

戦略一5: 中小企業の経営環境の改善
(Improvement of Business Environment for SMEs)

【戦略の狙い】

中小企業の一般的な事業環境を整えることがこの狙いである。

中小企業の事業環境を改善するという意味を広く解釈すれば、戦略4・戦略5で提案された各プロジェクトもこの戦略に分類されることになるだろう。ただしここでは、前述の戦略にはし難い、より広範かつ一般的なプロジェクトを本戦略に分類することにする。

基本的には本戦略には税制を含む諸制度、各種政策、インフラ整備等が含まれることになる。中小企業の優遇策として補助金をおくとしても、優遇税制、制度金融の主たるツールとなる。税制についてはアンケートにおいて付加価値税 (VAT) の Refund が遅れるという問題、輸入関税の不合理性などが指摘されている。これら施策については中小企業振興法 (SME Promotion Act) の成立と、戦略1で提案した3つの金融関連 Project の実施を待つことになるだろう。

ここでは下記の2つの制度的インフラストラクチャ整備プロジェクトを提案する。なお Project 5.2 は中小企業に限らず工業界全体にとって緊急課題として提案するものである。

Project 5.1 Development of Information Networks for SMEs

(中小企業の情報化およびネットワークの普及)

一般的にどの国においても、地方に立地する中小企業にとって、企業経営上大きな問題の一つは情報の収集を如何に行うかである。特にタイの場合は製品市場という意味においても、工業原材料の調達と言う意味においてもバンコク及び首都圏が最大の市場であり、この地域に基盤を持たない企業にとってはハンディキャップを負うことになる。このことは投資という面においても同様であり、結果的に首都圏集中を助長するものともなった。

近年の情報化の発展はこの問題の改善に一つの働きをなすものである。工業省は IRP プロジェクトの一つに地方の情報化推進案件を取り上げ、まず地方の工業関連情報をデータベース化し、ホームページを開くことによって情報を開示していく計画である。当面は投資促進の観点からデータの整理、ハードの拡充が行われる予定である。これを今後は市場開拓、パートナーの発掘などに発展させることにより、現在、地方の中小企業が情報収集のために負担しているコスト（人件費、旅費、その他経費）を節約することが可能となり、更に時間も節約されることにより従来以上の活動を進めることが出来る。当面は中小企業における情報化の推進に力点を置くも、将来的には商務省のや大学などを含めた情報ネットワーク化を視野におくものとする。

Project 5.2 Improvement of Standards and Conformance in Infrastructure to Promote Export

（輸出振興のための工業標準化の強化）

今日、工業規格（あるいは安全規格）の遵守は国内消費者を保護する観点のみからならず、貿易取引を促進する上でも重要なものとなっている。しかしながらタイの現状は身近な電気製品ですら、国内に規格が確立されていない。また、それらを検査、普及させる機関も存在しない。その結果、最近では中国、ロシア等から安価な電気製品の輸入が増加してきており、消費者の安全のみならず、国内メーカーの市場を侵食するものとなっている。一方、タイのメーカーが輸出を考えた場合、国際的な規格に適合しないものはアメリカや日本などの大きな市場には受け入れられないことになる。このような状況は電気・電子産業のみならず、他の産業においても言えることである。本プロジェクトは輸出振興の観点も含めて、これらの工業規格あるいは安全規格を国内で確立し、普及させることを狙いとしている。今後、タイの工業製品が更なる輸出展開を図る場合、避けて通れない課題である。

Supporting Industryに対する特別プロジェクト

下の2つの Project S.1 と S.2 は従来 TISI の所有していた機能と整備を受け継ぐ形で Institute として分離独立したものである。調査団は両インスティテュートの責任者と密接な関係をとりつつ基本計画を提案したものである。1999年5月現在、調査団の提案をベースに人員の雇用に移ったところである。Project S.3 は JICA と DIP によって合意されたプロジェクトである。本報告書ではその内容を紹介するにとどめる。

Project S.1 Setting-up of Thailand Automotive Institute

タイ自動車産業の国際競争力の強化を目的として、1998年7月に設立された独立公益法人である。その主要目的は4分野からなる。

- (1) 自動車、自動車部品、自動車材料の試験・検査
- (2) 情報の提供、技術指導・訓練
- (3) 政府と民間、国内と海外の連携、協力体制の構築
- (4) タイの自動車産業振興のための政策提案

Project S.2 Setting-up of Electrical and Electronics Institute

TAI 同様、タイの電気・電子産業の国際競争力強化を目的として、同時期に設立された独立公益法人。活動目的も電気・電子産業の分野で TAI 同様のことを行う。

Project S.3 SIC-Tool and Mold Technology Development Project

1999年7月 JICA は上記プロジェクトについて機材供与と専門家派遣を DIP と合意した。同プロジェクトは BSID が実施主体となって、タイ国のプラスチック金型製作部門を振興させることを目的としたものである、このプロジェクトによってプラスチック部門の技術センターが整い旧 MIDI の金属加工部門と合わせて、BSID がサポーティングインダストリーセンターとして名実共に充実する。

Strategy 1. Strengthening of SME financing

Project No. 1.1 Restructuring of the Credit Guarantee System

1. Implementation Agency	Primarily MOF followed by FTI and Thai domestic banks
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	200
4. Estimated Project Cost	More than 70 billion bahts
5. Rationale	In Thailand, commercial banks have a dominant position in SMEs financing. SMEs are facing difficulty in accessing to credit, especially for working capital. Also, SMEs lack collateral due to their limited cash flow and (in general) short history of business. After the economic crisis, banks have become very cautious on credit risk taking, especially when SMEs are the borrowers. To facilitate SME finance, the credit guaranty scheme should be enhanced to compensate for the problems of lack of collateral, and cautiousness of financial institutions in providing credit to SMEs.
6. Purpose	To provide a credit guaranty scheme which could be applied horizontally to all commercial banks and SFIs which lend to SMEs.
7. Output	<p>(1) A credit guaranty facility</p> <p>(2) Basic information on SMEs would be accumulated.</p> <p>(3) Procedures and techniques of credit analysis of commercial banks and SFI to improve know-how on credit analysis.</p> <p>(4) Information about different sectors would be collected and analyzed based on (2) & (3) above.</p>
8. Activities	<p>(1) Provide guarantees toward existing customers of commercial banks and SFIs by short term. In this stage, the new guaranty corporation will guarantee loans of no greater than 20 million bahts.</p> <p>(2) Provide guarantees toward new customers of commercial banks and SFIs for short-term.</p> <p>(3) Provide guarantees on long term capital investment related loans.</p> <p>(4) Credit analysis related data-base development based on accumulated credit related information of (1) to (3) above.</p> <p>(5) Sector analysis related data-base development based on accumulated credit related information of (1) to (3) above which will be utilized to evaluate creditworthiness of new customers in such sector.</p>
9. Target Group	Commercial Banks and SFIs
10. Success Indicators	<p>Number of extended guarantees</p> <p>Self-sustainable profitability of the credit guaranty scheme</p>
11. Strength	<p>The Thai Government has shown the initiative to strengthen the capital base of SICGC.</p> <p>Also, the Thai Government recognized the necessity to improve credit analysis capability of SICGC.</p>
12. Weakness	<p>Thai Government's commitment to increase the capital of SICGC is limited due to budget constraints. This means that SICGC's guaranty capacity will remain limited and thereby reduce the incentive for commercial banks and SFIs to lend. SICGC's capability should be supported by the Government (as a sovereign risk).</p>

Project No. 1.2 Strengthening of the SME Banking System

1. Implementation Agency	SIFC, MOF and MOI
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	
5. Rationale	
<p>There is urgent need to improve the system for the supply of credit to the SME sector with regard to supply both of working capital and investment capital. Toward this end strengthening of existing financial institutions is indispensable. Extraordinary steps by the government cannot be avoided because credit creation ability has become limited by the burden of non performing loans.</p> <p>The Project will promote greatly-needed structural reform in the financial sector, promote the recovery of a key small-business financial institutions and prepare it for a more significant future role; further, by these means the growth and development of the SME sector will be promoted through a more responsive credit creation mechanism.</p>	
6. Purpose	
This project will offer opportunities for SMEs to gain access to working capital and investment capital.	
7. Output	
<p>(1) The capability of the SIFC to provide short and long term credit will be improved.</p> <p>(2) The geographic range over which SIFC credit can be supplied will be expanded, overcoming the limitation of a lack of a network of branches, by using the agency loan system, with the cooperation of four major banks.</p> <p>(3) To enhance credit creation capability, SIFC will be given an injection capital by the Thai government to write off non-performing loans.</p> <p>(4) The SIFC will be made able to maintain a BIS equity ratio of 8.5%.</p> <p>(5) SIFC will be improved with regard to loan management skill, including credit appraisal.</p>	
8. Activities	
<p>(1) Revise the SIFC Act B.E.2534.</p> <p>(2) SIFC is given a capital injection from the Thai Government to write off non-performing loans and increase the capability to make policy based loans.</p> <p>(3) SIFC expands its effective branch network, and improve its creditworthiness analysis capabilities.</p> <p>(4) In 2001, SIFC will expand the scope of its lending to include the commercial and service sectors, and the maximum size of an eligible borrower, in terms of fixed assets will be raised from 50 to 100 million bahts. The maximum amount to be lent to an enterprise should also be increased from 25 million bahts to 50 million bahts.</p> <p>(5) Through the above, preparations for converting the SIFC into an "SME Bank" will be accomplished.</p>	
9. Target Group	
SMEs	
10. Success Indicators	
<p>(1) Number of approved loans</p> <p>(2) Self-Sustainable Profitability of the SIFC and ratio of non-performing loan</p>	
11. Strength	
<p>The Thai Government has indicated its intention to strengthen the branch network of SIFC.</p> <p>Also Thai Government recognized the necessity to improve credit analysis capability of SIFC.</p>	
12. Weakness	
<p>SIFC has no experience in lending to the commercial and service sectors.</p> <p>The credit guaranty scheme for practical purposes, is under suspension.</p>	

Project No. 1.3 Establishment of an Equity Participation System for SMEs

1. Implementation Agency	MOF, MOI and possibly SIFC and Venture Capital Association
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	
4. Estimated Project Cost	1 billion bahts
5. Rationale	SMEs in general have suffered greater financial setbacks than larger companies as a consequence of the 1997 crisis, but at a time when it has become more important than before to promote the growth and development of the sector in keeping with the recently revised industrial policy embodied in the IRP. A variety of measures are required, among which an equity participation scheme has been identified as having high potential as a trendsetter. A small beginning has been made at venture capital activities in the private sector, and a suitably modest precedent by the government can foster development of a venture capital market. The project would also contribute to diversification and expansion of the securities market in a way favorable to the SME sector.
6. Purpose	The project will offer opportunities for SMEs to have an access for long term capital through equity participation.
7. Output	The project would create high-visibility model SMEs that could be benchmarks for others, by the investment of public funds in selected companies that meet high qualifying requirements. The companies would be assisted to develop and grow to the point that they could offer shares to the public. Selected companies would receive investment in equity by a government-sponsored venture capital investment company. MOI will give preferential treatment to these companies to help them improve production technology, develop human resources, and improve managerial capabilities.
8. Activities	<ol style="list-style-type: none"> (1) Thai Government will set up a venture capital fund and company. (2) The Policy Making Committee of The Company will be established to set up basic investment policy. The Committee members will be composed of MOF, MOI and experts from financial sector. To avoid political intervention for the investment policy, the role of government members (MOF, MOI) will be limited to monitoring & auditing performance of the Company. (3) The Committee of The Company will appoint the Executive Board (hereinafter called The Board) which define concrete investment procedure and also which will appoint internal & external auditors. (4) The Board will search and recruit the Manager to run The Company. The Board also will set up general investment framework (targets, concrete procedure), guidelines of investment (investment by region, project size, stage of projects etc which will be applied to The Committee. (5) The Company's Manager will select projects which come from their own searching efforts and/or advices from financial market. MOI, SIFC and other concerning organizations, departments will cooperate to search potential projects from their customers. (6) MOI, through various Institutes, will collaborate with The Company to support weak points of the investee, such as production technology, marketing, quality control, accounting etc.
9. Target Group	All SMEs. However 13 priority industries in IRP would be in priority area to invest. (Mainly newly created companies)
10. Success Indicators	Number of companies receiving investment Reasonable return to the public from the investment

11. Strength

Most of the Cabinet member show their understanding on this matter.

12. Weakness

**Lack of experienced persons in Venture Capital Business.
Condition for listing on the SET are still hard for SMEs.**

Strategy 2. Upgrading of technological and managerial capability of SMEs

Project No. 2.1 Establishment of a Factory Evaluation System

1. Implementation Agency	Bureau of Supporting Industry Development (Technology Promotion Association (Thailand-Japan))
2. Site or Geographic Scope	Bangkok for central control; In principle, nation-wide implementation
3. Expected Direct Job Creation	N. A.
4. Estimated Project Cost	1999. 6 to 11; 42.54 million bahts, 1999. 6 to 2004.5; 352.62 million bahts
5. Rationale	<p>Domestic demand has been dropped precipitously after the financial crisis, and the manufacturers are now looking for product markets outside of the country. The IRP is the major policy instrument being used to assist industry to recover and return to a growth path.</p> <p>Because export market requirements are higher than those of the domestic market, and because the potential inroads of imports require Thai industry to shift towards better quality and more sophisticated products than hitherto produced, several aspects of the IRP address these problems. To improve these problems, the introduction of the system of the independent guidance is important. Finally, Factory Evaluation System is selected as one of IRP. Training activity preparatory to the functional starts of the system began in June 1999.</p>
6. Purpose	The purpose of establishing the Factory Evaluation System is to provide a tool to improve the management of SMEs.
7. Output	<p>(1) A certain number of evaluators would be trained under the system</p> <p>(2) A certain number of enterprises would be evaluated (analyzed for the purpose of offering specific recommendations and advice for technical and managerial changes)</p> <p>(3) Establishment of a system of the official qualification or certification of Enterprise Evaluators</p> <p>(4) Establishment of an Enterprise Evaluator training system that it the project will be sustainable</p>
8. Activities	<p>(1) Training of Thai evaluators To train candidates for certification as of official evaluators through classroom work and OJT. Training in Enterprise Evaluation To improve managerial and technical aspects of companies by means of experts' on-site Evaluation (observation, analysis, recommendations) Setting up a registration system for Certified Enterprise Evaluators (CEEs) To establish a training system and official certification for CEEs.</p> <p>(2) Survey of factories (about 2,000) to develop indexes and benchmarks (with Thai Productivity Institute)</p> <p>(3) Development of indicators and benchmarks for evaluation To make an index and benchmark (Thai Productivity Institute)</p> <p>(4) Evaluation of Factories</p> <p>(5) Assistance to evaluated companies seeking finance To introduce post-evaluation enterprises to financial institution based on results of evaluation.</p>
9. Target Group	<p>(1) Small and medium manufacturers</p> <p>(2) To be expanded to the commerce, information and service sectors in the future</p>
10. Success Indicators	<p>(1) Number of trainees and Evaluator candidates</p> <p>(2) Number of evaluated enterprises</p> <p>(3) A degree of completion of the system</p>

