JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) MINISTRY OF INDUSTRY, THE REPUBLIC OF INDONESIA

THE STUDY ON

HUMAN RESOURCE DEVELOPMENT FOR SMALL-and MEDIUM-sized ENTERPRISES (SMEs) FOCUSED ON MANUFACTURING INDUSTRIES

IN

THE REPUBLIC OF INDONESIA (PHASE 2)

FINAL REPORT (SUMMARY)

FEBURUARY 2008

JAPAN INTERNATIONAL COOPERATION AGENCY

UNICO INTERNATIONAL CORPORATION



No.

Abbreviations

AIMC	Association of Indonesian Management Consultants			
AMDI	Astra Management Development Institute			
APBD	Anggaran Pendapatan dan Belanja Daerah (Regional income and expenditure)			
APBN	Anggaran Pendapatan dan Belanja Negara (National income and expenditure)			
APP	Akademi Pimpinan Perusahaan (Leader academy of company)			
ASPEP	Assosiasi Permesinan dan Pengerjaan Logam (Association of Metal Industry)			
ASPILOW	Assosiasi Pengusaha Industri Logam Waru (Association of Metal Industry in Waru)			
BALAI BESAR	National Research Center			
BANK JATIM	Bank Jawa Timur (East Java Bank)			
BAPPENAS	Badan Perencanaan dan Pembangunan Nasional (National Development and Planning Agency)			
BARISTAND	Balai Riset dan Standarisasi (Research and standardization institution)			
BDI	Balai Diklat Industri (Industrial Training Institute)			
BDS	Bisnis Development Service (Business Development Service)			
BDS-P	Bisnis Development Service Provider (Business Development Service Provider)			
BNSP	Badan Nasional Sertifikasi dan Profesi (National profession certification agency)			
BPPI	Balai Penelitian dan Pengembangan Industri (Agency for Research and Development of Industry and Trade of MOI)			
BPR JATIM	Bank Perkreditan Rakyat Jawa Timur (Public bank in East Jawa Province)			
BPTI	Balai Pelayanan Teknis Industri (Industrial technique service center)			
BUMN	Badan Usaha Milik Negara (National Enterprises)			
CAD	Computer Aided Design			
CAM	Computer Aided Manufacturing			
CEFE	Creation of Enterprises Formation of Entrepreneurs			
DAKA PIM	Dakabalarea Pembinaan Industri Manufaktur (Manufacturing Development)			
DANA BERGULIR	Name of revolving fund			
DINAS	Industry and Trade Office of Provincial Government			
DIP	Department of Industrial Promotion (Department of Industrial Promotion)			
EI	Enterprises Improvement			
EPA	Economic Partnership Agreement			
GDP	Gross Domestic Product			
GRDP	Gross Regional Domestic Product			
GTZ	German Technical Cooperation/ Deutsche Gesellschaft fur Technische			
	Zusammenarbeit			
IDKM	Industri Dagang Kecil Menengah (Director General of Small and Medium Industry and Trade of MOI)			
IETC	Indonesian Export Training Center			
IKM	Industri Kecil Menengah (General Office of SME)			
IMF	International Monetary Fund			
ISO	International Standard Organization			
ITB	Institut Teknologi Bandung (Bandung Technology University)			
ITS	Institut Teknologi Surabaya (Surabaya Technology University)			
IVC-S	Industry Value Chain Strength			
JABODETABEK	Jakarta, Bogor, Depok, Tanggerang, Bekasi			

