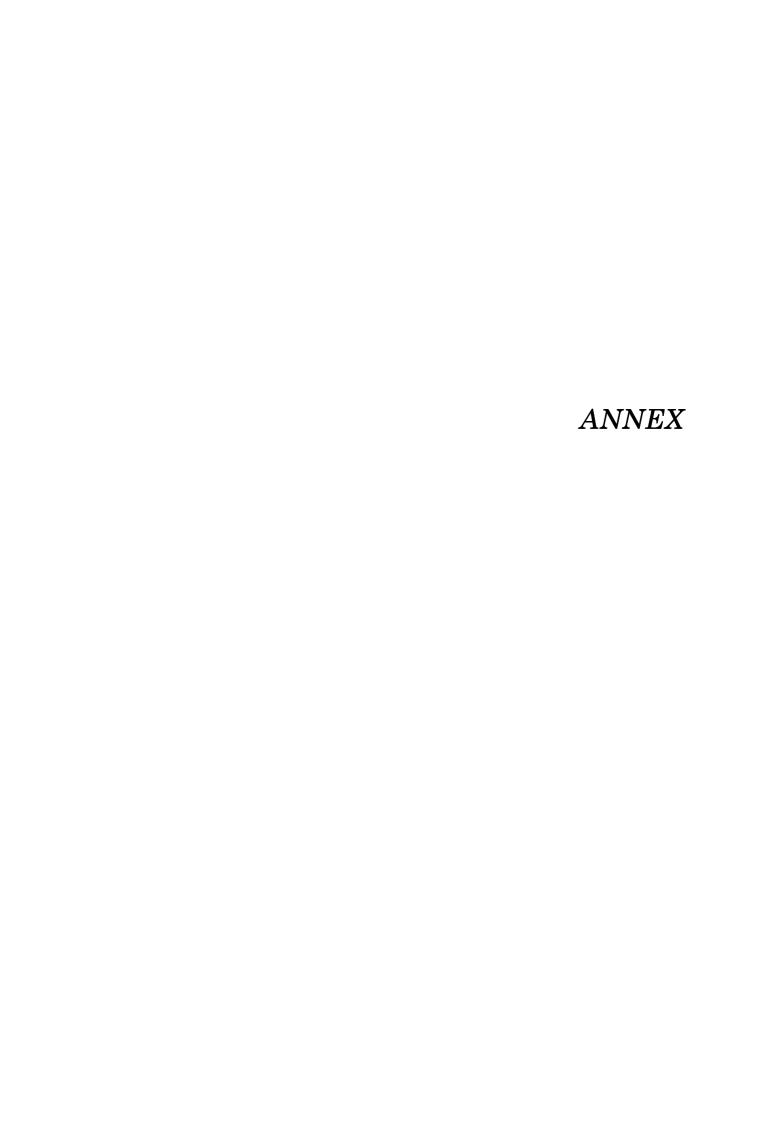
VII. CONCLUSION AND RECOMMENDATION

The studies and analysis in Chapters II to VI bring forward the conclusion and recommendations as summarized below.

- 1) Development of SMIs is quite important for the consolidation of industrialization in Sri Lanka, as well as for poverty reduction and enhancement of people's livelihood over the country. However, the policy for SMI development has not been clearly defined and there has been no public institution solely responsible for policy making and its execution. Circumstances surrounding SMIs have been aggravated, and SMIs in Sri Lanka are in crying need of technical, managerial and financial support.
- 2) Various ministries and institutions are concerned with SMI development but the services provided by such institutions have not been adequate and professional enough to meet the real requirements of SMIs. Some services have been inactive (e.g., credit guarantee by the Central Bank). Further, there has been a lack of coordination among the existing institutions to extend the required support to SMIs. It is therefore recommended that a one-stop-shop be set up to meet technical, managerial and financial requirements of SMIs. The establishment of SMIDEC is proposed to provide SMIs with (i) technical and management advice, (ii) management information service, (iii) venture and incubation promotion, and (iv) credit guarantee service.
- 3) Technical and management advice (TMA) is of particular importance to upgrade the technical level and to improve productivity and competitiveness of SMIs. SMIDEC is designed to provide them with highly professional consultation services with the technical assistance of international experts at the initial stage of operations. These international experts will train and upgrade local experts for technical and managerial improvement of SMI operations. In this context, it is recommended that external technical assistance be secured once SMIDEC is established.
- 4) Management information service (MIS) is also important to enhance the level of SMI management. SMIDEC will make the utmost use of local professionals available in Sri Lanka. Venture and incubation promotion (VIP) is of great significance for IT incubators. Promotion of IT industries, which generally start as ventures, is to be strategically designed with technical, managerial and financial support.
- 5) Credit guarantee organization (CGO) is proposed to be a key function of SMIDEC, as a new credit guarantee system is required not only by SMIs but also by the financial