11. Strength

- (1) There is a existing institution that has know-how and facilities training.**
- (2) IRP-based budget and (potentially) foreign ODA**

12. Weakness

- (1) There are few Thai instructors. Thai instructors are to trained in the system.**
- (2) Insufficient in the official support and utilize system for the evaluator under the SME promotion policy.**
- (3) Lack of mechanisms for co-operation between financial institutions, private and official organizations, and others concerned (potential loan applicants).**

Project No. 2.2 Introduction of an On-site Technical Guidance System

1. Implementation Agency	SMEPO (TAI, EEI, NFI, TTI)
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	First stage: 10 persons, Final stage: 30 persons
4. Estimated Project Cost	First stage: US\$600,000/year, Final stage: US\$2,400,000/year
5. Rationale	The traditional seminars, workshops and class-room type guidance can hardly provide SMEs with practical technology directly applicable to the tasks of production. Most of these measures are useful mainly for enlightening people with theoretical knowledge, and dissemination of technology as knowledge. Technology transfer, however, is best when it involves on-site technical guidance right at the SME production floor.
6. Purpose	To upgrade the technology of individual SMEs by on-site guidance given by professionals, in an interactive fashion so that the improvements are made by the SMEs based on advice, thereby optimizing the learning experience and facilitating development of capabilities within the firms.
7. Output	<ol style="list-style-type: none"> (1) Establishment of an on-site technical guidance system. (2) Formation of a group of professionals available to provide technical guidance. (3) Provision of periodic guidance to selected firms over a period of time of up to three years. (4) Preparation of a database and manuals for transfer of technology to SMEs. (5) Training and development of Thai consultants. (6) Augmented activities of the TAI and EEI.
8. Activities	<ol style="list-style-type: none"> (1) Planning of the system as a new administrative function. (2) Organizing a team or teams of experts, perhaps with technical cooperation from overseas for the initial stage. (3) Soliciting requests for assistance; collection and review of applications. (4) Organizing a specific target group based on a common product or production process. (5) Visits by the experts to the group companies, provision of advice and guidance, and monitoring results at the time of the next visit. (6) Collection of information about SMEs for administrative use. (7) Development of skills of the experts who would be certified as such upon meeting qualifying criteria.
9. Target Group	SMEs in the manufacturing sector
10. Success Indicators	The number of beneficiary companies and reduction of a defect rate of beneficiary SMEs.
11. Strength	This project tackles technology transfer which has long been regarded as the biggest challenge of developing countries. The point in favor of the project is that several similar projects have been successfully carried out.
12. Weakness	This project directly aims to improve the level of technology of model SMEs and indirectly aims to produce ripple effects. Therefore, it is impossible to increase the number of beneficiaries drastically in a short time.

Project No. 2.3 Development of Total Quality Management System of Thailand

1. Implementation Agency	Each industrial institute, starting with TAI
2. Site or Geographic Scope	Mainly in Greater Bangkok and Eastern Seaboard
3. Expected Direct Job Creation	5 personnel, full-time for one year with possible extension for TAI
4. Estimated Project Cost	10 million for a year
5. Rationale	ISO and QC systems have been introduced to Thailand but have not necessarily become well acclimatized. In order to firmly establish a base for improvement of competitiveness in the Thai industry, it is believed that creation of a specifically Thai form of Total Quality Management is needed. Concentrating on the automotive industry at the outset promises a better set of results; the success in that industry will make it easier to diffuse TQM to other industries.
6. Purpose	To develop and implement a Total Quality Management system suitable to the Thai environment, and covering requirements of ISO/QS and Japanese TQC and production systems, with the operating objective of meeting requirements of global automotive assemblers.
7. Output	<p>(1) Organized and structured TQM system developed for Thailand which encompasses ISO, QC systems as well as Japanese TQC and production systems, and that will enable Thai SMEs to satisfy the requirements of global automobile assemblers and, inter alia, acquire regional if not global competitiveness..</p> <p>(2) Documentation of the newly structured system with manuals and training programs. (Training shall be done in cooperation with other institutes)</p> <p>(3) A competitiveness monitoring system</p>
8. Activities	<p>Total one year program, to be followed by extension of the system to other industries.</p> <p>Phase 1 (first 3 months): Preparation Collect information on problems, success and failure stories and suggested solutions for improved systems from major JVs as well as local companies, technical cooperation with by foreign specialists.</p> <p>Phase 2 (second 3 months): Planning Structure the to-be-proposed system based on the survey and opinions of key industry opinion leaders.</p> <p>Phase 3 (last 6 months) After confirming that a workable system has been defined, start implementation with the support of a Specialist Group from the TAI. Monitor progress regularly; commenced feedback cycles. Start series of seminars, training, full documentation and PR activities at the same time.</p>
9. Target Group	Initially, automotive pass makers including SMEs; later, other industries.
10. Success Indicators	<p>(1) Diffusion of the subject</p> <p>(2) Acknowledgement by major motor vehicle assembler</p>
11. Strength	A major advance in improving the competitiveness of a major industry will be made.
12. Weakness	A single clear-cut system cannot apply for energy companies, it becomes rather tailor-made system.

Project No. 2.4 Provision of an Assistant Package for Incubation of SMEs

1. Implementation Agency	Venture Plaza of ISMED with cooperation of DIP, IEAT, SIFC, SICGC, Venture Capital Funds, Technical colleges
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	1,000 jobs/project site, 5,000 jobs for five project sites
4. Estimated Project Cost	US\$10 million/site, US\$50 million for five sites
5. Rationale	Business incubators have been proven internationally to be valid methods for promoting and supporting entrepreneurship, assisting local and small-scale business, creating jobs at relatively low cost, and supporting the development of local communities. It is believed that business incubators are a valid approach to complement the SME promotion projects, particularly because it will be possible to focus on precise targets.
6. Purpose	The purpose of the project is to assist potential entrepreneurs to start new enterprises.
7. Output	(1) A system that supports entrepreneurs in the start-up phase by reducing the minimum capital they need. (2) Potential entrepreneurs can acquire modern managerial know-how.
8. Activities	(1) To secure lands and/or construct buildings for use by potential entrepreneurs (2) To assess business plans proposed by applicants (3) To train potential entrepreneurs whose business plans have passed the assessment (4) To arrange financing to the potential entrepreneurs (5) To give technical and managerial guidance to them for three years
9. Target Group	Entrepreneurs who intend to start a new enterprise.
10. Success Indicators	The number of enterprises incubated.
11. Strength	An SME promotion system is gradually prepared in Thailand, measures of which are fully utilized to the proposed project.
12. Weakness	The Thai government lacks for experiences in implementation of this kind of package program for entrepreneur incubation.

Project No. 2.5 Enhancement of Technology Transfer from LEs to SMEs

1. Implementation Agency	DIP with cooperation of related institutions
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	N.A.
5. Rationale	<p>The weakness of the supporting industry sub-sector including the automotive vehicles industry and in the electrical and electronics industry has glaringly evident become as a result of the economic crisis. Upgrading of competitiveness of the supporting industry is an urgent issue and requires initiative on the part of the government. Some but not all assemblers are making efforts at transferring technology to their subcontractors. It is believed that promotion of this assembler-to-subcontractor transfer will be particularly effective and deserves a place in the proposed SME promotion program.</p> <p>This project aims at upbringing of subcontractors by making use of human resources, machine equipment or others of assemblers (or final products manufactures), toward strengthening of subcontractors.</p> <p>In other words, the program led by the private sector is supported by the government.</p>
6. Purpose	To improve production and management technology of small and medium scale subcontractors (or parts suppliers).
7. Output	<p>(1) A well developed industry supporting structure for key industries</p> <p>(2) Increase in competitiveness of the two industries</p>
8. Activities	<p>(1) To make a basic survey on requirements of LEs' desire for technology transfer to subcontractors.</p> <p>(2) To choose model SMEs which are assisted by the Project.</p> <p>(3) To formulate an incentive scheme to the technology transfer.</p> <p>(4) To make corporate diagnoses of the model SMEs by consultants.</p> <p>(5) To support the technology transfer with the prepared incentives.</p>
9. Target Group	LEs and SMEs which are linked by subcontracting business.
10. Success Indicators	Increase in quality of products that are out-sourced by subcontract.
11. Strength	A precedent exists on the part of some LEs.
12. Weakness	It might take long time to introduce the incentive scheme because the Thai government is not familiar with this kind of system and it requires legal preparation.

Strategy 3. Development of human resources for SMEs

Project No. 3.1 Establishment of the Institute for SME Development Institute (ISMED)

1. Implementation Agency	Department of Industrial Promotion, Ministry of Industry & Thammasat University
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	Government budget of 864.6 million bahts was decided in FY 1999
5. Rationale	To complement the overall effort at promoting the development of the SME sector, and institution specializing in the improvement of SME management, that does not now exist, is essential.
6. Purpose	To establish a nation-wide network for education and training of SME personnel including managers as well as professionals who provide various types of services to SMEs.
7. Output	<p>(1) A nationwide network is established in close collaborative efforts between government agencies and educational institutions.</p> <p>(2) Methods and tools for effective training and advisory services are developed.</p> <p>(3) Existing and potential managers of SMEs are well trained.</p> <p>(4) Professionals who provide various types of services to SMEs are fostered.</p>
8. Activities	<p>Short-term</p> <p>(1) To encourage interest and create vision to SMEs and the target group.</p> <p>(2) To set up short or medium term courses for SME entrepreneurs, trainers, and consultants.</p> <p>(3) To provide the loan for business expansion to the entrepreneurs who are being developed under the projects and intermediate the guarantee and co-ordination with the financial institutions considering credit grant to SMEs to increase the capability of target SMEs.</p> <p>(4) To cooperate in the planning of the Factory Evaluation System Project and also to work with financial institutions in order to quickly create evaluators and credit analysis for more liquidity of SMEs.</p> <p>Medium and long term activities</p> <p>(1) Development and giving of long term and new courses for each target group</p> <p>(2) Development of training equipment</p> <p>(3) Research and study about SMEs</p> <p>(4) Preparation of capability index</p> <p>(5) Development of an SME network</p> <p>(6) Database development about SMEs and resource persons (expert pool)</p> <p>(7) Continuously development instructors and advisors</p>
9. Target Group	SMEs in all sectors
10. Success Indicators	<p>(1) Number of trainees and enterprises assisted</p> <p>(2) A degree of fulfillment of factory evaluators' training course</p> <p>(3) Number of new business</p>
11. Strength	Not only MOI but also the participated universities are very active and having a strong will to support regional enterprises.

12. Weakness

There is still lack of awareness in the local people about the existence and activity of ISMED.

Project No. 3.2 Institutional Support for Securing Manpower for SMEs

1. Implementation Agency	Department of Employment and Department of Skill Development, Ministry of Labor and Social Welfare
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	N.A.
5. Rationale	<p>The labor market, having become soft following the adjustments resulting from the current crisis, has become favorable to employers. It is easier to hire workers, and job hopping has declined. Nevertheless, from a long-term viewpoint, it is necessary to facilitate the matching of demand and supplies in order to improve the efficiency of the labor market. Various parts of the government are involved in employment-related activities but little is being done to match demand and supply.</p> <p>A matchmaking function will be valuable to employers as well as workers. The IRP has as priority projects "Survey of Skilled Labor Requirement and Shortages in the Industrial Sector for Systematic Re-development of the Labor Force" and "Retraining of Labor for Effective Assimilation of Medium and High Technologies" and additional effort in relation to these undertakings, on behalf of matchmaking, is highly justified.</p>
6. Purpose	To provide SMEs with a better means of recruiting employees
7. Output	<p>(1) Better awareness and information of demand and supply of labor by skills and standards, for administrator, and employers</p> <p>(2) A system of matching of demand and supply in the labor market, facilitating employment</p>
8. Activities	<p>(1) Annually survey of demand and supply by job category</p> <p>(2) To have supply of information useful for planning to vocational training centers SMEs</p> <p>(3) Establish an information system for job seekers and employers</p>
9. Target Group	<p>(1) SMEs who want to recruit employees</p> <p>(2) Job seekers</p>
10. Success Indicators	Reduction of the unemployment rate
11. Strength	<p>(1) Both government and the private sector are interested in improving the functioning of the labor market</p> <p>(2) There is a lot of window office and training facility in nation-wide</p>
12. Weakness	<p>(1) Lack of awareness of importance of matching of demand and supply</p> <p>(2) Weak coordination between MOLSW and MOI</p>

Project No. 3.3 Establishment of a Certified Skill-Standards in Cooperation with the Private Sector

1. Implementation Agency	MOL, MOI, FTI
2. Site or Geographic Scope	Existing private training schools
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	N.A.
5. Rationale	<p>We have made a similar proposal in the report of the supporting industry plan submitted in March 1995. That proposal was based on two pillars. One was to expand the industries subject to skill certification from those centered on repair mechanics, to manufacturing element industries (i.e., casting, metal-stamping processing, plastic processing, and die manufacture). Another pillar was to commission certification work to external private enterprises. However, it appears that expected results have not necessarily been obtained. Therefore, we will proceed one step further to propose that the government shall approve those graduates as publicly qualified personnel who graduated from a private enterprise's vocational school to train their own employees.</p> <p>The reason we have made such a proposal is based on the fact that a diploma of a certain global enterprise's vocational school is being highly evaluated in transferring a job, etc. The decisive factor to realize this project will focus on how much incentive the government is prepared to provide to large enterprises having their own vocational schools. The advantages are clear that the government, as a beneficiary, can reduce its burden through private-sector vitalization, and that the worker can obtain public qualifications. Anyway, a system should be introduced, by which the worker can improve a future life through improving his /her skill or technology.</p>
6. Purpose	To authorize the existing training schools managed by private enterprises as the issuing schools of the public certifications so as to complement lack of public facilities.
7. Output	<p>(1) Authorization private training schools for issuing certification of skill-standards</p> <p>(2) A network of a skill-standards certification system by a joint public private cooperation</p> <p>(3) An increase in the number of certified skilled worker</p>
8. Activities	<p>(1) Survey of the present state of in-home training schools managed by private enterprises.</p> <p>(2) Identify capabilities of the public and private facilities of testing and certifying workers for skill-standards.</p> <p>(3) Provide incentives for the private training schools to join this project.</p> <p>(4) Formulate criteria for authorization of private training schools.</p> <p>(5) Examine qualification of the schools in terms of software and hardware equipped in the schools.</p> <p>(6) Certify graduates of authorized schools as meeting skill standard requirements.</p>
9. Target Group	Public and private training schools offering courses matching the national skills standards program
10. Success Indicators	<p>The number of private training schools authorized by the Government.</p> <p>The number of certificates awarded to "graduates" of such schools.</p>
11. Strength	The scheme is practically or partly working in the labor market.
12. Weakness	Need to provide incentives to the private sector.