JICA	Japan International Cooperation Agency		
ЛТ	Just in Time		
KADIN	Kamar Dagang Indonesia (Indonesian Chamber of commerce and industry)		
KIK	Kredit Industri Kecil (Small Industry Loan)		
LDP	Lembaga Diklat Profesi (Professional training organization)		
LPB	Lembaga Pengembangan Bisnis (Business development body)		
LPB WARU	Lembaga Pengembangan Bisnis Waru (Waru business development body)		
LPPM	Lembaga Pendidikan dan Pembinaan Manajemen (Management of business administration institution)		
LPSM	Lembaga Pengembangan Sumber Daya Manusia (Human Development Institute under YPMG)		
LPT-INDAK	Lembaga Pembinaan Terpadu Industri dan Dagang Kecil (Development institute of small industry and trade)		
LSP	Lembaga Sertifikasi Profesi (Profession certification body)		
MINISTRY OF BUMN	Kementrian Badan Usaha Milik Negara (Ministry of National Company)		
MOI	Ministry of Industry		
MONE	Ministry of National Education		
MTAP	Medium Term Action Plan		
NPO	Non Profit Organization		
OEM	Original Equipment Manufacturing		
PFPP	Pejabat Fungsional Penyuluh Perindustrian dan Perdagangan (Extension officer of industry and trade)		
POLBAN	Politeknik Negeri Bandung (Politechnic in Bandung)		
POLMAN	Politeknik Manufaktur Negeri Bandung (Politechnic in Manufacturing)		
PPM	Pusat Pengembangan Manajemen (Center for Management Development)		
PRASETYA	Business School Name (Name of Business School)		
PROPENAS	Program Pembangunan Nasional (National Development Program)		
PUSDIKLAT	Pusat Pendidikan dan Latihan Industri (Center for Education and Training)		
PUSDIKLAT-IND	Pusat Pendidikan dan Latihan Industri (Center for Education and Training of Industry and Trade)		
QS	Quality System		
R/D	Research Development		
RENSTRA	Rencana Strategis (Strategic Planning)		
SENTRA	Center		
SIAP	The Strategic Investment Action Plan		
SKKNI	Standart Kompetensi Kerja Nasional Indonesia (National standard for profession competency)		
SME	Small Medium Enterprise		
SNI	Standart Nasional Indonesia (Indonesian Standard)		
STMI	Sekolah Teknik Menengah Industri (Industrial Technical School of middle level)		
TOR	Term of Reference		
TS	Technical Specification		
UKM	Usaha Kecil Menengah (Small and Medium Enterprises)		
UPL	Unit Pelayanan Langsung (Direct Service Unit)		
UPT	Unit Pelayanan Teknis (Common Service Facilities)		
YBMB	Yayasan Bina Mitra Bakrie (BINA MITRA BAKRIE Foundation)		

YDBA	Yayasan Dana Bhakti Astra (DHARMA BHAKTI ASTRA Foundation)
YPMG	Yayasan Pendidikan Matsushita Gobel (MATSUSHITA GOBEL Education Foundation)

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Chapter 1 An Overview of the Study

Chapter 1 An Overview of the Study

1.1 Background of the Study

The previous study, Phase I Study, proposes local deployment of SME support activities as one of the approaches to promote transition from the Human Resource Development Board to the SME Human Resource Development Center. The Indonesian government also recognizes that it is necessary to build a mechanism for continuous SME support activities by the certified consultants on a local basis in order to improve competitiveness of local SMEs.

At the same time, Indonesia has been actively pursuing the decentralization process since 2001 and each local government is in a position to plan and implement local industry development programs under its leadership. In reality, however, facing various problems and constraints, local government have yet to implement effective policies and programs relating to SME human resource development.

Under these circumstances, the present study (the Study) was launched to support the implementation of effective SME human resource development policies which take into account the decentralization process. Figure 1-1 summarizes the background and positioning of the Study in relation to the past study and project.

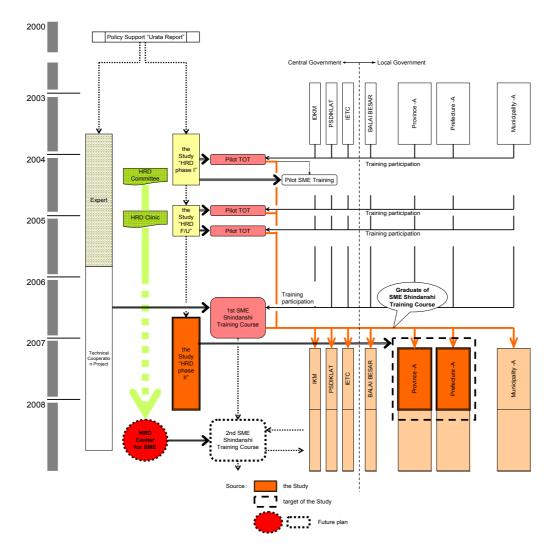


Figure 1-1 Relationship of Background of the Study and this Study

1.2 Objectives of the Study

<Overall Goal>

Strengthening the Human Resource Development (HRD) system for SMEs (Small and Medium-sized Enterprises) in Republic of Indonesia.

<Project Purpose>

The study aims at recommending effective concrete policies and/or an organization system that provincial governments of Republic of Indonesia adopt in order to promote HRD for SMEs in cooperation with the central government (Ministry of Industry, MOI).