institutions. The previous experience of the Central Bank in credit guarantee operations, though they are inactive at present, should be reflected and utilized once its function is transferred to SMIDEC. CGO should also learn from the experience of credit guarantee operations in other countries.

- 6) Operations of SMIDEC collectively as a project, as well as operations of TMA, MIS, VIP and CGO individually, are assessed to be financially viable judging from the internal rate of return. From the cash flow analysis, operations of SMIDEC are evaluated to be financially sustainable. SMIDEC can be established by domestic finance (Scenario 1). It is more desirable that expanded SMIDEC operations be programmed with loans by international financial institutions (Scenario 2) or through equity capital and loans by the international financial institutions (Scenario 3), in view of the presence of international investment, better debt/equity ratio and higher profitability.
- 7) Based on the requirements of SMIs for the one-stop-shop for technical, managerial and financial support, as well as in the light of financial viability of operations, it is recommended that SMIDEC be established as early as possible. SMIDEC may be established as a "public company".
- 8) For the establishment of SMIDEC, it is recommended that a Committee be organized by possible domestic investors, both public and private. The Committee should review and study the proposed SMIDEC operation and management plans and prepare the Memorandum of Association and Article of Association. The Committee should also secure investment to SMIDEC by the public and private sectors, referring to the financial plan envisaged in this Study. Since the finance by the government grant is significant for SMIDEC, the Committee should request the government for its assistance in setting up SMIDEC.
- 9) Since cooperation by the international financial institutions, equity capital and/or loans, is of great significance for successful operation of SMIDEC, it is recommended that contact and discussion with the international financial institutions be initiated by the Ministry of Finance and Planning and MCAID as early as possible. The larger the SMIDEC operations, the higher the profitability of SMIDEC.
- 10) SMIDEC, once established, may work as an apex body for coordination among the existing institutions concerned with SMI development. It is recommended that discussion be made at the Board of Directors how to coordinate among various institutions for the best interest of SMIs in Sri Lanka.



COMPANIES ACT NO. 17 OF 1982 COMPANY LIMITED BY SHARES

[DRAFT]

MEMORANDUM OF ASSOCIATION OF

SMALL AND MEDIUM INDUSTRY DEVELOPMENT CORPORATION LIMITED.

- 1. The name of the Company is SMALL AND MEDIUM INDUSTRY DEVELOPMENT CORPORATION LIMITED.
- 2. The Registered Office of the Company will be situated in the District of Colombo.
- **3.** The objects for which the Company is established are as follows:

(A) **PRIMARY OBJECTS:**

To carry on the business of providing technical, managerial and financial advice, support and assistance to small and medium industries to encourage the growth of productive small and medium industries.

(B) <u>ANCILLARY POWERS</u>

- (I) To purchase, take on lease or in exchange, hire or otherwise acquire, any real or personal, immovable or movable property and any rights, privileges, licenses or easements.
- (II) To apply for, purchase or otherwise acquire any patents, brevets d'invention, concessions and the like conferring an exclusive or non-exclusive or limited right to use any invention which may seem capable of being used for the above businesses or the acquisition of which may seem directly or indirectly to benefit the Company; and to use, exercise, develop, grant licenses in respect of, or otherwise turn to account the property rights and information so acquired.
- (III) To pay for any real or personal, immovable or movable property or assets of any kind, acquired or to be acquired by the Company, and generally to pay or discharge any consideration to be paid or given by the Company for property or

assets or for services rendered to the Company or for any other cause whatsoever in money or in shares whether fully paid up or partly paid up or in debentures, debenture-stock or partly in one and partly in another or otherwise howsoever.