Strategy 4. Securing of markets for SMEs

Project No. 4.1 Introduction of a Preferential Purchasing System of SME Products by the Public Sector

1. Implementation Agency	MOI, Public institutions
2. Site or Geographic Scope	Nationwide
3. Expected Direct Job Creation	N.A.
4. Estimated Project Cost	No specific investment cost is required.
5. Rationale	SMEs are disadvantaged regarding marketing power in general. Especially, when SMEs develop new market, they face a more severe situation than the large-size enterprises. The public sector can compensate for this and help SMEs to grow and develop by granting preferential opportunities to SMEs when contracting for purchase of goods, works and services. This arrangement is used in many countries such as USA and Japan.
6. Purpose	To preferentially secure for SMEs a part of the market for public sector demand, including purchases by the Government and other public institutions.
7. Output	(1) Legislative base for the preferential purchase of SMEs by the public sector (2) Increased opportunities for SMEs to supply goods, works and services to the public sector
8. Activities	(1) Passage of a law will be required for implementation of this project. (2) To determine those items of goods and services the purchase of which is suitable for given to SMEs, and to accept competitive bids from SMEs for purchase of these goods and others. (3) Publicize the new arrangement among the SME sector. (4) To notify all relevant parts of the public sectors to give preference to SMEs as per plans. (5) To release advance information related to purchase of goods and others through channels that reach SMEs. (6) To simplify the proceedings from bidding to contracting and to simplify the documents. (7) To monitor and supervise the performance of the public sector for the preferential purchasing.
9. Target Group	SMEs qualifying as suppliers to the public sector
10. Success Indicators	The amount of contracts given by the public sector to SMEs.
11. Strength	SMEs are provided with preferential access to the government.
12. Weakness	Complaints from LEs.

Project No. 4.2 Strengthening of Export Promotion Activities

1. Implementation Agency	BISD, DIP, MOI, DEP, MOC, FTI, TCC
2. Site or Geographic Scope	
3. Expected Direct Job Creation	N. A.
4. Estimated Project Cost	N. A.
5. Rationale	<p>The key factor for sustained expansion of the export of Thai SME products is to improve their international competitiveness in terms of quality, cost, delivery, and development. The improvement of SMEs' international competitiveness, however, is thought to have the following prerequisites.</p> <p>(1) Thai SMEs make their products familiar to foreign buyers. (2) Thai SMEs have enough useful and timely information on export demand.</p> <p>These conditions can be satisfied if both the government and industrial associations strengthen export promotional activities.</p>
6. Purpose	The purpose of the project is to assist SMEs to upgrade their marketing capability.
7. Output	<p>(1) Thai SMEs products are made more familiar to foreign buyers. (2) Thai SMEs can have more information about export demands.</p>
8. Activities	<p>(1) To make a database of potential foreign buyers. (2) To make a database of Thai SMEs. (3) To make home pages for Thai SMEs and their products. (4) To develop packaging designs for Thai products. (5) To hold regular trade fairs for Thai products in Thailand and foreign countries. (6) To make marketing surveys on Thai products. (7) To hold regular seminars on export demands. (8) To send missions abroad to collect marketing information. (9) To carry on campaigns for publicizing Thai products.</p>
9. Target Group	SMEs
10. Success Indicators	<p>the items of export products the amount of export</p>
11. Strength	The project can encourage SMEs to promote their export.
12. Weakness	It may take much time for the project to be effective.

Strategy 5. Improvement of business environment for SMEs

Project No. 5.1 Development of Information Networks for SMEs

1. Implementation Agency	Industrial Information Center
2. Site or Geographic Scope	Industrial Information Center, Bureau of Industrial Promotion Policy and Planning, BIED of DIP, SME Development Institute and participated universities, Local SMEs
3. Expected Direct Job Creation	20 as promotion officers
4. Estimated Project Cost	
5. Rationale	<p>One of the largest problems in the business management for locally-based SMEs is how to acquire information. In Thailand in particular, the Bangkok metropolitan area is the largest a market for products and industrial raw materials. SMEs which do not have a base in this area are greatly handicapped.</p> <p>Recent growth of information technology offers a means to improve this problem. The Ministry of Industry picked up the matter of promotion of local information technology as one of IRP projects. It plans to create a database of information relevant to local industry and to supply the information via a home page. It is scheduled that rearrangement of data and extension of hardware are executed for some time from the viewpoint of promotion of investment.</p> <p>In order to enable SMEs to expand their economic activities through the use of information technology and help to advance their management innovation smoothly, the project provides them with information support in the form of computer hardware and software.</p>
6. Purpose	<p>To develop an information network system using the internet for local SMEs</p> <p>To stimulate market development effort by local SMEs</p>
7. Output	Information network for SMEs
8. Activities	<p>Consolidation of communication network and contents will be executed mainly by the Ministry of Industry. Terminals which can be used by any body will be installed at Industrial Promotion Center of DIP, provincial offices of MOI and SMEDI in the whole nation in the first phase, and elsewhere thereafter. The information to be disclosed at a website will be prepared by MOI and ISMED. Public information and training activities related to information technology will be implemented for the benefit of corporate managers. Intermediation and reference in the national scale will be executed by MOI as the second phase. coordination with BOI and DOE will also be taken into account. When enterprises make investment in information technology, support of some kind will be provided, for a limited period of time.</p> <p>The Ministry of Industry has already seized a sign of progress of information technology and is about to take actions in the consolidation. For instance, DIW has been developing own network system, and DIP implement information dissemination project, too. Furthermore, local SMEs are also interested in information technology, and such a trend can be said to be a large strength toward materialization of the project. It can be pointed as a problem that consolidation of local communication network has not yet been completed.</p>
9. Target Group	regional SMEs
10. Success Indicators	Website hits
11. Strength	MOI has already organized development committee.
12. Weakness	Under development of telecommunications infrastructure upcountry.

Project No. 5.2 Improvement of Standards and Conformance Infrastructure to Promote Export

1. Implementation Agency	MOI, MOC, MST, and environment related organizations
2. Site or Geographic Scope	Thailand
3. Expected Direct Job Creation	
4. Estimated Project Cost	
5. Rationale	<p>Strong and effective standards and conformance infrastructure is essential for every aspect of economic activities because it supports the nation's production activities by guaranteeing its quality and safety to the domestic and overseas market. In the WTO/TBT (Technical Barriers to Trade) Agreement, the member economies agreed to promote harmonization of standards and conformity infrastructure. The objective of this agreement is to achieve the production efficiency and trade facilitation as well as for consumer safety and environmental conservation. Unfortunately most developing economies lagging in this issue. In case of Thailand, voluntary and compulsory standards are not yet harmonized with the international standards. Further, an efficient and supportive network of accredited testing and calibration laboratories does not exist yet. These issues are more critical for those SMEs when they are trying to present their products quality with credibility to a third party (potential buyer) since they are not able to afford in-house testing facilities like those large companies and multilateral companies. Correction of these shortcomings will be a significant contribution to the effort at promoting SMEs.</p>
6. Purpose	To support and improve competitiveness of Thai industry so that its products are readily accepted in the international market, through the improvement of standards and conformance infrastructure
7. Output	<p>(1) Study report for policy planning and action, on economic impact for standards development by sector (2) Documentation and standardization of voluntary and compulsory standards (with cooperation of TISI) (3) Conformity assessment infrastructure for standards that is accepted in international markets (4) Establishment of a strong position of the Thai Government regarding Mutual Recognition of Agreement under the WTO</p>
8. Activities	<p>(1) Study on conditions of, and economic impact for, standards development by sector Verification of the actual situation of document standards and setting of the direction of strategy. Study on calibration and testing activities in electrical and electronics industry in Thailand. Study on conformance infrastructure in Thailand. Study of conditions related to the position on the Mutual Recognition Agreement, MRA.</p> <p>(2) Develop the documentation and standardization of voluntary and compulsory standards (with TISI). Develop the documentation of voluntary & compulsory standards with TISI based on above studies. Promotional activities to the make public understand the importance of standards and conformance issue (with coordination of the government, Chamber of Commerce and FTI). Apply the voluntary & compulsory standards to Thai industries including but not limited to imported products Facilitate access to public and private testing and calibration services.</p> <p>(3) Conformity assessment infrastructure for standards to be accepted by international market Justify necessary standards' traceability charts and their technical credibility in APEC. Promote intercomparisons of standards of the above activity to establish a base for MRA.</p>

<p>(4) Establishment of a strong position on MRA</p> <p>Promote the results of above intercomparisons to APEC economies to promote the technical credibility of standards and conformance infrastructure of Thailand.</p> <p>Promote the results of above intercomparisons to industries and prepare a directory of accredited laboratories to facilitate exports and strengthen public information activities.</p> <p>Expand counterpart countries and sectors for more MRAs.</p>
<p>9. Target Group</p> <p>Thai Industries selected by Activity No.1.</p>
<p>10. Success Indicators</p> <p>(1) Number of document voluntary standards and compulsory standards established.</p> <p>(2) Attendance on intercomparisons.</p> <p>(3) Number of MRAs the Thai Government signed.</p>
<p>11. Strength</p> <p>(1) A huge demand for export promotion is expected from the Thai industries.</p> <p>(2) Strong support from TISI, NIMT, MOC, FTI, Chamber of Commerce, and related organizations and institutes can be expected.</p>
<p>12. Weakness</p> <p>Existing low level of recognition of the importance of standards and the conformance issue by stakeholders (Government, exporters, importers and consumers).</p>

Supporting industries

Project No. S.1 Setting-up of Thailand Automotive Institute (TAI)

1. Implementation Agency	Thai Automotive Institute
2. Site or Geographic Scope	Bangkok, Bampoo
3. Expected Direct Job Creation	63 persons (as of Year 2003)
4. Estimated Project Cost	434.7 million bahts (For 5 Years)
5. Rationale	<p>In January 1998, the Government of Thailand has announced its Cabinet approval of the "Industrial Restructuring Plan, IRP" which was proposed by the Ministry of Industry. The purpose of IRP is to cope with the Thai's economic recession through the improvement of Thai's international competitiveness and export expansion, and the "Concept for Institutional Building" is one of the strategic means to execute IRP's action plans.</p> <p>Ministry of Industry (hereinafter, MOI) consists of six departments, and under MOI there are three state enterprises and seven non-profit institutes some of which including Thai Automotive Institute are in the process of setting up at this moment.</p> <p>The MOI's main responsibilities are policy-making, budget distribution and monitoring, however, they are too much involved in service activities directly affecting the industries, such as research, inspection, testing and human resource development and training. In turn, those of main responsibilities have been left behind. In order to focus on the policy-making, budget planning and distribution and monitoring, the MOI has been promoting the institutional building to transfer some of their activities to those institutes to take place and work closely to the industries.</p> <p>Thai Automotive Institute (hereinafter, TAI) is an independent and non-profit organization under the Industrial Development Foundation, MOI. The TAI was established in July 1998. The automotive related activities which Thai Industrial Standards Institute, TISI of MOI has been offering such as testing and certification services will be transferred to TAI. The TAI is managed by an executive director under the provision of TAI board of directors, which consists of representatives from governmental, private and academic agencies.</p> <p>Before 1997 the manufacturers had their marketing target on Thai's domestic market, however, since the economic crisis in 1997, the domestic demand has shrunken rapidly, and they are now looking for exporting of their products. Under the given circumstances, the automotive and auto-parts industry expect a strong support from TAI. Their demand are as follows;</p> <p>(1) support Tier-2 suppliers and SMEs, (2) human development, (3) coordination, (4) information.</p>
6. Purpose	To meet the needs of private sectors and to support and promote their competitiveness in the domestic and international market.
7. Output	<p>The principal mission to achieve the project purpose is to have good coordination between private sector and the government under one umbrella of TAI</p> <p>(1) Policy Making Support (2) Information Service (3) Testing and Certification Services (4) Consultation Services</p>

8. Activities
1. Policy Making Support 1-1 Automotive and Auto-parts Sector Studies 1-2 Policy Recommendation Studies 1-3 Specific Sector Studies 1-4 Standards Development with Thai Industrial Standards Institute, TISI-MOI 2. Information Service 2-1 Development of Data Bank for Automotive and Auto-parts Industry 2-2 Publication of Data and Data Analysis 2-3 Publication of Sector Studies 2-4 Publication of Periodical Sector News 2-5 Development of Data Bank for Consults 3. Testing and Certification Services 3-1 Safety Testing and Certification 3-2 Emission Testing and Certification 3-3 Testing for Importing Products and Parts based on TISI standards 3-4 Testing for Exporting Products and Parts based on Counter Part Standards 4. Consultation Services 4-1 Factory-Clinic Services 4-2 R&D Supporting Services for SMEs 4-3 Intermediary Services to Other Institutes
9. Target Group
Automotive and Auto-parts industry enterprises in Thailand
10. Success Indicators
(1) Number of registered members in TAI reaches more than 300 enterprises by the year 2003. (2) Operating ratio of the testing and calibration services achieves as much as 100% with given conditions.
11. Strength
(1) A huge demand is expected for the services offered by the TAI. (2) World-class assemblers in Thailand will be supportive for the activities of the TAI. (3) Some of the equipment and machinery has already been prepared through TISI.
12. Weakness
(1) Documentary standards (voluntary and compulsory) which are harmonized to international standards should be developed. (2) Strong marketing is needed to catch as many players as in the demand market. (3) A number of engineers should be enough trained.