<Output>

- To bring out a current situation and problems of HRD for SMEs in local areas
- To define the role of MOI and Industry and Trade DINAS in the field of HRD for SMEs
- To propose a program of HRD for SMEs DINAS provides

1.3 Target Sector and Enterprises of the Study

The Study will focus on the supporting industry groups of manufacturing industries. The main targets are 2nd and 3rd tier suppliers of parts/components, which have a potential to become stable parts/components suppliers to assemblers but have not become so yet.

1.4 Scope of the Study

The Study will cover Central government (MOI) and Provincial governments (East and West Java).

1.5 Study Framework

Figure 1-2 shows the basic flow of the Study. The Study is divided into three stages.



Figure 1-2 Basic Flow of the Study

Stage 1: Study of the current situation

The Study team collected and analyzed relevant information with reference to the existing study and recommendation. Then, the team visited government organizations (central and local) and SMEs to deepen the understanding of the current situation of HRD for SMEs

Stage 2: Implementation of model program(s)

Based on the study results of stage 1, the team conducted model programs in East and West Java Provinces with provincial DINAS being the counterpart.

Stage 3: Formulation of recommendation

Reflecting the findings and results of the model programs, the team formulated recommendation and a list of action assignment to improve HRD for SMEs

1.6 Work Description of Study Team Members

Table 1-1 shows the members of the Study team and the areas in charge.

Table 1-1	Formation and Business	for Which One is	Responsible of Study	Team
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Specialties	Name	Areas in Charge
Leader / Small-and medium-sized enterprises promotion policies	T. Moriguchi	Supervision of the Study, and SME development
Sub-leader / Supporting Industry Promotion policies / Local Administration	H. Imaizumi	Support of the supervisor, and Promotion of supporting industry, local administration
Small-and medium-sized enterprise human resource development	Y. Izuho	Human Development Policy and System of SME
Small-and medium-sized enterprise management	O. Fukaya	Implementation / management of the model program
Production management	T. Seki	Implementation / management of the model program

1.7 Field Work Schedule

The Study Team conducted the following field studies.

Field Study		Main Activities of the Study Team
First Field Work (I)	September 17 to October 8, 2006	Fact-finding survey (IKM of MOI, Provincial government organizations for SME promotion in East and West Java)
First Field Work (II)	January 24 to February 26, 2007	Fact-finding survey in East and West Java (SMEs), Model Program Planning
Second Field Work	May 13 to July 19, 2007	Model Program, Supplementary field study
Third Field Work	August 1 to September 18, 2007	Model Program, Supplementary field study
Fourth Field Work	November 11 to December 24, 2007	Model Program, Supplementary field study, Recommendation formulation
Fifth Field Work	January 20 to January 28, 2008	Workshops, Collections of reactions to the recommendations

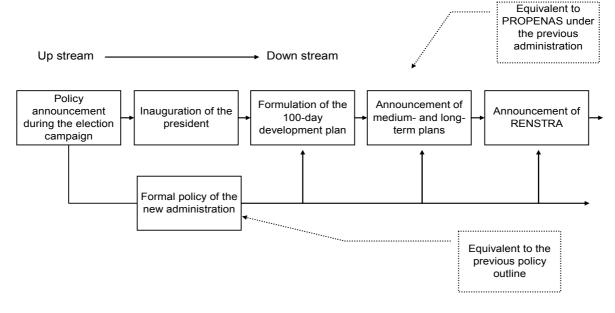
 Table 1-2
 Field Study Schedule and Activities

Chapter 2 National Development Plan and SMEs Promotion Policy in Indonesia

Chapter 2 National Development Plan and SMEs Promotion Policy in Indonesia

2.1 The National Development Plan and Its Positioning

The following diagram (Figure 2-1) illustrates a structural relationship among development projects, policies and strategies.



Source: JICA Study Team

Figure 2-1 National Development Plan and its positioning in Indonesia

2.2 SMEs Development Strategy

Upon the publication of Medium-Term Development Plan 2004-2009, each Ministry in the central government formulated a more concrete (issue-based and sector-based) development strategy, RENSTRA 2004-2009. The outline of SME development strategy in RENSTRA by MOI is as follows.