- (IV) To invest any moneys of the Company and to hold, sell or otherwise deal with such investment.
- (V) To borrow or raise money for the purposes of the Company or receive money on deposit at interest or otherwise and for the purpose of raising or securing money for the performance or discharge of any obligation or liability of the Company or for any other purpose to create, execute, grant or issue any mortgage, debentures, debenture stock, bonds or obligations of the Company either at par, premium or discount and either redeemable, irredeemable or perpetual secured upon all or any part of the undertaking, revenue, rights and property of the Company, present and future, including uncalled capital or the unpaid calls of the Company.
- (VI) To cause or permit debentures, debenture-stock, bonds, mortgages, charges, encumbrances, liens or securities of, or belonging to, or made or issued by the Company or affecting its property or rights or any of the terms thereof, to be renewed, extended, varied, redeemed, exchanged, transferred or satisfied as shall be deemed fit by the Company to pay and re-borrow the moneys secured thereby or any part or parts thereof.
- (VII) To make, draw, accept, endorse and execute promissory notes, bills of exchange, bills of lading and other negotiable and transferable instruments.
- (VII) To sell, let, underlet, lease, under-lease, exchange, surrender, transfer, deliver, charge, mortgage, dispose of, turn to account, abandon or otherwise deal with all or any part of the property rights, of the Company whether in consideration of rents, money or securities for money, shares, debentures or securities in any other Company or for any other consideration.
- (VIII) To give, arrange, manage, guarantee loans given or taken for the purposes of the Company.
- (IX) To promote, and introduce specialised financial products, services packages and instruments.

- (IX) To sell the undertaking of the Company or any part thereof for such consideration as the Company may deem fit and in particular for shares, debentures, debenture-stock or securities of any other Company.
- (X) To accept as consideration for the sale or disposal of any lands and real or personal, immovable or movable property or assets of the Company or in discharge of any other consideration to be received by the Company, money or shares (whether fully paid up or partly paid up) in any Company, or debentures or debenture stock or obligations of any Company or any part or parts thereof
- (XI) To amalgamate, enter into partnership or into any arrangement for sharing profits, union of interest, reciprocal concession, amalgamation or co-operation with any person, corporation or Company carrying on or about to carry on any business or transaction which the Company is authorized to carry on or capable of being conducted directly or indirectly to the benefit of the Company.
- (XII) To enter into any arrangements or agreements with any authorities Government, Municipal, Local or otherwise, that may seem necessary or conductive to the above businesses and to obtain from any such authority any rights, privileges, rebates and concessions which the Company may consider desirable to obtain and to carry out exercise and comply with such arrangements, agreements, rights, privileges, rebates and concessions.
- (XIII) To engage, employ, maintain and dismiss managers, engineers, superintendents, assistants, technicians, artisans, machine operators, craftsmen, assistants, clerks and other servants, skilled or unskilled apprentices, advisers, consultants, appraisers, contractors, sub-contractors and experts on such terms and conditions and at such remuneration as shall be considered fit.
- (XVI) To establish and support or aid in the establishment and support of associations, institutions, clubs, buildings, and housing schemes, funds, trusts, and conveniences, calculated to benefit any of the employees or ex-employees, including directors and ex-directors of the Company or their dependents and to grant or provide for pensions, gratuities and allowances to such persons for their dependents and to make payments towards insurance and to subscribe or guarantee money for charitable or benevolent objects or for any exhibition or for any public, general or useful object and to make gifts and bonuses to persons in the employment of the Company.