Project No. S.2 Setting-up of Electrical and Electronics Institute (EEI)

1. Implementation Agency	Electrical and Electronics Institute
2. Site or Geographic Scope	Bangkok, Bampoo
3. Expected Direct Job Creation	79 persons (as of Year 2003)
4. Estimated Project Cost	849.2million bahts (for 5 years)
5. Rationale	
<p>In January 1998, the Government of Thailand has announced its Cabinet approval of the "Industrial Restructuring Plan, IRP" which was proposed by the Ministry of Industry. The purpose of IRP is to cope with the Thai's economic recession through the improvement of Thai's international competitiveness and export expansion, and the "Concept for Institutional Building" is one of the strategic means to execute IRP's action plans.</p> <p>Ministry of Industry (hereinafter, MOI) consists of six departments, and under MOI there are three state enterprises and seven non-profit institutes some of which including Electrical and Electronics Institute are in the process of setting up at this moment.</p> <p>The MOI's main responsibilities are policy-making, budget distribution and monitoring, however, they are too much involved in service activities directly affecting the industries, such as research, inspection, testing and human resource development and training. In turn, those of main responsibilities have been left behind. In order to focus on the policy-making, budget planning and distribution and monitoring, the MOI has been promoting the institutional building to transfer some of their activities to those institutes to take place and work closely to the industries.</p> <p>Electrical and Electronics Institute (hereinafter, EEI) is an independent and non-profit organization under the Industrial Development Foundation, MOI. The EEI was established on July 7th., 1998. It has the objective to strengthen the competitiveness of Thai electrical and electronics industry in the international market. The EEI is managed by an executive director under the provision of EEI board of directors, which consists of representatives from governmental, private and academic agencies.</p> <p>The Thai's domestic market has been dropped rapidly after the financial crisis in 1997, and the manufacturers are now looking for a market outside of the country. Given this condition, they are in need to produce products which have international competitiveness, and they are expecting that this new institute will support on the following areas;</p> <p>(1) product certification, (2) safety standards development, (3) standards accreditation, (4) market information, (5) calibration, etc.</p>	
6. Purpose	
To meet the needs of private sectors and to support and promote their competitiveness in the domestic and international market.	
7. Output	
<p>The principal mission for EEI to achieve the project purpose is to have good coordination between private sector and the government.</p> <p>(1) Policy Making Support (2) Information Service (3) Testing and Certification Services (4) Consultation Services</p>	

<p>8. Activities</p> <p>1. Policy Making Support</p> <p>1-1 Electrical and Electronics Sector Studies</p> <p>1-2 Policy Recommendation Studies</p> <p>1-3 Specific Sector Studies</p> <p>1-4 Standards Development with Thai Industrial Standards Institute, TISI-MOI</p> <p>2. Information Service</p> <p>2-1 Development of Data Base for Electrical and Electronics Companies</p> <p>2-2 Publication of Data and Data Analysis</p> <p>2-3 Publication of Sector Studies</p> <p>2-4 Publication of Periodical Sector News</p> <p>2-5 Development of Data Bank for Consults</p> <p>3. Testing and Certification Services</p> <p>3-1 Safety Testing and Certification of electrical and electronics Products and Parts Based on TISI Standards</p> <p>3-2 Compulsory Standards Testing Based on TISI</p> <p>3-3 Voluntary Standards Test</p> <p>3-4 CE-Marking Test</p> <p>4. Consultation Services</p> <p>4-1 Factory-Clinic Services</p> <p>4-2 Intermediary Services to Other Institutes</p>
<p>9. Target Group</p> <p>Electrical and electronics industry enterprises in Thailand</p>
<p>10. Success Indicators</p> <p>(1) Number of registered members in EEI reaches more than 220 enterprises by the year 2003.</p> <p>(2) Operating ratio of the testing and calibration services is as much as 100% with given number of engineers and facilities.</p>
<p>11. Strength</p> <p>(1) A huge demand is expected for the services offered by the EEI.</p> <p>(2) Some of the equipment and machinery has already prepared through TISI.</p>
<p>12. Weakness</p> <p>(1) Documentary standards (voluntary and compulsory) which are harmonized to international standards should be developed.</p> <p>(2) A number of engineers should be enough trained to serve the testing and calibration.</p>

Project No. S.3 SIC - Tool and Mold Technology Development Project

1. Implementation Agency	BSID
2. Site or Geographic Scope	BSID/MIDI
3. Expected Direct Job Creation	Not relevant
4. Estimated Project Cost	At this stage of project preparation, only direct personnel costs can be estimated, roughly. For each of the three areas of activity proposed, _____ million bahts would be needed.
5. Rationale	<p>It is said that product quality is determined to the extent of 70% by the quality of the mold or die used to make it. Efforts at improving competitiveness are not always best when companies rely on imported mold and molds for precision parts, as is the case in developing countries in general. Weakness in the ability to make tools and molds is one basic constraint to improvement of competitiveness of developing country manufacturers. It is necessary to realize accelerated improvement of the ability to design parts and to design the molds and molds needed to make them, so that productivity can be enhanced and reject rates can be reduced. Without possession of tool and die technology, we cannot expect much development of the R&D related technology in a given country.</p> <p>This project therefore seeks to improve the technical capabilities of BSID staff and to supply them with the plastic mold technology that they need in order to assist manufacturers.</p>
6. Purpose	To contribute to enhanced global competitiveness; to improve supporting industries; specifically, to improve tools the quality of and molds made in Thailand.
7. Output	<p>(1) It is anticipated that a major advance will be made toward ensuring capability to domestically produce tools and molds of superior quality, enabling more effective production of parts on the basis of improved competitiveness.</p> <p>(2) Enhanced capability of BSID; optimization of use of BSID's technical assets.</p>
8. Activities	<p>(1) Create and organize a small dedicated team; plan and monitor activities and budget control</p> <p>(2) Develop and test a technical information and advisory service; start a trial prototyping service; validate both and make them a permanent feature of MIDI activities</p> <p>(3) Perform the above for mold design, NC programming, mold processing, mold assembling and trial shot, and networking.</p>
9. Target Group	
10. Success Indicators	<p>(1) Number of firms using BSID services</p> <p>(2) Evaluation of improvements made as result of using BSID services</p>
11. Strength	<p>(1) The SIC has within its organization two institutes, for automotive and electric/electronic parts suppliers, making it easier for SIC to function as a linkage between industries.</p> <p>(2) By means of this project the BSID will acquire essentially all the technical service capability needed for the metalworking and plastics forming SIs. In fact as well as name these supporting industries will function as a one-stop service center.</p>

12. Weakness

- (1) The transfer of technology may not be as successful as planned if the counterparts assigned by MIDI leave MIDI during or after the project.**
- (2) It is not certain at this time whether the plastic formers and mold-making companies have a high level of interest in the services BSID proposes to provide.**

4.3 その他の重要施策の提言

今回調査の対象とされないが中小企業振興に強い関連がある重要施策について必要性や概要を、以下に述べる。今後の詳細調査によって Action Plan が策定されることが期待されるものである。

- (1) 地域中小企業振興策
- (2) 公的機関による SME 向け技術開発、技術指導の推進
- (3) 職業訓練校、大学の人材育成能力の強化
- (4) 物流効率化対策
- (5) 公害防止対策等特別な政策目的のための施策

4.3.1 地域中小企業振興策

(1) 地域工業開発マスタープラン策定への取り組み

本報告書 2.5 節の「地域工業開発」において、タイにおける今後の地域工業開発への取り組むべき課題として次の 6 項目を指摘している。

- 1) 地域別工業開発マスタープランの欠如
- 2) 地域金融システムの未整備
- 3) 地方からの投資誘致活動の欠如
- 4) 地方における工業開発推進母体の不在
- 5) 地方からの市場（情報）へのアクセス未整備
- 6) 地域工業に関する統計の整備

これらは今回の調査において、地域レベルでの現状分析より浮かび上がってきた問題点であるが、さらに国家レベルで地域工業開発を論じれば、更に次のような課題が指摘できよう。

- 7) 工業のバンコク及び首都圏一極集中の是正
- 8) 地方における雇用機会の創出
- 9) 地域における開発行政組織の見直し

これらの課題は既に第8次国家経済社会開発計画（1997-2001）の策定段階においても論じられている。その結果として、NESDB が呼びかけたものが、地域（県群）毎の開発計画策定による取り組みである¹¹。工業省は NESDB のこの方針を受けて、1998年より、全国14 Sub-region（Provincial cluster）毎の工業開発マスタープランを策定する計画が進められている。

この地域別工業開発マスタープランは民間セクター（地域住民、企業）と、地方の行政機関、研究機関などが参画して策定するもので、関係者が地域の特性、産業構造等をふまえ、お互いの利益を調整しながら、地域としての発展を考えるとところに大きな意義を持っている。即ち、ボトムアップの考え方を従来の開発行政のやり方以上に進めるものであり、コンセンサスを図りながら進めるという意味で、計画策定に係わる組織作りがまず重要なこととなる。

もちろん地域の人々にいきなり全てを任せただけで計画が出来るものではなく、全体の振興は専門家によるガイダンスを受けながら作業は進められるべきであろう。UNIDO が1996-1997年にタイで行った調査「Promotion of Industrial Competitiveness in the Disadvantaged Region of Thailand」においてこのワーキンググループについての考え方が提示されているが（Table 4.3.1 参照）、基本的にはこのメンバー構成（人数に変更があるにしても）が妥当なものと考えられる。特に委員長を有力な民間人とし、事務局を工業省ないしは新設予定の SME Promotion Office に置いて、ワーキンググループと関係機関の調整を図っていくことが薦められる。

この地域別工業開発マスタープランには最低、次のような項目が含まれるべきである。

- ・当該地域の資源（人材、モノ、資金、等）
- ・地域の強み、弱み、開発制約要因
- ・振興すべき産業、開発潜在性のある産業
- ・産業の振興方策と財源
- ・インフラ整備方策と財源

¹¹ "the formulation of regional economic and social development guidelines and of development plans for provincial groupings, to be used as frameworks for development planning" (NESDB, 1996b, Part IV, Chapter 4)

- ・開発推進組織体制のあり方
- ・各県、各機関の役割と責任
- ・開発指標、など

地域別工業開発マスタープランは中小企業振興に特化したものとはならないが、4.1.2 の (3)で述べたように地域活性化のために中小企業が果たす役割は大きく、同マスタープランの目指すべき方向は結果的に地域中小企業振興に繋がるものである。

Table 4.3.1 Suggested Structure for the Sub-Regional Working Group for Industry

Position (number)	Role	Possible Candidates	Expected Inputs	Expected Benefits
1 Chair-permanent or rotated (1)	Meeting coordinator, moderator	A dynamic and respected leader of the business community or a member of the provincial CC or FII	Time, arrange and plan the meeting together with the secretary, jointly select and brief consultants	Networking, exchange information with colleagues from other sectors, improved business environment, discuss cost effective resource allocation, access to technical expertise, influence policy development
2 Secretary-MOI (1 or 2)	Represent MOI, provide logistical support	MOI staff member, possibly from OIE	Time, finance pilot phase, prepare agenda, link with MOI (provide policy background, feedback from/to MOI) ideas from other sub-regional working groups, convene meetings, produce minutes	Strengthen capability of MOI/OIE to establish dialogue between the centre and the periphery. Participatory planning mechanism, facilitate MOI's implementation of the Eighth NESDP
3 Provincial member from the private sector (1 per province)	Participate in discussions	See 1	Time, money to finance participation, provide information, ideas and opinions to help promote industrial development. Give feedback from own organisation/networks	See 1
4 Provincial member from the government sector (1 per province)	Represent respective agency	A staff member of PIO, DIP, the Provincial Office	Provide information on services, programmes, policies and feedback from own agency and networks	Involved in dynamic dialogue, networking, raise effectiveness of agency, obtain feedback on present and planned policies
5 NESDB representative (1 or 2)	Represent NESDB	NESDB staff member from regional and/or national level	Provide technical expertise, give guidance on the participatory approach to development planning, provide link to other NESDB projects	Feedback on the Eighth NESDP in action, participate in pilot approach for sector-specific participatory planning
6 Consultant	Provide specialist advice	Independent consultancy/research agency - private firm, university, think-tank, international export	Act as resource person, provide technical expertise and new perspectives on required issues	Remuneration, honorarium
7 Other important actors in the sub- region and elsewhere	Participate and represent their institution and act as resource persons	Financial institutions, education institution, other relevant government agencies, NGOs, potential international trade/investment partners, international donor-funded projects	Participate in discussions as appropriate, provide technical expertise and feedback. Build linkages between the working group and their institutions	A forum to air views and receive candid feedback, networking

Source: "Promotion of Industrial Competitiveness in the Disadvantaged Regions of Thailand", UNIDO, 27 March, 1997

(2) 開発コンセプトと開発手段

地域別 (Sub-region) の工業開発における開発コンセプトと開発手段としては次のような点が想定される。

1) 開発コンセプト

- i) 地域住民の参画によるマスタープラン作り
- ii) 県相互の計画の整合性、協力関係の確立とシナジー効果の追求
- iii) Sub-region としての中核都市、衛星中都市、村落部の設定
- iv) Sub-region としての創業支援システムの構築
- v) 中央と地方の新たな行政システムの構築

2) 開発手段

- i) 外発型開発方法と内発型開発方法の組み合わせ
- ii) 地域の経営者、同業種の組織化支援
- iii) 情報網の整備と情報化の促進
- iv) 地方における制度金融の整備
- v) 地域産業振興公社の設置
- vi) 地域中小企業振興協議会の設置
- vii) SME development Fund の資金とスキーム活用
- viii) BOI 指定地域制度の活用
- ix) 共同施設、貸床工場などの整備
- x) 創業支援システムのプログラム充実

この中でも 10) 創業支援システムのプログラムとは資金支援、施設空間支援、機械リース支援、市場開拓支援、管理業務支援、人材育成・斡旋支援など広範囲にわたる創業支援を意味している。

なお、地域別工業開発マスタープラン策定については JICA も工業省に協力する方向で協議が現在進められている。

4.3.2 公的機関による中小企業向けの技術開発、技術指導の推進

(1) 施策の必要性

中小企業には技術開発／改善機能が欠落しておりタイの研究機能の大部分は、大学、国立研究所、国営企業に偏在している。また、大学や研究機関の設備が有効に使われないものがあり産業界とのリエゾン機能があってもワークしていない。

King Mongkut's Institute of Technology Thonburi (KMUTT)、King Mongkut's Institute of North Bangkok (KMITNB)、Suranari University of Technology 等で産学連携事業を実施又は計画しているが、経済危機の影響もあり必ずしもうまく動いていない、中止になった事業もある。

(2) 施策の内容

- 1) SME Promotion Office の下に、中小企業産官学連携小委員会を設置
(必要に応じ、中小企業開発インステチュートの各大学を中心とした地域ワーキンググループを設置)

中小委員会では、以下のような事業について審議。

- i) 各大学、公的研究所において民間が活用できる施設設備や機能のマップを作成する
- ii) 上記マップを踏まえて、既存施設設備の最大限の有効活用策を検討する
- iii) 中小企業にとって使いやすい各大学等の機能の利用方法を検討する
- iv) 産官学連携の具体的な在り方を民間、中小企業関係者と意見交換する
- v) 中小企業の大学、公的研究所へのニーズ調査・検討する
- vi) 産学連携における制度面の障害についての調査・検討する

2) 中小企業向け施設設備整備への助成

中小企業産官学連携小委員会では、さらに、上記マップと中小企業者からの調査等を踏まえて、中小企業のニーズからみて不足している機能、施設設備を明らかにする。本検討を踏まえ中小企業振興委員会において整備が必要と承認された施設設備の整備に対して助成を行う。地方においては、例えば、技術指導、人材育成の中

心でもある中小企業開発インステテュート(地方支部)が地域特有資源等の活用を推進するのに必要な施設設備の充実を図る。

3) 大学や公的研究所を中心とした中小企業者向け技術開発への支援

中小企業との共同研究体による研究開発への助成を行う。また中小企業向けの技術開発を大学等へ委託を講ずる。例えば、成果の実用化についても支援措置する制度を構築する。実用化を考える中小企業に対して、アドバイザー派遣、技術指導、試作や市場調査に対する助成、商品化に対する低利融資・ファイナンス制度の特例、開発機械の中小企業者購入に対する税制上の特例措置等を行う。

4) なお、中小企業のみならず、産業全体の基盤整備として産官学連携を抜本的に強化

企業の技術力工場に大学や国立研究所が貢献する体制を支援策を構築する。これら支援策を円滑に活用するために、大学や公的研究機関にコーディネート機能を持つ企業のリエゾンオフィスを設け、企業に対して総合的な支援を行う。

4.3.3 職業訓練校、大学人材育成能力の強化

(1) 施策の必要性

タイにおいては、技術系人材が圧倒的に不足している。職業訓練校や工業高等専門学校が脆弱であり、量質共に不足しているのが一つの原因である。またカリキュラム等に産業界ニーズが反映されていない。大学の人材育成についても、理工系大学が絶対的に少ない上に、大学から出る人材が現場を知らないし、現場に出ようとしない、卒業生が関連製造業等に必ずしも就職しない傾向がある等の問題がある。特にこうした技術系人材の中小企業への供給は極めて少ないと予想される。自動車等の分野で産学連携による人材育成事業も少しずつ動き出しつつあるのが、中小企業施策と一体的に積極的に推進することが必要である。