Major issues addressed

- High unemployment rate, poverty
- Low economic growth
- Poor export capability
- Insufficient infrastructure
- Low level of technology

Two pillars of the development strategy

- (1) Basic strategy
 - 1) Reinforcement of industrial networks, including supporting industries, related industries, and infrastructure/utilities industries
 - 2) Reinforcement of industrial productivity, efficiency and diversity, and use of recyclable resources
 - 3) Input of development promotion/competitiveness strengthening measures
- (2) Implementation strategy
 - 1) Industrial promotion through cluster development and strengthening, and identification of priority industry groups
 - 2) Priority development of lagging areas in the east region, other than Java
 - 3) Development of the business environment
 - 4) Promotion of innovation and management capabilities through industrial R&D and technology development initiatives

Chapter 3 Decentralization and SME Promotion

Chapter 3 Decentralization and SME Promotion

3.1 Decentralization and SME Promotion

As a result of the organizational reform for decentralization described Figure 3-1, regional offices of IDKM under the MOCI, which used to lead SME promotion, now belong to DINAS under the provincial government.

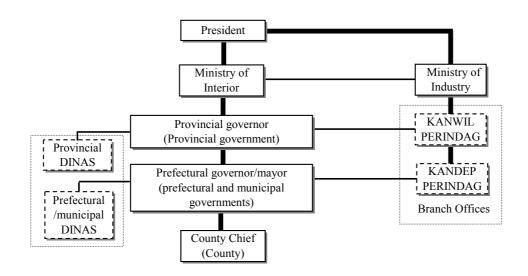
After the decentralization, KANWIL PERIINDAG and KANDEP PERINDAG were dissolved and integrated into DINAS at local government level, provincial and prefectural/municipal respectively. Accordingly, most staff members of KANWIL PERIINDAG and KANDEP PERINDAG moved permanently to respective DINAS. As a result, their payrolls were transferred from the central government to local ones.

The relationship between the MOI and provincial DINAS in the area of SME promotion after decentralization is defined as follows: "the central government (MOI) is responsible for formulation of basic policy, based on which each provincial DINAS prepares an action plan in consideration of the province's potential capacity. The budgetary source is also transferred from the central government to the respective local government. Furthermore, in the field of human resource development, educational institutes under the central government (such as BDI) are responsible for rendering related service.

3.2 SME Promotion Policy by East Java Government

Development strategy and policy up to 2008 in East Java emphasize economic development within which the promotion of UMKM and the securing of basic rights are given priority to. DINAS puts an emphasis on "measures to reduce poverty and unemployment, improvement of employment, and encouragement of entrepreneurship."

In Eat Java, three DINASs are engaged in SME promotion, Industry and Trade DINAS, SME and Cooperative DINAS, and DINAS under the jurisdiction of Ministry of Interior (MOI-attached DINAS) Industry and Trade DINAS, which is responsible for promotion of SMEs in the manufacturing sector, operates under the mission "to foster SMEs to overcome poverty."



Government Organization Relating to SME Promotion in West Java before Decentralization

..... Government Organization Relating to SME Promotion in West Java after Decentralization

...

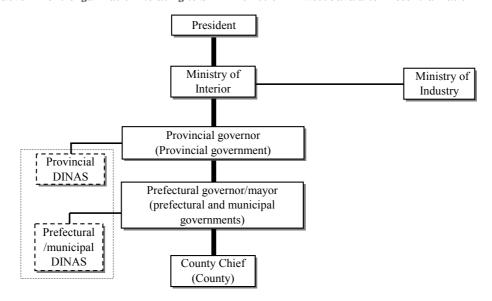


Figure 3-1 Comparison of SME Promotion Related Government Organizations before and after Decentralization

Table 3-1 shows annual budgets of Industry and Trade DINAS in East Java in 2005 and 2006. During the period, approximately 60% of the DINAS budget was funded by the provincial government and 40% by the central government (MOI and MOC).

Table 3-1 Fiscal Budget of Industry and Trade DINAS in East Java

Fiscal 2005	60 billion Rp.	(including personnel cost, 15 billion Rp)
Fiscal 2006	70 billion Rp.	(including personnel cost, 18 billion Rp)

The dependency rate on the central government in 2007 is slightly below 16%, which dropped sharply from 2005 and 2006.

There are two SME loan schemes operated under the provincial government's budget, namely KIK (Koredit Industri Kecil) and UKM (Usaha Kecil Menengah). Loan applications for both schemes are submitted and accepted by provincial DINAS, and loans are made by provincial banks (BANK JATIM and BPR JATIM).

3.3 SME Promotion Policy by West Java Government

The West Java government has set forth the following five missions toward the year 2010.