- (XV) To adopt such means of making known the businesses of the Company as may seem expedient to the Company and in particular by advertising through any media, by purchase and exhibition of works of art or publication of books, brochures and periodicals, by conducting competitions and by granting prizes, rewards and donations thereof.
- (XVI) To distribute among the shareholders in specie any property of the Company whether by way of dividend or upon a return of capital but so that no distribution amounting to a reduction of capital be made except with the sanction for the time being required by law.
- (XVII) To acquire, establish or to carry on any other business or businesses whatsoever and wheresoever which the Company may conveniently carry on by itself or through any associate or subsidiary Company in connection with the said primary objects or which may directly or indirectly enhance the value or render profitable any of the properties or rights of the Company.
- (XVIII) To do all such things as may be necessary, incidental, conducive or convenient to the attainment of the above objects or any of such objects or otherwise likely in any respect to be advantageous to the company. In case of doubt as to what shall be so necessary, incidental, conducive, convenient or advantageous as aforesaid the decision of an extraordinary general meeting of the Company on the matter in doubt shall resolve the matter conclusively.

It being hereby declared that in the foregoing paragraphs this clause (unless a contrary intention appears), the word "person" includes any number of persons and a corporation and the word "Company" except where used in reference to this Company shall be deemed to include any partnership or other body of persons whether incorporated or not incorporated and whether domiciled or incorporated in the Republic of Sri Lanka or elsewhere.

4. The liability of members is limited.

5.	The Share Capital of the Company is Rupees
	(Rs) divided into () shares of Rupees
	(Rs/-) each, with power to increase or reduce the capital, consolidate,
	subdivide the shares or alter the shares into shares of larger or smaller amounts and to
	issue all or any part of the original or any increased capital with any preferential rights or
	privileges or subject to any special terms or conditions with or without any special

designation and from time to time, to modify, commute, abrogate or deal with any rights, privileges, terms, conditions or designations for the time being attached to any class of shares.

We, the several persons whose names, addresses and descriptions are subscribed hereto are desirous of being formed into a Company, in pursuance of this Memorandum of Association and we respectively agree to take the number of shares in the capital of the Company set opposite our respective names.

Witness to the above signatures and I do hereby testify to the number of shares subscribed for by the signatories abovenamed.

Notary Public.

COMPANIES ACT NO. 17 OF 1982 COMPANY LIMITED BY SHARES

[DRAFT]

ARTICLES OF ASSOCIATION

OF

SMALL AND MEDIUM INDUSTRY DEVELOPMENT CORPORATION LIMITED.

TABLE 'A' IN THE FIRST SCHEDULE

1. The rules applicable to a Public Company in Part I of Table "A" in the First Schedule of the Companies Act No. 17 of 1982 (hereinafter called "Table A") shall apply to the Company and shall be deemed to be incorporated herein except so far as those are herein expressly or impliedly modified or declared not to apply, and in case of any, conflict between the provisions herein contained and the rules in Table "A" the provisions herein contained shall prevail.

INTERPRETATION

2. In the construction of these articles words importing the masculine gender only shall include the feminine gender and words importing the singular number only shall include the plural number and vice versa and words importing persons shall include corporations.

SHARE CAPITAL AND VARIATION OF RIGHTS

3.	The share capital of the Company is Rupees
	(Rs) divided into (
	(Rs/-) each.

SHARE CAPITAL AND VARIATION OF RIGHTS

4. The following shall be substituted for Rule 2 of Table "A":-

The shares in the capital of the Company shall be at the disposal of the directors, who may from time to time issue any unissued shares, allot or otherwise dispose of them to such persons at such time and on such terms and conditions as they think proper, provided that new shares shall first be offered to the existing shareholders in proportion to their respective shareholdings and all shares not accepted by any of the existing shareholders shall be offered to the other existing shareholders in proportion to their respective shareholdings and if any shares remain unissued thereafter such remaining shares may be issued and allotted by the directors as they deem fit

Provided however that in the event of the approval of the Board of Investment of Sri Lanka or other necessary approval being declined for a foreign shareholder to purchase the shares such foreign shareholder may, if it so wishes, require the allotment of the shares to be made to a resident of Sri Lanka acceptable to such foreign shareholder the and the directors shall comply with such requirement of such foreign shareholder.

No share shall be issued at a discount, except as provided by Section 59 of the Act.