(2) 施策の概要

基本的には、中小企業を含む、産業全体のインフラ整備として推進すべき話である。こうした整備されたインフラに中小企業のニーズを反映させ、利用の円滑化を図ることに特に留意することが重要と思われる。

下記的手段により、産業界にニーズに対応した理工系人材の供給を量質共に可能とするような大学、工業高等専門学校、職業訓練校の充実を図る。

- i) 企業での現場実習制度の導入
- ii) 各教育機関の中に産学交流委員会の設置
- iii) 企業の従業員の再教育システムのための協力
- iv) 大学の先生の企業研修への派遣のコーディネートおよび助成
- v) 企業実務者の講師派遣のための人材プール作り、派遣への助成
- vi) 既存の他の機関の施設や民間企業との連携強化
- vii) 職業訓練校、高専の強化拡充策として、モデル校方式による工業高等専門学校や職業訓練校の底上げ
- viii) 大学の人材育成の強化拡充として、エンジニア教育の認定制度の導入

4.3.4 物流効率化対策

(1) 施策の必要性

今後、産業構造の高度化を達成するためには、ニーズの高度化・多様化、短期間かつジャストインタイムの納期等への対応が必要であるが、これを実現するための流通システムが不十分である。流通の非効率によって作業効率の低下、トラック積載率の低下、燃料エネルギーの多消費等、必要以上の物流コストの増加によりさらに競争力低下を招いている。特に、多頻度小口配送を強いられる中小企業にとって物流コストが増加しがちであり、深刻な問題となっている。地方産業にとって、バンコク近郊の産業に比して相当高い物流コストが競争力強化のネックになっており、一極集中の一因ともなっている。

(2) 施策の内容

中小企業の共同物流効率化を推進し、物流コストを低減すると共に、納期遵守の徹底、適切な在庫管理・生産管理を可能とする。また、地方からの輸送コストを低減し、地方立地の不利を軽減する。

1) 中小企業共同物流効率化関連支援策

- i) 物流効率化アドバイザー制度
- ii) 調査設計支援事業
- iii) 共同物流施設（共同搬送、卸売り団地、共同倉庫、情報化等）の整備支援

2) 流通業強化資金貸付制度

中小企業者や中小物流業者等流通業務にかかわる中小企業が物流合理化に資する業務を行う場合に、必要な資金について特利での貸付を行う。

4.3.5 公害防止対策等特別な政策目的のための施策

公害防止対策や省エネルギー対策等、社会的に積極的に対応が求められているものの、直接、企業の利益を生まない分野については、中小企業は経営資源の制約等から、その取り組みが容易でないことから、中小企業に対して特別な支援を行うことが必要である。

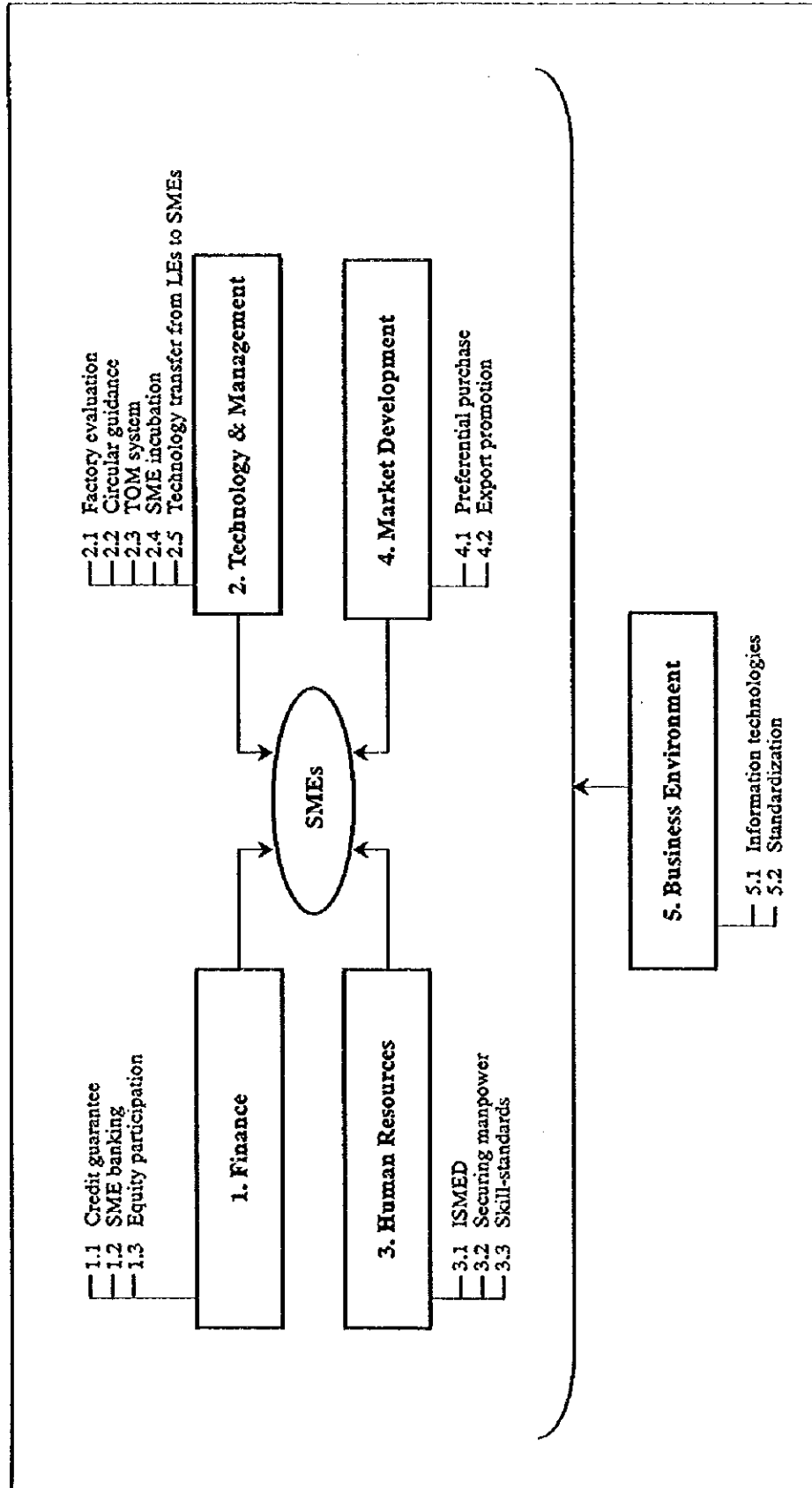
第5章 中小企業振興の実施計画

第5章 中小企業振興の実施計画

5.1 振興マスタープランの体系

Figure 5.1-1 は5つの Strategy と Project が全体計画の中でどういった役割の位置付けになるかを描いたものである。同図では、Strategy の1~4 が直接、SMEs に対して働きかけをなす戦略・プロジェクトであり、Strategy 5 が SMEs を取り巻くビジネス環境の整備として機能することを示している。各 Strategy の下につくプロジェクトが具体的な施策である。本調査では、既にタイ政府が実施を決定しているプロジェクトも含め、産業構造事業（IRP）の各プロジェクトを意識してマスタープランを策定している。従って、タイ中小企業振興マスタープランとしては本調査での提言プロジェクトに加え、IRP プロジェクト実施による効果が相乗して、最大の成果が上がることになる。

Figure 5.1-1. Schematic Diagram of Master Plan for SME Promotion



5.2 総合実施体制

中小企業振興の現在の実施体系については第2章でまとめている。役割と機能別の実施機関については Table 2.1.2 に整理分類している。ここでは中小企業振興法が制定されることを前提に、各種 SME 振興機関が SME 開発マスタープランを効果的に実施するにあたり、どのような実施体制をとるべきかという観点からいくつかの提案をする。

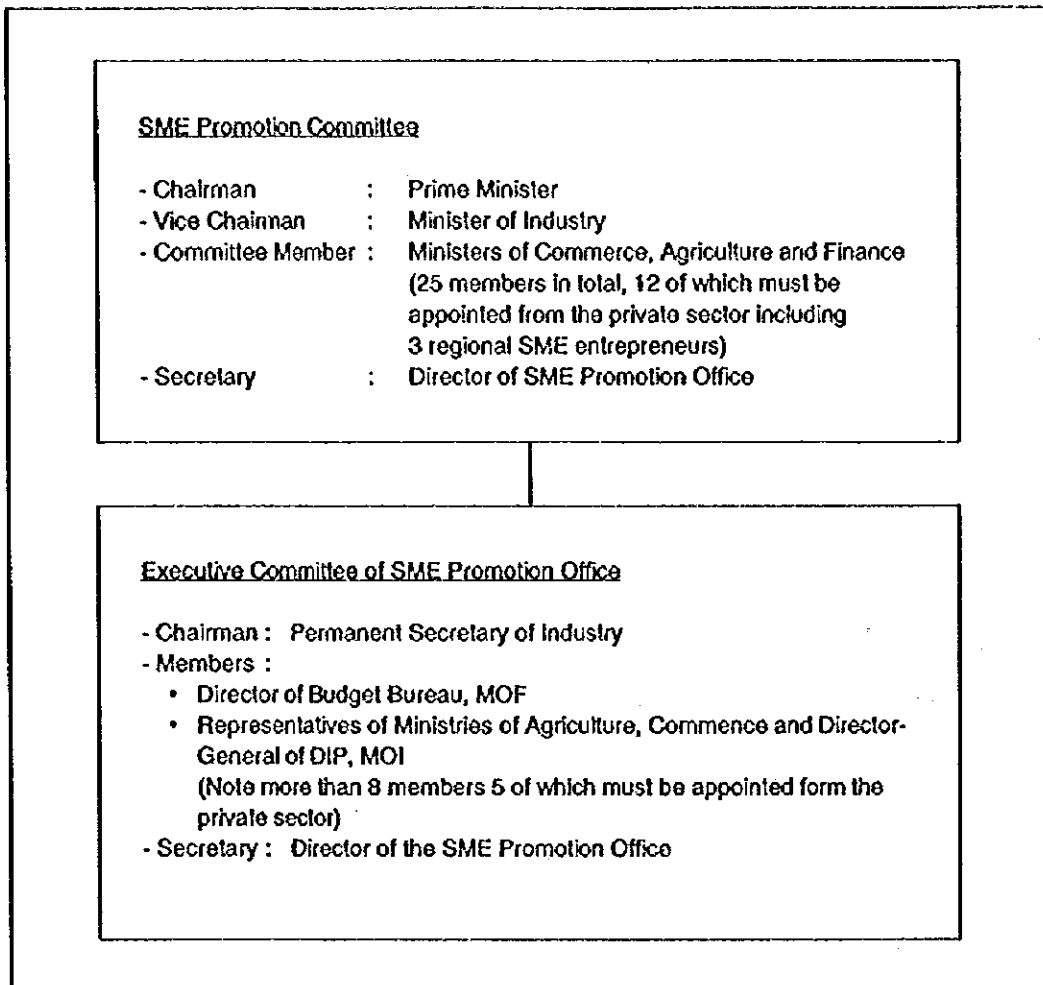
提案内容は次の4項目である。

- 1) 中央実施体制
- 2) 地方実施体制
- 3) 政策普及活動の推進体制
- 4) 提案プロジェクトの実施機関

(1) 中央実施体制

SME の総合的開発を全国レベルで総轄する中央政府組織が必要である。中央組織は大蔵省を含む関係政策官庁が関与することが望ましい。類似の組織は現存しないので現在国会で審議中の SME Promotion Act 案に提案されている SME Promotion Office (SMEPO) が中央組織の中心となるのが望ましい。同 Act に提案されている SMEPO と上位組織である SME Promotion Committee の組織は下記のようにしている。

Figure 5.2-1. Committees Proposed in SMED Promotion Act



関係者の話では、SMEPOは原案では自らは政策実施機関とならず、あくまで政策の立案、調整およびSME Fundの運用等が主な業務であるとされている。しかし、個別の施策実施の監視、フォローアップ、指導、普及、実績評価とフィードバックも業務内容に付け加えるべきであろう。理由はこれら業務のため別途新しい中央政府組織を設立すれば重複となるからである。

SMEPOのExecutive Committeeのメンバーとして少なくとも5人は民間部門から任命されることになっている。5人の中には根拠法によって設立されているFTI、TCC、Banker's Associationの3団体の代表は少なくともメンバーとして参加するべきである。

(2) 地方実施体制

地方の中小企業振興実施に必要な機能には次のようなものがある。なお、タイ国の地方行政は自治体制をとっておらず、内務省からの任命制であり予算も中央からの交付金であり、独自の税収によって地域開発の実施を行える余地は少ない。

- 1) 地域自身が内部誘発的に地域 SME を振興する。
- 2) 各種の中小企業振興策を中央から地方へ周知させ普及する。
- 3) 地方のニーズを把握し中央政府へ報告する。
- 4) 中央の施策を地方においても浸透させる。

地方の中小企業振興にかかわる組織は現状、次のようなものである。(第 2 章 2.5 も参照のこと)。

中央政府の出先機関 (工業省の例) :

- Industrial Promotion Center (IPC)、DIP の施策実施機関で全国 11 ヶ所にある。
- Provincial Industrial Office (PIO)、全国 75 (除くバンコク) 県にある工業省県事務所、工場の監理・監督業務が中心

官民協議会 :

- 官民経済合同協議会 (Joint Public/Private Consultative Committee) タイ語名 コロオ (KORLOROR)

民間団体 :

- Federation of Thai Industry (FTI)
- Chamber of Commerce

中小企業金融 :

- SIFC 支店数 4 ヶ所、IFCT 支店数 23 ヶ所

中小企業振興の地方実施体制として欠落している体制は、1 つは内部誘発型すなわち地域自身が自己の地域開発の計画と実施を行う機関である。また外部誘発型の振興策として投資誘致のため、ワンストップサービスセンターの機能を兼ね備えた地方 SME 開発推進機関 (仮称 : 地域開発公社) の設立が必要となろう。設置数は IPC/DIP と同じく 11 ヶ所、あるいはクラスター別 14 ヶ所、各県 75 ヶ所 (バンコク

を除く) の案が考えられようが地方の工業化推進という観点からみれば DIP の出先機関のある 11 地域区分でスタートするのが妥当であろう。

地域開発公社

(目的)

- 地域工業の内部誘発型振興および投資誘致促進

(活動内容)

- 地域産業振興計画(マスタープラン) の策定と推進
- 投資融資のための情報提供 (ワンストップサービスセンター機能)
- 地域企業間のコーディネートまた協同化
- 各地方機関のコーディネート
- セミナー、ワークショップの開催

(組織)

- 民間主導型とするための FTI、CC および地域の有力企業を中心とする
- 協賛：各省庁の出先機関、コロオ
- 常設オフィスを設置 (スタッフ 10 人~20 人)

(資金)