West Java Provincial Government's Missions

- Mission 1: Improvement of human resource quality and productivity
- Mission 2: Development of the regional economic structure
- Mission 3: Strengthening of local administration
- Mission 4: Viability of development
- Mission 5: Improvement of life quality

Among these missions, DINAS supports Mission 2 "Development of the regional economic structure." First of all, it identifies problems facing the industrial sector, namely competitiveness of industrial products, production techniques and productivity, quality of workforce, and capacity of local government staff. Then, DINAS defines the vision for 2006 – 2010 as "improvement of competitiveness."

Outline of budget of DINAS in west java provincial government in 2007 is approximately 50 billion Rp. Approximately 81% of whole budget comes from provincial government and 15% of whole budget comes from MOI, and 3.2% of whole budget comes from MOC of central government. Decentralization of finance is highly advance on the face of things. However much of the activity costs of DINAS are provided by central government. Activity budget in DINAS of west java provincial government has no other choice to rely on central government budget currently.

There is one loan schemes operated under the provincial government's budget, namely DAKA-PIM. Loan procedure is made by provincial banks and prefectural/municipal industry and trade DINAS is concerned in loaned SMEs through the activity of monitoring.

Chapter 4 Human Resource Development for SMEs and Supporting Program

Chapter 4 Human Resource Development for SMEs and Supporting Program

4.1 Human Resource Development for SMEs of Ministry of Industry (MOI)

Regarding the human resource development for SMEs of MOI, PUSDIKLAT-INDA, IKM, BPPI are mainly responsible for human resource development for SMEs.

PUSDIKLAT-IND provide the academic education and training for private sectors and provide training for the ministry staff and state-owned companies.

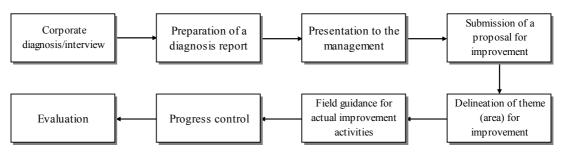
IKM is responsible for the formulation of promotion policy for SMEs in all sub-sectors of industry. Focused on the manufacturing sector, the promotion of the supporting industry is one of the main missions of the IKM.

Under BPPI, there are nine (9) technical centers (Balai Besar) and 13 regional offices (BARISTAND-IND) to meet the needs of local industry.

4.2 SME Consulting System and UPL-IKM

In Indonesia, it was decided to establish a new SME consulting system on the basis of the Japanese "Shindan-shi" system, as envisaged in "Minister of Industry Decree on Development of SME Consulting Service" (37/M-IND/PER/6/2006) that was enacted in June 27, 2006.

Figure 4-1 shows key activities undertaken under the SME consulting system.



Source: Prepared by the study team on the basis of a brochure introducing the SME consulting system produced by Human Resource Development Clinic, MOI

Figure 4-1 General Flow of the SME Consulting System

UPL-IKM

Concurrently with the certification of new SME diagnosis consultants, IKM is working to establish UPL-IKM within each local government.

According to its plan, IKM will make each of 33 provinces and all prefectures and municipalities establish UPL-IKM. The operating budget is secured at the central government (Deprin IKM) and is allocated to each province, then from provinces to prefectures and municipalities. UPL-IKM's personnel appointment is left to each local government.

So far, the following are documents relating to the establishment of UPL-IKM.

- Integrated Strategy for Development and Fostering of SMEs in 2007 IKM (2006)
- Directive to establish UPL-IKM by Director General of IKM, issued to each province, prefecture and municipality
- Decision by Director General of IKM concerning the UPL-IKM team
- IKM Director General Regulation No.55/IKM/PER/8/2007

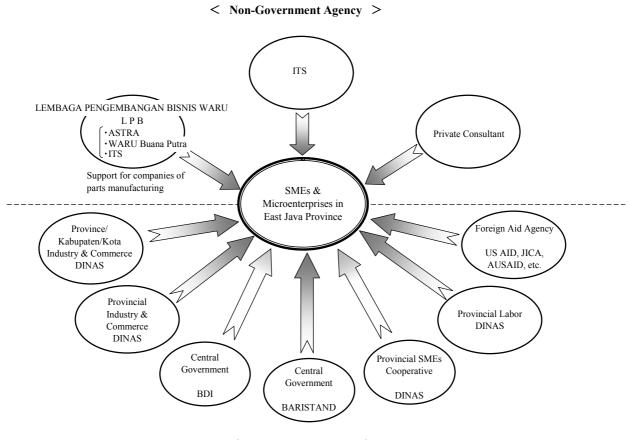
4.3 Human Resource Development by Private Sector

There are various private organizations for human resource development nationwide. Human resource development by private sector is classified into 3 categories: (1) Non-profit Organization (2) Management Institutions (3) Polytechnic manufacture.