TRANSFER OF SHARES

5. The following Rule shall be added to the Rules in Table "A"

Any member desiring to sell or transfer his shares shall first offer the shares proposed to be sold by him to all the other members in the proportion of the shares held by them respectively in the Company at the time of the offer and such offer shall be made to them in writing. In the event of any such member not purchasing the shares within thirty days after such offer is made by paying the value therefor to the member desiring to sell, then the member desiring to sell shares may sell the shares that the other members have not purchased within the aforesaid time to any other person.

Provided however that in the event of the approval of the Board of Investment of Sri Lanka or other necessary approval being declined for a foreign shareholder to purchase the shares such foreign shareholder may, if it so wishes, require the allotment of the shares to be made to a resident of Sri Lanka acceptable to such foreign shareholder the and the directors shall comply with such requirement of such foreign shareholder.

RESOLUTIONS BY MEMBERS

6. The following Rule shall be added to the Rules in Table A:-

Subject to the provisions of the Act, the decision reached by the members by a resolution in writing signed by all the members for the time being entitled to receive notice of and to attend and vote at general meetings (or being corporations by their duly authorised representatives) holding together not less than ninety five percentum (95%) in nominal value of the shares giving such entitlement expressly consenting or dissenting thereto shall be as valid and effective as a resolution passed at a general meeting of the Company duly convened and held. An expression by any member of consent or dissent by facsimile transceiver shall be deemed for all purposes to be equivalent to such a member signing a resolution for the purposes of this Article.

- 7. The quorum for a meeting of the shareholders shall be two (2). In the absence of the quorum at any meeting of the shareholders the meeting shall be adjourned to such other day and place as the directors may determine and notice thereof given to all the shareholders, and if at such adjourned meeting too the quorum is not present within half and hour from the time appointed for the meeting the members present shall be a quorum.
- 8. Unless otherwise agreed not less than thirty (30) days notice shall be given to all the shareholders of any meeting or any adjourned meeting of the shareholders.

Notices shall be given to the non resident shareholders by telex or facsimile transceiver as well as by registered post.

9. Meetings of members may also be held by teleconference if all the members so agree.

DIRECTORS

The following shall be substituted for Rule 76 in Table "A":-

(a) Until otherwise determined at a general meeting of a Company the number of directors of the Company shall be not less than four (4) and not less than eight (8)

(b) The Chairman of the Board of Directors and of the Company shall be elected by the directors of the Company. In the case of an equality of votes cast for and against any question, issue or resolution before the members or the directors before the directors the Chairman shall not have a second or casting vote. Rule 61 in Table A and the sentence "in case of an equality of votes the Chairman shall have a second or casting vote" in Rule 99 of Table a shall not apply to the company.

REMUNERATION OF DIRECTORS

- 10. The following shall be added to the rules in Table A:-
 - (a) The directors shall in addition to their remuneration be paid out of the funds of the Company all their travelling, hotel and other expenses properly and necessarily expended by them with the approval of the board in or about the performance of their duties as directors.
 - (b) A director may hold any other office or place of profit under the company except that of auditor upon such terms as to remuneration tenure of office and otherwise as may be determined by the Board of Directors.
 - (c) A director may contract or participate in the profits of any contract with the Company in the same manner as if he were not a director subject nevertheless to the provisions that he shall declare the nature of his interest in any contract or proposed contract in which he is interested in the manner required by Section 203 of the Act. Subject to such declaration being made, a director may vote as a director in respect of any such contract or proposed contract in which is so interested as aforesaid and his vote shall be valid. A general notice that he is a member of any specific firm or company and is to be regarded as interested in any subsequent transaction with such firm or company shall be a sufficient disclosure under this rule and after such general notice it shall not be necessary to give any special notice relating to any particular transaction with such firm or Company. Rule 85 in Table A shall not apply to the company.

BORROWING POWERS OF DIRECTORS

11. The proviso to Rule 80 in Table A shall not apply to the Company.

POWERS AND DUTIES OF DIRECTORS

12. The words "and every Director present at any meeting of Directors or Committee of Directors shall sign his name in a book to be kept for that purpose" in Rule 87 of Table "A" shall not apply to the Company.