- 活動資金は民間大企業からの会費、独自の収益および SME Promotion Fund の活用
- 各種プロジェクトへの投資は民間投資とする

金融

中小企業金融の地方への普及は SIFC、IFCT では支店数が少なすぎるので地域の支店網が多い BAAC (支店数 667) や GSB (支店数 558) を通じての代理貸制度の導入をとることを提案する。なお BAAC は対象を農業のみに限らず工業への金融も現在検討されている。

(3) 政策普及推進体制

世銀の調査によれば産業振興に関する工業省の政策は、約 3 割の企業しか知られていないし、その恩典を受けていることを認識している企業はそれほど多くない。今後充実されていくであろう中小企業振興政策を中小企業に周知させ利用させる体制を整える必要がある。

この面で中小企業は次のような問題点を抱えている。

- 情報のアクセスの機会が少ない
- 中小企業の事業活動に関係する法律／制度は、多岐にわたり関係省庁も多いため、どこに問い合わせたらよいかもわからない
- 日常直面する問題に対して相談する相手がなく、解決策が見つけれられない

中小企業に政策の広範な普及を周知徹底するとともに、身近な場所に関係政策に関する問い合わせ対応を行える場があることが必要である。さらに、同じ場所に、常日頃の企業活動における問題・悩みについての解決策や施策の活用等を教える相談窓口を設置し、中小企業の企業活動に対する下記のような支援を実施すべきであろう。

1) 施策の普及

(i) 中小企業施策の整理

中小企業振興事務局（SMEPO）は、中小企業の企業活動に関する政策およびその政策へのアプローチの方法について各省庁から収集し、分類整理する。これらの情報は毎年リバイスされる。これをベースに、中小企業政策ハンドブックおよび中小企業政策利用マニュアルを作成する。

こうして整理されたハンドブックは市販して広く普及させると共に、ハンドブック、マニュアルは商工会議所等の窓口におき、管轄の中小企業者への便宜を図ると共に相談等においても活用する。

サービス窓口の候補としては以下が考えられる。

--- 商工会議所、FTI 地方支部、PIO、IPC、県、各省庁の出先

(ii) その他、村、地域の役場等に施策 PR のパンフレット、広報誌等を置く

(iii) インターネット等を通じた普及 --- 中小企業政策に関するホームページ作成、あわせて産業関連データベース等も整備する

2) 商工会議所機能の中小企業者サービス機能の強化

各県の商工会議所の中小企業者への施策普及、相談窓口機能を付与し、必要な事業費についてはSME Promotion Fundから助成する。

(i) ワンストップサービス

- 中小企業者に関連する法律、制度、政策の照会
- これら制度の申請等の代行や必要な関連機関との仲介機能
- 中小企業者からの相談、苦情等の問題処理のための関係機関への斡旋
- 中小企業者からの苦情、陳情、要望等の受理および処理

(ii) 相談指導窓口

経営指導員、場所によっては技術指導員や診断士を配置

- 中小企業者の来訪、文書、電話等によって行われる経営、生産、技術、取引、金融、税制、労務、法律、情報等に対する相談への対応
- 軽微な技術・経営上の問題に対して、診断指導を実施
当初は、初級診断士の活用が有効。相談指導の定着と需要動向を見て、必要に応じ、有資格診断士を配置し、本格的な診断事業に着手。
- 記帳指導の実施
- 重大な問題等へは、診断制度の申請仲介をはじめ、適切な機関を紹介し、仲介
- こうした相談等で得られた中小企業者の経営実状等を整理・分析し、問題点を明確化し行政ニーズを把握する。その結果は、中小企業事務局へ送付される。事務局はこれを関係省庁へ伝える。

(iii) 講習会、研修会の実施

3) 施策普及、相談指導に必要な人材育成

中小企業振興にかかわる官民の諸団体職員に対して、中小企業開発インスティテュート（ISMED）において研修を行う。研修内容は下記の通りである。

- 中小企業者に関連する法律、制度、政策
- 上記の相談指導窓口の機能を果たすための基礎コース

(4) 提案プロジェクトの実施機関

本調査で提案するプロジェクトは中小工業振興に向けられたものである。従って、その実施においては工業省(MOI)が深く関わることとなり、中でも、Department of Industrial Promotion (DIP)がその中心的役割を担うことになる。Table 5.2-1 に各プロジェクト毎の想定される実施・運営機関、及び支援機関を一覧にしている。実施運営機関については調査団が各プロジェクトの実施機関、あるいは核となるべき機関として望ましいと思われる機関名をあげている。なお、プロジェクトによっては3.1の ISMED 設立や、4.2の輸出振興など既に実施に移されているものもあり、それらは現状を尊重する形で実施機関名をあげている。

Table 5.2-1. IMPLEMENTATION AGENCY BY PROJECTS

Proposed Project	Implementing Agencies	Supporting Agencies
Strategy 1. Strengthening of SMEs Financing	(SICGC)	MOF, MOI, FTI
1.1 Restructuring of the credit guarantee system	(SIFC)	MOF, MOI,
1.2 Strengthening of the SME banking system	(Newly established)	MOF, MOI, SIFC, SET
1.3 Establishment of an equity participation system for SMEs		
Strategy 2. Upgrading of Technology and Managerial Capability of SMEs		
2.1 Establishment of a factory evaluation system	BSID, TPA	MOI, ISMED
2.2 Introduction of a circular technical guidance system	BSID	each Institute of MOI
2.3 Development of Total Quality Management System for Thailand	Thailand Productivity Institute	MOI
2.4 Provision of an assistant package for incubation of SMEs	BSID	SIFC, ISMED
2.5 Enhancement of technology transfer from LEs to SMEs	BSID	BISD, OIE
Strategy 3. Development of Human Resources for SMEs		
3.1 Establishment of the Institute for SME Development	DIP, Thammasat Univ.	MOI, affiliated universities
3.2 Institutional supports for securing manpower for SMEs	DOE (Department of Employment)	MOLSW, MOI
3.3 Establishment of a certified skill-standards in cooperation with the private sector	MOLSW	MOI, FTI
Strategy 4. Securing of Markets for SMEs		
4.1 Introduction of preferential purchase of SME products by the public sector	BIPA	MOI
4.2 Strengthening of export promotion activities	DEP (Department of Export Promotion)	MOC, MOI, FTI, TOC
Strategy 5. Improvement of Business Environment for SMEs		
5.1 Development of information technologies and networks for SMEs	BIPPP	MOI
5.2 Improvement of standards and conformance infrastructure to promote export	TISI	MOI, MOC, MOSTE
Supporting Industries		
S.1 Setting-up of Thailand Automotive Institute	TAI	MOI, FTI
S.2 Setting-up of Electrical and Electronics Institute	EEI	MOI, FTI
S.3 SIC-Tool and Mold Technology Development Project	BSID, MIDI	MOI

Note: See "List of Abbreviation" as required.

5.3 実施計画のスケジュール

5.3.1 ワークショップによる評価

一方、調査団は上記を含む全ての提言プロジェクトについて、第三次現地調査においてワークショップを開催し、タイ側関係者の意見を聞く機会を得た。ワークショップには工業省の各部局、あるいは NESDB や SIFC などより参加があり、最後に各提案プロジェクト毎に「必要性」、「緊急性」、「実現可能性」および、プロジェクトが実施された場合の「影響度」について、各々評点をお願いした。Table 5.3-2 はその結果の一覧である。タイ側からの 14 名の評点と、JICA 調査団 11 名による評点を併記して示してある。

表中の各数字はタイ側（全員で 14 名）、調査団側（全員で 11 名）が各々、4 つの項目毎に評点した人の数を表し、3 から 1 では 3 の評点が最も高いものとして扱われる（厳密には各プロジェクトについての評点ではなく、「重要性」の認識度と言える）。もちろん、各プロジェクト毎の内容の理解は評点者毎に差があり、また、3 から 1 の度合いについても評点者全員で十分なすりあわせを行ったわけではない。従ってここでは全体の傾向をもとに、プロジェクトの優先順位を付ける上での参考指標とした。

全体の結果から傾向として言える点は次のような点である。

- (1) タイ側、調査団側ともいずれのプロジェクトについても「必要性」は高い評点となっている。これは他の要素と比較しても 3 の評点者が多く、1 の評点者が少ないことから明らかである。中でも、「1.1 の credit guarantee system」、「4.2 の export promotion」、「3.1 の ISMED 設立」などが高く評価されている。
- (2) 「実現可能性」の評点については、逆に 3 から 1 にばらつきが見られる。この項目の場合、3 評価は実現性が高いと見ているわけであるが、それらは「2.1 の factory evaluation system」、「3.1 の ISMED 設立」、「4.2 の export promotion」等であり、逆に実現性が低いと評点されているプロジェクトは 1.3 の equity participation system、2.5 の technology transfer などである。特にタイ側は 2.5 について実現性が低い見ている点が、特徴的である。
- (3) 「緊急性」はタイ側、調査団側ともほぼ同じ様な評点結果となっている。これは個別プロジェクトにおいても同様であり、「1.1 の credit guarantee system」、

「1.2のSME Bank」、「4.2のexport promotion」などが評点が高く、効果が高いと見られている。

- (4) プロジェクト実施による「影響度」はタイ側と調査団側の見方が最もかけ離れている結果となっている。特に調査団側の評点は比較的低く、厳しく見ていることが伺える。「影響度」の評点としては「1.1のcredit guarantee system」、「3.1のISMED設立(特にタイ側)」、「4.2のexport promotion」等が高い。
- (5) プロジェクト個々の視点から見れば、「4.2のexport promotion」、「1.1のcredit guarantee system」、および「3.1のISMED設立」が高く評価されている。中でも、4.2のStrengthening of export promotion activitiesが全ての項目で極めて高く評価されていることは、現地調査(field survey)の結果からも理解できるものである。

一般論的として、予算措置は別にしても既存施策(ないしはプロジェクト)との関連が強く、関係機関との調整が少ないプロジェクトほど早期の実現性は高いものである。すなわち、プロジェクトとしての必要性は認識されているわけであり、後はどれほど緊急性が求められているかを優先順位付けの指標として用いるべきである。その意味では次の3プロジェクトはワークショップの結果からは最も急がれるべきプロジェクトと結論付けられる。

- ・ 1.1 Restructuring of the credit guarantee system
- ・ 3.1 Establishment of Institute for SME Development (ISMED)
- ・ 4.2 Strengthening of export promotion activities

5.3.2 法規・制度の改正等が必要なプロジェクト

提案する15プロジェクトおよび、3つの新規インスティテュートの設立プロジェクト合計18プロジェクトは、いずれも実施にあたっては既存組織や施策との調整を必要とするが、実施のための要件、あるいはプロジェクトとしての性格づけから次のような相違が見られる。

- (1) 実施にあたり法整備(法律改正を含む)を必要とするプロジェクト
- (2) 法整備までは必要としないが、まったく新規のプロジェクトとなるもの
- (3) 既存の施策の流れにあり、その内容を活用、あるいは強化するプロジェクト

Table 5.3-1 にプロジェクト毎の性格づけを示している。この中で、明らかに法律の制定ないしは、現行法規・制度の改正を要すると思われるプロジェクトとしては次のようなもの（7件）が上げられる。

- ・ 1.1 Restructuring of the credit guarantee system
- ・ 1.2 Strengthening of SME banking system
- ・ 1.3 Establishment of an equity financing facility for SMEs
- ・ 2.4 Provision of an assistant package for incubation of SMEs
- ・ 3.1 Establishment of Institute for SME Development (ISMED)
- ・ 3.3 Establishment of a certified skill-standards system
- ・ 4.1 Introduction of preferential purchase of SME products by the public sector

またこれ以外にも省令などを準備する必要性が予想される。これらのプロジェクトが実施までの準備期間としてどの程度要するかは不明であるが、法律制定・改正のための関係機関への働きかけは早期に成すべきである。なぜならば、この種の施策が具体化される段階での最大の問題が法律の整備に時間を要し、施策として実施されるべき時期を逸してしまうことにある。類似するプロジェクトは海外でも行われており、それらを参考にタイの国内事情を勘案しながら法整備の準備を行うことが薦められる。

5.3.3 プロジェクトの優先順位

本調査においては長期（5ヶ年）計画、及び緊急対策的な短期計画を策定することが課題として与えられている。ここで言う緊急対策的な短期計画とは即効性の高い、立ち上がりの早いプロジェクトを指している。その意味では本年6月よりスタートしたISMEDの立ち上げを急ぐことや、商務省が1999年初めより相次いで打ち出している輸出振興策を早期に実施することが求められる。また、2.1のFactory evaluation systemも既にBSIDがIRPプロジェクトとして着手していることから緊急対策的なものとして加えることが出来よう。ただ、これらはいずれも緊急対策的対応が求められているものの、プロジェクトとしては長期にわたって継続させられるべきものであるとも言える。言い換えれば短期で終わらせてはいけないプロジェクトでもある。金融支援策については当面の流動性資金不足に対しては手が打たれているが、信用補完制度の充実については具

体的な対応までには至っていない。これは立ち上げに時間がかかり、長期的対応を要するものではあるが、直ぐにでもプロジェクトとして着手すべきものと位置付けられる。

これら3件以外のプロジェクトについても重ねて言えば、その必要性は全てにおいて認められているわけであり、基本的にはプロジェクトとして取り上げなくても良いというものはひとつもない。すなわち、全18プロジェクトが長期計画の中にも組み込まれるべきであり、全てのプロジェクトの内、同一分野（Strategy）、あるいは同一機関が実施機関となる場合についてのみ、プロジェクトの着手時期に差を持たせるという考え方が妥当であろう。

以上のような視点をふまえ、全18プロジェクトの実施に優先順位をあえてつけるとすれば、Table 5.3-3 のようになる。

Table 5.3-3 において優先順位の判断根拠はワークショップによる評価の他、Table 5.2-1 で示した実施機関が抱えるプロジェクト件数（実施能力）、Table 5.3-2 でのプロジェクトの性格付けを参考にし、総合的な見地から行ったものである。この内、3rdに順位づけた2件はワークショップの評点が低いこと、関与する機関が多いこと、そしていずれも新規にスタートさせるプロジェクトであるという観点から優先順位を遅くしている。残りプロジェクトの内、1stと2ndは実質的には差がなく、例えば同一実施機関となるBSIDのプロジェクトで評点の高いものを1stとする。あるいは既にスタートしているプロジェクトを1stにするといった基準で優先順位をつけている。

先述したように、プロジェクト実施の優先順位は、すべてを同時スタートさせることは困難であろうとの予想から、あえて考え方を整理したものである。しかし、どのプロジェクトを先行させるかは実施主体の意欲次第と言える。例えば、大蔵省が主体となるプロジェクト1.1、1.2および1.3については、同省の積極的な対応で1999年中にプロジェクトをスタートさせることが同年8月10日に発表されている。

最後にTable 5.3-4は向こう5年間のプロジェクト実施スケジュールを示したものである。この表では1stと2nd、順位のプロジェクトは殆どないものとして5年間の動きを示している。