For Non-profit organizations, there is YPMG, YDBA, and YBMB. There is PPM, AMDI and PRASETIYA for management institutions. POLMAN (Manufacturing orient polytechnic) under supervision of MONE are categorized in higher education institutions. POLMAN introduced here are popular for practical and systematic training programs.

4.4 Key organizations relating to the Human Resource Development for SMEs in East Java

Figure 4-2 shows a general image of SME support organizations in East Java



< Government Agency >

Figure 4-2 SME Supporting Institution in East Java Province

UPL-IKM

Under the instruction of DGSMSE, Industry and Commerce Department DINAS in East Java established five district UPL-IKMs and a UPL-IKM within state DINAS as coordinating organization. In East Java, there are five SME diagnostic consultants who have obtained certification through participation in the training course in 2006, and they are appointed as principals of five UPLs in industrial areas within the state.

BPTI Logam (BALAI PELAYANAN TEKNIS INDUSTRI LOGAM)

BPTI Logam has 104 staff members, of which nine are full-time employees and 95 contract workers. It provides technical support and training in the metal field as well as skill training (vocational training) for high school graduates.

BDI

BDI is one of seven local training institutes under UPSDIKLAT (MOI) and serves East Java, East Kalimantan, and South Kalimantan. BDI's training program covers both the government and private sectors.

BARISTAND

It is a local standardization center under BPPI and is active in promoting standardization by sending instructors to companies.

LPB Waru (LEMBAGA PENGEMBANGAN BISNIS WARU)

LPB Waru was established jointly by ITS, ASTRA Foundation, and Buana Cooperative (Waru, Sidoarjo) in 1993. Its mission is to improve efficiency of SME support activity by integrating various programs that have been managed without adequate coordination, while its foundation was directly motivated by the need to suppliers for ASTRA in Surabaya.

ITS – AIMC's Surabaya Chapter

AIMC is the management consulting association in Indonesia and has membership of around 60 companies, mainly in Jakarta. Note that AIMC's concept of management does not include production management techniques used on the shop floor. AIMC's Surabaya Chapter is situated within ITS. Founded three years ago, the chapter has 20 consultants, most of whom are specialized in accounting, and it provides support mainly for medium and large enterprises.

KADIN

KADIN is a private organization established in each state under statute.

East Java SME & Cooperative DINAS

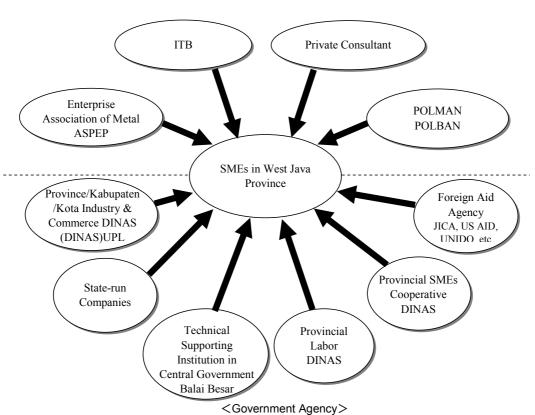
It promotes and supports the formation of cooperatives organizing small enterprises and microenterprises in the manufacturing and commerce sectors.

East Java Labor Department DINAS

It conducts vocational training for promotion of employment, while actively carrying out 5S promotion and entrepreneurship training activities for local small enterprises and microenterprises.

4.5 Major organizations relating to the Human Resource Development for SMEs in West Java

Figure 4-3 shows a general image of SME support organizations in West Java.



<Non-government Agency>

Figure 4-3 SME Supporting Institution in West Java Province

UPL -IKM

Under the instruction of DGSMSE, Industry and Commerce Department DINAS in West Java established five district UPL-IKMs and a UPL-IKM within the DINAS as coordinating organization.

UPT (Common Service Facilities)

UPTs are designed to make available to small manufacturers machinery and equipment that is infrequently used and too expensive to purchase.