DISQUALIFICATIONS OF DIRECTORS

- 13. The following shall be added to Rule 89 immediately after 89 in Table A immediately after 89 (f) thereof:-
 - (g) if requested in writing by all his co-directors to resign.
 - (h) is removed from office by an ordinary resolution of the Company.
 - (i) if required to hold any qualification does not obtain his qualification within two months after his appointment or at any time after his appointment ceases to hold his qualification.

ROTATION OF DIRECTORS

- 14. (a) Rules 90 to 95 (both inclusive) and 98 in table A shall not apply to the Company
 - (b) The words "any director so appointed shall hold office only until the next following annual general meeting and shall then be eligible for re-election but shall not be taken into account in determining the directors who are to retire by rotation at such meeting" in Rule 96 in Table A shall not apply to the company.

PROCEEDINGS OF DIRECTORS

15. Rule 106 in Table "A" shall not apply and the following Rule shall instead apply:-

The decision reached by the directors by a resolution in writing signed by a majority of the Directors at any given time expressly consenting or dissenting thereto shall be as valid and effectual as if it had been passed at a meeting of the directors duly convened and constituted. An expression by any director of consent or dissent to a resolution by means of a communication by telex or by facsimile transceiver shall be deemed for all purposes to be equivalent to such a director signing a resolution for the purpose of this Article.

- 16. The quorum for a meeting of the directors shall be two (2). In the absence of the quorum at any meeting of the directors the meeting shall be adjourned.
- 17. Unless otherwise agreed not less than fourteen (14) days notice shall be given to all the directors of any meeting or any adjourned meeting of the directors. Notices shall be given to the foreign directors by telex or facsimile transceiver as well as by registered post.

MANAGING DIRECTOR AND EXECUTIVE DIRECTORS

18.

- (a) The words "or executive director or executive directors" shall be interpolated in the first line of Rule 108 in Table A after the word "Managing Director" and before the word "shall"
- (b) The words "A director so appointed shall not whilst holding that office be subject to retirement by rotation or be taken into account in determining the rotation or retirement of directors, but his" in Rule 107 in Table A shall be deleted and the word "such" shall be substituted therefor.
- (c) The words or "executive director or executive directors" shall be interpolated in the first line of Rule 108 in Table A after the word "Managing Director" and before the word "shall".
- (d) The words "or executive director or executive directors" shall be interpolated in the second line of Rule 109 in Table A after the word "director" and before the word "any".

ALTERNATE DIRECTORS

- 19. (i) Any director may at any time by notice in writing left at the registered office of the Company or by notice sent by telex or by facsimile transceiver to the registered office of the Company appoint any person to be an alternate director of the Company to act in his place and the following provisions of this Article shall apply to any person so appointed.
 - (ii) A person appointed as an alternate director shall not in respect of such appointment be entitled to receive any remuneration from the Company nor be required to hold any share qualification but the directors may repay the alternate director such reasonable expenses as he may incur in attending and returning from meetings of the directors which he is entitled to attend or which he may otherwise properly incur in or about the business of the Company or may pay such allowances as they may think proper in respect of those expenses.
 - (iii) An alternate director shall on his giving an address for such notice to be served upon him be entitled to receive notices of all meetings of directors and to attend and vote as director at any such meeting at which the director appointing him is not personally present and generally at such meeting to perform all the functions of his appointor as a director in the absence of such appointor.
 - (iv) An alternate director may be appointed for a specified period or until the happening of a specified event but he shall ipso facto cease to be an alternate director if his appointor ceases for any reason to be a director.

THE SEAL

25. The following shall be added at the beginning of Rule 113 in Table "A":-

Contracts on behalf of the Company may be made as mentioned in Section 34 of the Companies Act No.17 of 1982 and for contracts made in terms of Section 34 (1) (a) of the said Act the Company shall keep a common seal.

IN WITNESS WHEREOF the Subscribers to the Memorandum of Association have hereunto set and subscribed their names to the foregoing Articles of Association at the place and on the date hereafter written.

Names	of Subscribe	ers.							Signatu	res.
	XX 7	.1	1					a ·		1 0
Two Th	ousand One		above	signatures	at	Colombo	on	tnis		day of
								Notary Public.		