Table 5.3-1. (a) EVALUATION OF PROPOSED PROJECTS

Project No.	(1) Necessity						(2) Urgency						(3) Feasibility						(4) Impact						Total Point of Level 3			
	3		2		1		3		2		1		3		2		1		3		2		1					
	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA			Thai	JICA
1.1	12	9	2	2	0	0	10	9	4	2	0	0	8	2	5	9	3	0	0	10	6	3	5	1	0	38	26	64
1.2	9	8	5	3	0	0	9	9	5	2	0	0	4	4	7	6	3	1	6	3	7	8	1	0	28	24	52	
1.3	7	4	5	2	1	5	6	3	4	3	3	5	3	1	5	6	5	4	5	1	6	7	2	3	21	9	30	
2.1	8	6	6	2	0	3	7	4	7	5	0	2	7	5	4	4	3	2	8	4	5	4	1	3	30	19	49	
2.2	9	6	4	4	1	1	6	4	8	6	0	1	7	3	7	7	0	1	7	3	7	6	0	2	29	16	45	
2.3	7	4	7	6	0	0	5	2	8	6	1	2	4	0	8	8	2	2	8	2	5	7	1	1	24	8	32	
2.4	8	3	5	6	1	2	5	0	7	7	2	4	6	0	6	8	2	3	5	0	7	7	2	4	24	3	27	
2.5	10	7	3	3	1	1	7	5	6	5	1	1	2	4	7	6	5	1	8	4	5	6	1	1	27	20	47	
3.1	11	7	3	4	0	0	9	6	5	4	0	1	7	6	5	5	2	0	11	3	3	7	0	1	38	22	60	
3.2	7	4	7	7	0	0	4	2	10	8	0	1	6	1	7	8	1	2	6	1	7	7	1	3	23	8	31	
3.3	11	5	3	6	0	0	3	3	11	7	0	1	3	4	9	6	2	1	7	1	7	10	0	0	24	13	37	
4.1	6	5	7	5	1	1	4	4	6	5	4	2	4	5	7	4	3	2	7	5	6	5	1	0	21	19	40	
4.2	10	10	4	1	0	0	11	8	2	3	1	0	9	3	4	7	1	1	9	7	3	4	2	0	39	28	67	
5.1	9	4	5	6	0	1	5	2	6	7	3	2	6	0	6	11	3	0	7	0	7	8	0	3	26	6	32	
5.2	9	4	5	7	0	0	5	4	6	6	3	1	5	3	6	6	3	2	7	3	7	7	0	1	26	14	40	
*S1	9	8	5	2	0	0	7	7	7	3	0	0	4	4	8	4	2	2	7	3	4	5	3	2	27	22	49	
S2	8	8	6	2	0	0	6	7	8	3	0	0	4	5	8	3	2	2	7	4	4	4	4	3	2	25	24	49
Total	150	102	82	68	5	14	109	79	110	82	18	23	86	50	109	108	42	26	125	50	93	107	19	26	470	281	751	

Number of answers = 25 (Thai side 14, JICA side 11)

*: 1 person not answer.

Source: JICA Study Team

Table 5-3-1-a

Table 5.3-1. (a) EVALUATION OF PROPOSED PROJECTS

Project No.	(1) Necessity						(2) Urgency						(3) Feasibility						(4) Impact						Total Point of Level 3		
	3		2		1		3		2		1		3		2		1		Thai	JICA	Total						
	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA	Thai	JICA				Thai	JICA	Total			
1.1	12	9	2	2	0	0	10	9	4	2	0	0	6	2	5	9	3	0	10	6	3	5	1	0	38	26	64
1.2	9	8	5	3	0	0	9	9	5	2	0	0	4	4	7	6	3	1	6	3	7	8	1	0	28	24	52
*1.3	7	4	5	2	1	5	6	3	4	3	3	5	3	1	5	6	5	4	5	1	6	7	2	3	21	9	30
2.1	8	6	6	2	0	3	7	4	7	5	0	2	7	5	4	4	3	2	8	4	5	4	1	3	30	19	49
2.2	9	6	4	4	1	1	6	4	8	6	0	1	7	3	7	7	0	1	7	3	7	6	0	2	29	16	45
*2.3	7	4	7	6	0	0	5	2	8	6	1	2	4	0	8	8	2	2	8	2	5	7	1	1	24	8	32
2.4	8	3	5	6	1	2	5	0	7	7	2	4	6	0	6	8	2	3	5	0	7	7	2	4	24	3	27
2.5	10	7	3	3	1	1	7	5	6	5	1	1	2	4	7	6	5	1	8	4	5	6	1	1	27	20	47
3.1	11	7	3	4	0	0	9	6	5	4	0	1	7	6	5	5	2	0	11	3	3	7	0	1	38	22	60
3.2	7	4	7	7	0	0	4	2	10	8	0	1	6	1	7	8	1	2	6	1	7	7	1	3	23	8	31
*3.3	11	5	3	6	0	0	3	3	11	7	0	1	3	4	9	6	2	1	7	1	7	10	0	0	24	13	37
4.1	6	5	7	5	1	1	4	4	6	5	4	2	4	5	7	4	3	2	7	5	6	5	1	0	21	19	40
4.2	10	10	4	1	0	0	11	8	2	3	1	0	9	3	4	7	1	1	9	7	3	4	2	0	39	28	67
5.1	9	4	5	6	0	1	5	2	6	7	3	2	5	0	6	11	3	0	7	0	7	8	0	3	26	6	32
5.2	9	4	5	7	0	0	5	4	6	6	3	1	5	3	6	6	3	2	7	3	7	7	0	1	26	14	40
*S1	9	8	5	2	0	0	7	7	7	3	0	0	4	4	8	4	2	2	7	3	4	5	3	2	27	22	49
S2	8	8	6	2	0	0	6	7	8	3	0	0	4	5	8	3	2	2	7	4	4	4	3	2	25	24	49
Total	150	102	82	68	5	14	109	79	110	82	18	23	86	50	109	108	42	26	125	50	93	107	19	26	470	281	751

Number of answers = 25 (Thai side 14, JICA side 11)

*: 1 person not answer.

Source: JICA Study Team

Table S.3-1.(b) TOTAL SCORE OF PROPOSED PROJECTS EVALUATION

No.	Name of Project	(1) Necessity		(2) Urgency		(3) Feasibility		(4) Impact		Total	(Average)②
		Total	(Average)①	Total	(Average)①	Total	(Average)①	Total	(Average)①		
4.2	Export promotion	70	(2.80)	68	(2.72)	60	(2.40)	64	(2.56)	262	(10.48)
1.1	Credit guarantee	71	(2.84)	69	(2.76)	55	(2.20)	65	(2.60)	260	(10.40)
3.1	ISMED	68	(2.72)	64	(2.56)	61	(2.44)	63	(2.52)	256	(10.24)
1.2	SME banking	67	(2.68)	68	(2.72)	54	(2.16)	58	(2.32)	247	(9.88)
*S1	TAI	65	(2.71)	62	(2.58)	52	(2.17)	53	(2.21)	232	(9.67)
2.2	Circular guidance	63	(2.52)	59	(2.36)	59	(2.36)	58	(2.32)	239	(9.56)
2.1	Factory evaluation	61	(2.44)	59	(2.36)	57	(2.28)	58	(2.32)	235	(9.40)
2.5	Technology (LEs to SMEs)	65	(2.60)	60	(2.40)	50	(2.00)	60	(2.40)	235	(9.40)
3.3	Skill-standards	66	(2.64)	55	(2.20)	54	(2.16)	58	(2.32)	233	(9.32)
S2	EEl	64	(2.56)	61	(2.44)	53	(2.12)	54	(2.16)	232	(9.28)
5.2	Standardization	63	(2.52)	55	(2.20)	53	(2.12)	59	(2.36)	230	(9.20)
4.1	Preferential purchase	59	(2.36)	52	(2.08)	54	(2.16)	59	(2.36)	224	(8.96)
*2.3	TQM system	59	(2.46)	52	(2.17)	48	(2.00)	56	(2.33)	215	(8.96)
3.2	Securing manpower	61	(2.44)	55	(2.20)	54	(2.16)	53	(2.12)	223	(8.92)
5.1	Info. Technology	62	(2.48)	52	(2.08)	52	(2.08)	54	(2.16)	220	(8.80)
2.4	SME incubation	58	(2.32)	49	(1.96)	51	(2.04)	49	(1.96)	207	(8.28)
*1.3	Equity participation	53	(2.21)	49	(2.04)	43	(1.79)	49	(2.04)	194	(8.08)
Total (Average) ①		1,075	(2.55)	989	(2.34)	910	(2.16)	970	(2.30)	3,944	(9.34)

(Note) Number of answers = 25 (Thai side:14, JICA side:11)

*One person did not answer.

Average ① Full mark = 3 points

Average ② Full mark = 12 points

(Source) JICA Study Team

Table 5.3-2. REQUIREMENTS FOR IMPLEMENTATION OR NATURE OF PROJECTs

Proposed Project	Legalize	Existing	New
Strategy 1. Strengthening of SMEs Financing			
1.1 Restructuring of the credit guarantee system	○	○	
1.2 Strengthening of the SME banking system	○	○	
1.3 Establishment of an equity participation system for SMEs	○		○
Strategy 2. Upgrading of technology and managerial capability of SMEs			
2.1 Establishment of a factory evaluation system		○	
2.2 Introduction of a circular technical guidance system			○
2.3 Development of total quantity management system for Thailand	○		○
2.4 Provision of an assistant package for incubation of SMEs			○
2.5 Enhancement of technology transfer from LEs to SMEs			○
Strategy 3. Development of human resources for SMEs			
3.1 Establishment of Institute for SME Development (ISMED)	○	○	
3.2 Institutional supports for securing manpower for SMEs		○	
3.3 Establishment of a certified skill-standards in cooperation with the private sector	○		○
Strategy 4. Securing of markets for SMEs			
4.1 Introduction of preferential purchase of SME products by the public sector	○		○
4.2 Strengthening of export promotion activities		○	
Strategy 5. Improvement of business environment for SMEs			
5.1 Development of information technologies and networks for SMEs			○
5.2 Improvement of standards and conformance infrastructure to promote export			○
Supporting industries			
S.1 Setting-up of Thailand Automotive Institute (TAI)	○	○	
S.2 Setting-up of Electrical and Electronics Institute (EEI)	○	○	

Note: "Legalize" means (1) Projects which require enactment/revision of legislation for implementation.
 "Existing" means (3) Project which are extensions of existing measures and which utilize or reinforce them.
 "New" means (2) entirely new project.

Table 5.3-3. PRIORITY FOR EXECUTION OF THE PROPOSED M/P

Proposed Project	1st	2nd	3rd
Strategy 1. Strengthening of SMEs Financing			
1.1 Restructuring of the credit guarantee system	■		
1.2 Strengthening of the SME banking system		■	
1.3 Establishment of an equity participation system for SMEs			■
Strategy 2. Upgrading of technology and managerial capability of SMEs			
2.1 Establishment of a factory evaluation system	■		
2.2 Introduction of a circular technical guidance system		■	
2.3 Development of total quantity management system for Thailand		■	
2.4 Provision of an assistant package for incubation of SMEs			■
2.5 Enhancement of technology transfer from LEs to SMEs		■	
Strategy 3. Development of human resources for SMEs			
3.1 Establishment of Institute for SME Development (ISMED)	■		
3.2 Institutional supports for securing manpower for SMEs		■	
3.3 Establishment of a certified skill-standards in cooperation with the private sector		■	
Strategy 4. Securing of markets for SMEs			
4.1 Introduction of preferential purchase of SME products by the public sector		■	
4.2 Strengthening of export promotion activities	■		
Strategy 5. Improvement of business environment for SMEs			
5.1 Development of information technologies and networks for SMEs		■	
5.2 Improvement of standards and conformance infrastructure to promote export		■	
Supporting Industries			
S.1 Setting-up of Thailand Automotive Institute (TAI)	■		
S.2 Setting-up of Electrical and Electronics Institute (EEI)			

Table 5.3-4. TIME TABLE FOR IMPLEMENTATION OF 17 PROJECTS

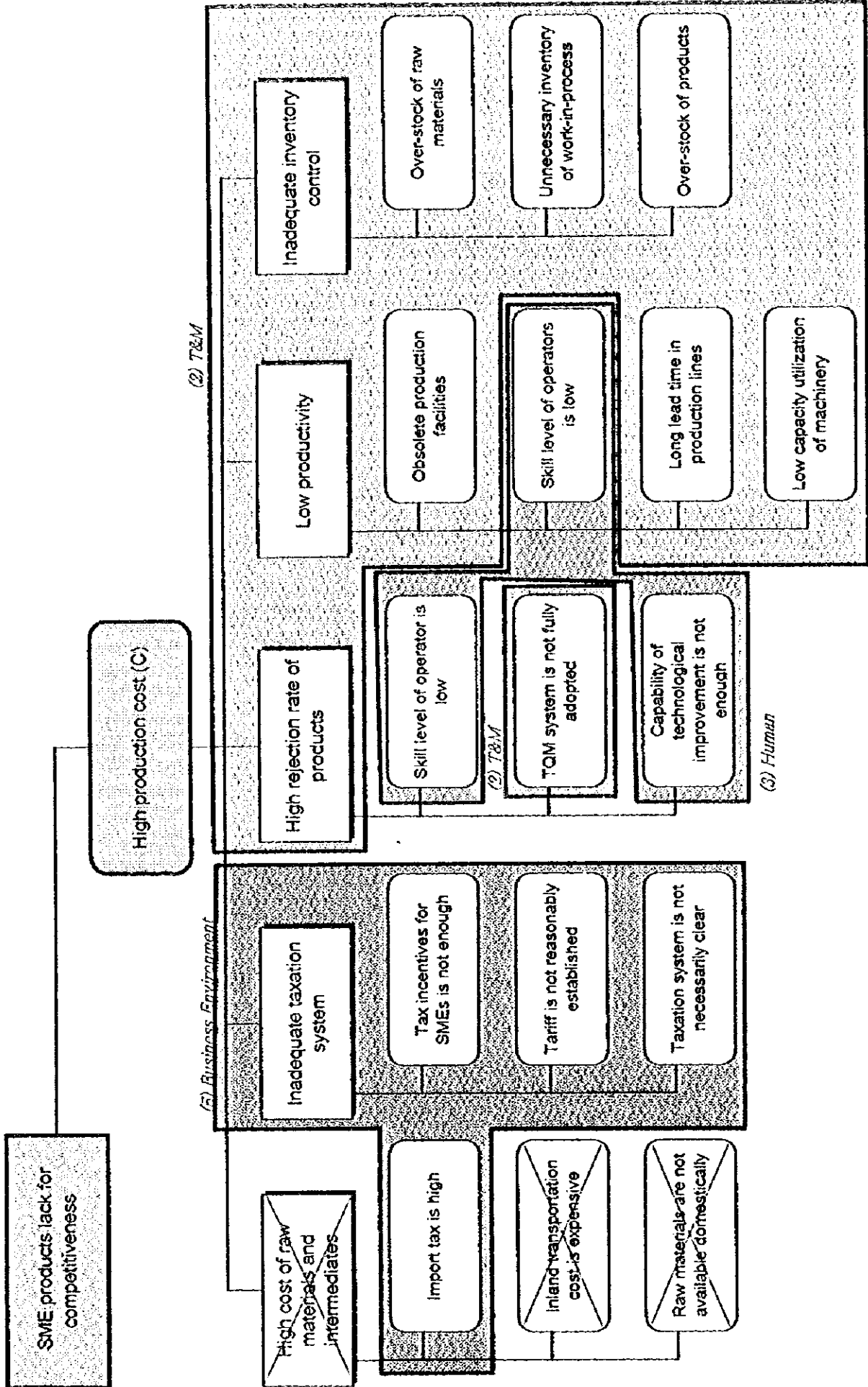
Proposed Project	1st Year/1999	2nd Year/2000	3rd Year/2001	4th Year/2002	5th Year/2003
Strategy 1. Strengthening of SMEs Financing					
1.1 Restructuring of the credit guarantee system	Examination in MOF	Setting up New CGC → Δ	Capital-increase & Institutional Build-up → Δ	Set up contingency fund → Δ	2nd Capital increase → Δ
1.2 Strengthening of the SME banking system	Preparation of MIP	Revise the SIFC Act	Reorganization → Δ	Capital increase → Δ	Full operation
1.3 Establishment of an equity participation system for SMEs	Policy making	Submission new legislation	Preparation	Start operation → Δ	Expand the target industry → Δ
Strategy 2. Upgrading of technology and managerial capability of SMEs					
2.1 Establishment of a factory evaluation system	Institutional Build-up (trial period)			Full operation	
2.2 Introduction of a circular technical guidance	Project Preparation	Trial period & Training new staff	Reorganization		Full operation
2.3 Development of a Thai system for TQM and production improvement	Policy making	Pre-F/S Preparation 3 months, 3 months	Trial 6 months		Full operation
2.4 Provision of an assistant package for incubation of SMEs	Policy making	Pre-F/S Preparation	Institutional Build-up		Operation
2.5 Enhancement of technology transfer from LEs to SMEs	Program planning		Subcontracting system evaluation		Tax deduction & financial support → Δ
Strategy 3. Development of human resources for SMEs					
3.1 Establishment of Institute for SME Development (ISMED)	Institutional Build-up		Full-operation		
3.2 Institutional supports for securing manpower for SMEs	Cooperate with DOE, DSD	(Development of training equipment; Research work; Database development)	Full-operation, network development		
3.3 Establishment of a certified skill-standards in cooperation with the private sector	Database development	Cooperate with prime sector			Increase type of job → Δ
Strategy 4. Securing of markets for SMEs					
4.1 Introduction of preferential purchase of SME products by the public sector	Research and preparation	Legislation	1st year purchasing	2nd year purchasing	
4.2 Strengthening of export promotion activities	Operation	Review	Additional plans	Review	Operation
Strategy 5. Improvement of business environment for SMEs					
5.1 Development of Information technologies and networks for SMEs	DIP's software development	Promote & training		Development network	
5.2 Improvement of standards and conformance infrastructure to promote export	Budgeting for the project			Institutional support	
Supporting industries					
S.1 Setting-up of Thailand Automotive Institute (TAI)	Preparation for testing & certificate	Preparation for other services		Full operation	
S.2 Setting-up of Electrical and Electronics Institute (EEI)	Preparation for testing facilities	Service start		Full operation	
S.3 SIC-Tool and Mold Technology Development Project	Building Construction	Equipment supply		Full operation	
		Training			