Balai Besar

BPPI under MOI has nine technical support organizations (Balai Besar) and thirteen district offices (BARISTAD-INDAG), of which five Balai Besar centers are located in West Java. In particular, the following five centers are operated in Bandung.

Politeknik

For high school graduates in Indonesia, two courses of advanced education are available, an academic course (university) and a professional course (advanced vocational training institute). Politeknik under jurisdiction of the Ministry of Education is an advanced vocational training institute. There are two Politeknik institutes in Bandung.

State enterprises: Under the policy of the Ministry of BUMN, state enterprises are required to spend a specific percentage of profit to provide support for local SMEs.

4.6 Current Status of SME Promotion by Donor Organizations

Various SME Promotion project/program conducted by donor organizations existed in the past. But US AID project and JICA project are only implemented by donor at present regarding SME Promotion.

Outline of US AID's SENDA Project is as follows:

US AID carries out the SENADA¹ project in the country since 2006. SENADA is designed to provide technical assistance for SMEs in the manufacturing sector with an aim to enable them to expand production, improve productivity, and increase employment.

The project is implemented in Jakarta, Bandung, Surabaya, and Semaran. The following six sectors have been chosen:

- Automotive parts
- Footwear
- Furniture
- Textile/Garment
- ICT
- Ceramic

¹ SENADA: Indonesia Competitiveness Program

Chapter 5 Supporting Industries in Indonesia

Chapter 5 Supporting Industries in Indonesia

5.1 General Outline and Major Issues of Supporting Industries in Indonesia

(1) General outline of supporting industries in Indonesia

Supporting industry in Indonesia is classified into two groups:

One group (A or B group described in Figure 5-1) is trying to meet the expectation about QCD from the assembler, and the other group (C group described in Figure 5-1). In general, A group is Japanese affiliated firms, B group is a part of local enterprises, Korea and Taiwan affiliated firms, and C group is large majority of local firms. The current positioning of supporting industry in Indonesia belong to the group C.

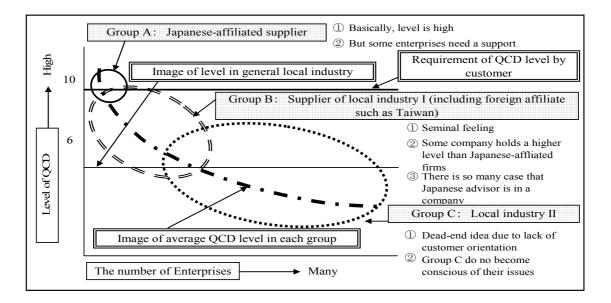


Figure 5-1 Conceptual View Representing the Positioning of Supporting Industries¹

- (2) Major issues of supporting industries in Indonesia
 - 1) High import dependent of basic material: Import dependent rate is so high in the field of basic material because basic material industry of Indonesia supporting the industry is so weak.
 - Low level of QCD under second supplier: Under second supplier group comprising of most of local firms is so low level in QCD compared with the first supplier comprising of Japanese-affiliated firms
 - 3) Weak of Mold Industry: At present most of mold depend on import.

¹ Study Team made this figure based on the JICA "Report of Basic Research regarding a development of supporting industry in ASEAN region".

5.2 Current state and issues of supporting industries in local

- (1) Current state of supporting industries in East Java
 - 1) Manufacturing industry in East Java

According to the 2004 statistics, the manufacturing sector represents 28.3% of Indonesia's GDP, or 24.6% when the oil and gas sector is not included. It is interesting to see that the manufacturing sector's GRP share in East Java remains at slightly below 30% in recent three years, even if the oil and gas sector makes no contribution. Thus, percentage contribution by the manufacturing sector in East Java, excepting the oil and gas sector, exceeds the national average. In fact, Surabaya in East Java is the second largest industrial area next to JABODETABEK (in and around Jakarta).

2) Supporting industry in East Java

Geographically, however, Surabaya accommodates a relatively small number of assembly plants in comparison to JABODETABEK where many Japanese and other multinational manufacturers operate assembly operations. In Surabaya, three bonded processing zones are established, two in Surabaya City and one in Pasuruan, to attract foreign investment, but a small number of transportation machinery and electrical/electronics manufacturers operate there. For instance, a Japanese agricultural machinery factory and a motorcycle assembly plant are operated, while no Japanese automaker has an assembly plant. In the electrical and electronics field, a few local manufacturers and a Japanese manufacturer of lighting fixtures and vending machines is found in the area. Finally, as for the automobile industry, there are several suppliers (second-tier or third-tier) that serve assemblers in Jakarta.