Note: 1st Year means Aug.-Dec. 1999, but other years suppose calendar year.

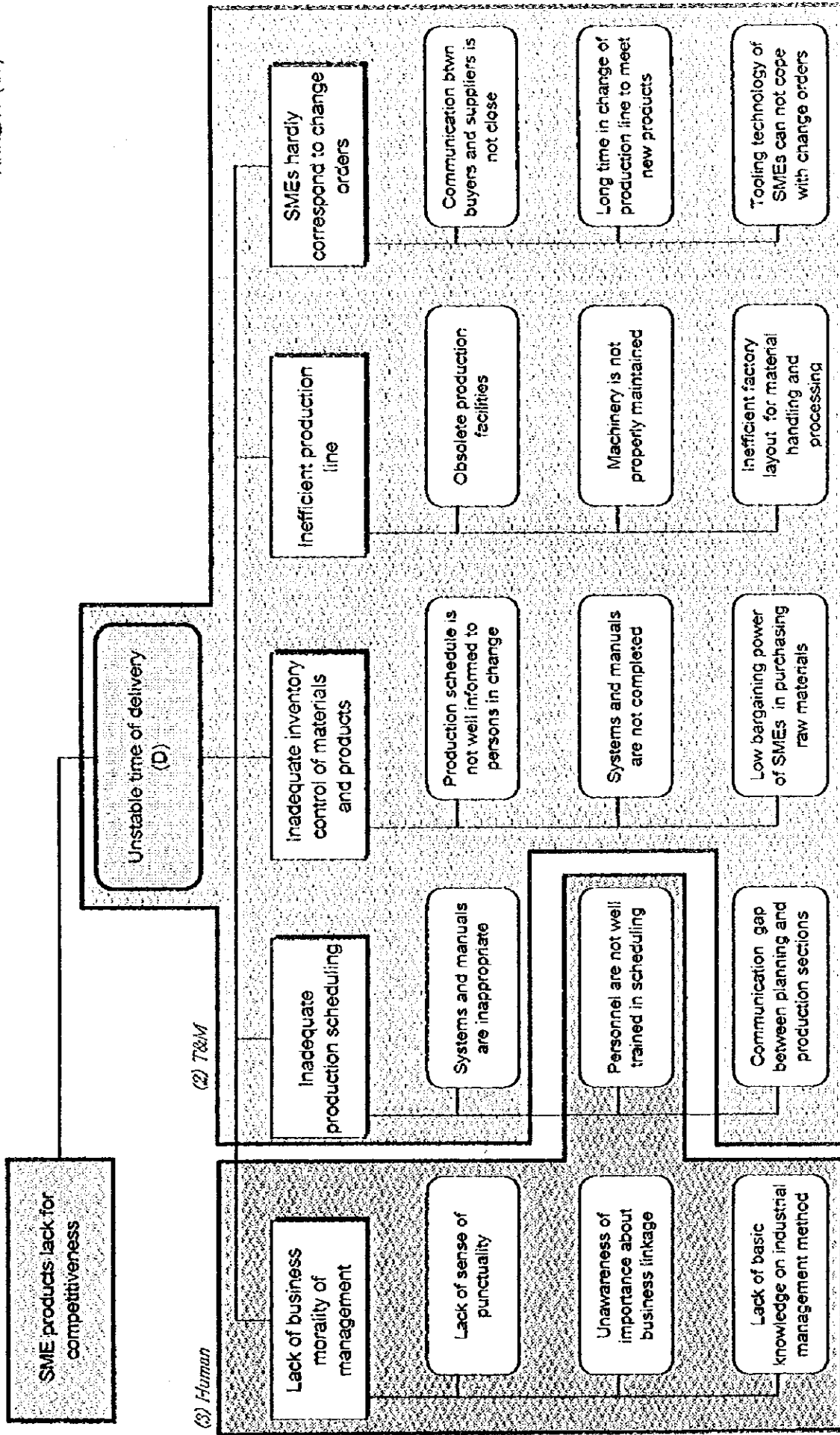
ANNEXES

ANNEX I Problem Tree for SME Development

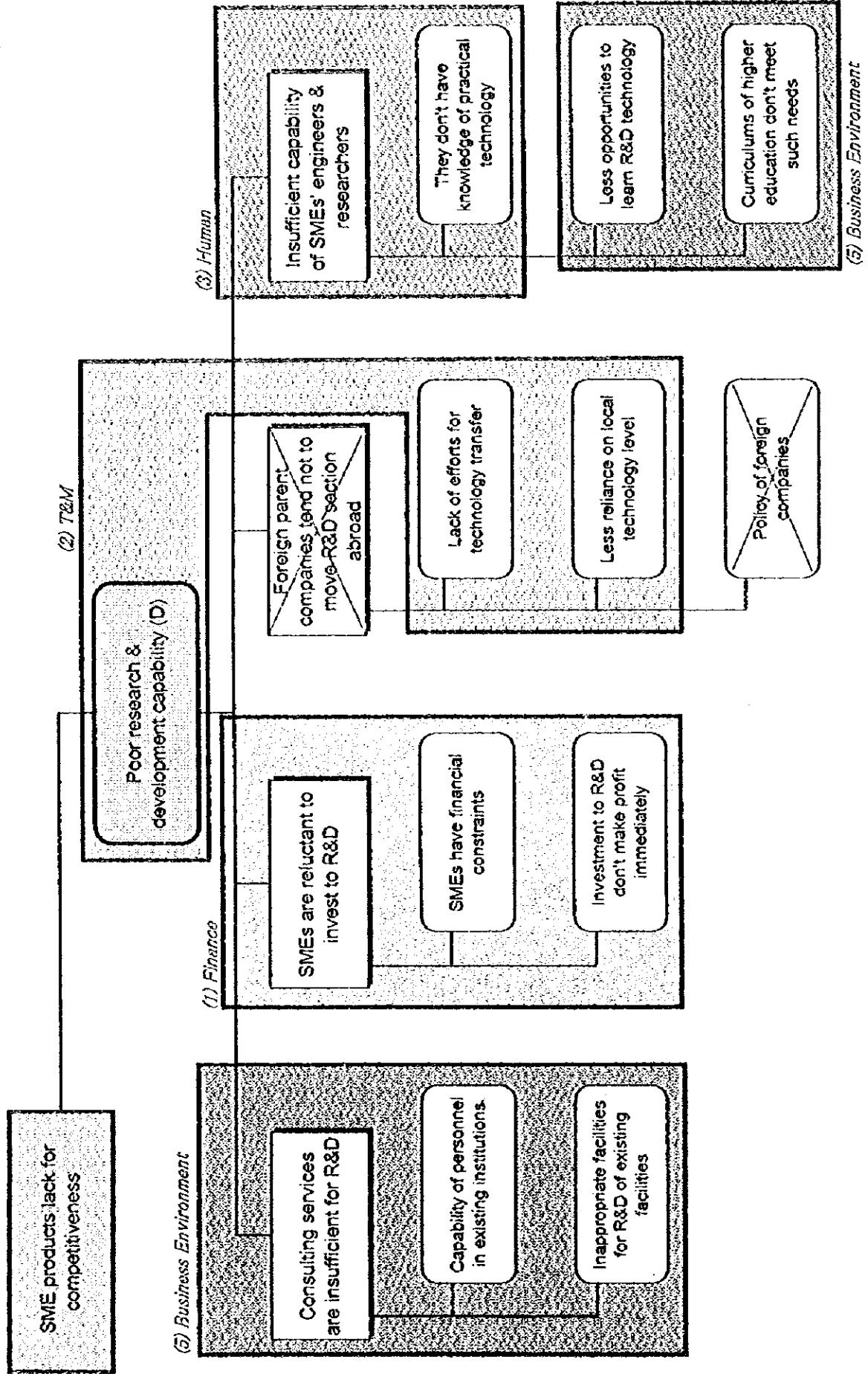
PROBLEM TREE FOR 'COST'



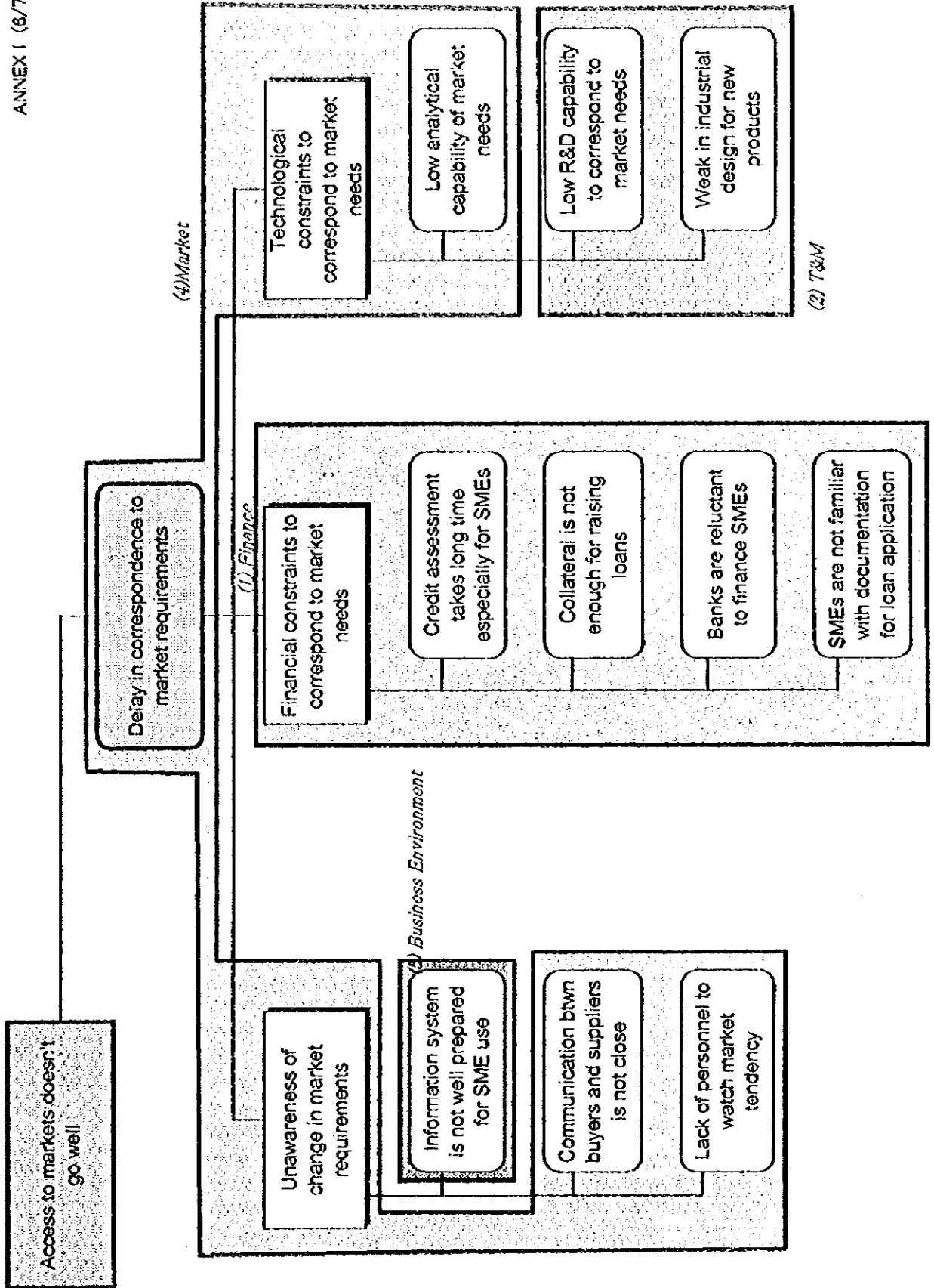
PROBLEM TREE FOR 'DELIVERY'



PROBLEM TREE FOR 'R&D'



PROBLEM TREE FOR MARKETING



(2) T&M

PROBLEM TREE FOR 'MARKETING'

ANNEX 1 (7/7)