- (2) Current state of supporting industries in West Java
 - 1) Manufacturing industry in West Java

The manufacturing sector continues to boast the percentage share of 42% in recent years, far exceeding the sector's percentage share in the country's GDP, 28.3% (in 2004). While the country's manufacturing sector accounts for nearly one third of the Indonesian economy, its major portions (around 60%) are located in West Java. Thus, the manufacturing industry in the state has significant impacts on the national economy.

2) Supporting industries in West Java

In particular, the state government attempts to foster automotive and machine parts industries (supporting industries) by designating, in "RENSTRA," an industrial area where such suppliers are concentrated as the priority development zone. Also, West Java is located adjacent to JABODETABEK where assembly plants of multinational manufacturers including Japanese are concentrated, and a large number of second- and third-tier suppliers are found in the state.

Clearly, supporting industries are largely distributed in departments and municipalities close to JABODETABEK, namely Bandung, Bekasi, Bogor, and Sukabumi. While all of them do not supply parts to multinational assembly manufacturers, there are a large number of companies that can become second- and third-tier suppliers.

(3) Visiting survey results of the current state of SMEs

The study team visited and surveyed the current state of SMEs in East and West Java.

1) Objective

The primary objective of the survey was to study, among other things, the current state of SMEs, industrial characteristics of the region, technology levels, issues facing them, and demand for technical support, and to compile and reflect them in the development of model programs.

2) Methodology

Prior to the start of the survey, the study team asked DINAS to prepare a list of SMEs in the machine parts sector, totaling around 80. DINAS in East Java made selection mainly from enterprise databases held by DINASs in prefectures and municipalities, whereas DINAS in West Java relied on member lists of trade associations.

The study team experts visited companies so selected. At first, their factories were visited, followed by interview of their owners or managers by using a questionnaire. After the interview, the study team experts commented their impressions on the factory and gave advice for improvement as far as practical.

3) Questionnaire

The questionnaire used for the survey contains questions on the following items.

- Company profiles
- Types of products made and technologies used
- Markets
- Urgent issues facing the company
- Requests relating to training and outside support organizations
- Intent to participate in the proposed model program on field guidance
- 4) Survey Results

The study team experts visited 43 companies in East Java and 40 in West Java.

Findings from Expert's Analysis of SMEs in East Java

Current state of local SMEs

Small metalwork shops are highly concentrated to form a major amalgamation not seen in Indonesia and even in the world. However, as few large assembly manufacturers are located near these areas, not many metalwork companies supply metal parts directly or indirectly to assemblers. Most of these metalworking companies mainly manufacture aftermarket parts for motorcycles, automobiles, and farming equipment, repair parts for machines, and metallic furniture parts.

Level of production technology

As few companies are engaged in OEM production and many produce aftermarket and repair parts that do not have meet strict quality requirements, their production techniques and skills remain at low levels.

Level of interest in production management and extent of implementation

Owners of many microenterprises do not even understand about what production management is. The condition of introduction of production management is not yet arranged in East Java.

Major issues facing them

- To incorporate planning and control into management
- Improving the situation through 5S activities
- Improvement of employees' morale

Findings from Expert's Analysis of SMEs in West Java

Current state of SMEs

Quality control and productivity is limited due to the old machines and equipment. Thus, it is difficult to make an OEM production. And the reduction of setup change lead to the high productivity, but most of manager do not have a morale of improvement.

Production technology

Basic technology necessary for manufacturing is lacking.

Level of interest in production management and extent of implementation

Owners of many firms do not even understand about what production management is. The level of introduction of production management is not yet advanced in West Java.

Major issues facing surveyed companies

Low motivation of owners of many firms in west jawa for improvement.

Chapter 6 Model Program

Chapter 6 Model Program

6.1 Implementation Plan for the Model Program

The Model program was implemented to ensure that the provincial government, under its leadership and in collaboration with the central government, tries to implement a human resource development support program for local SMEs in the manufacturing sector, to verify the program's appropriateness and feasibility, and to reflect the verification results in the final recommendation. In designing the model program, consideration is given to the progress of the establishment of the SME consulting system and UPL-IKM.

6.2 Model Program Scheme

Model Program A: Corporate diagnosis, kaizen proposal, and consulting activities Model Program B: The development of a prototype database on special technology experts in various fields

Figure 6-1 illustrates a basic scheme for Model Programs A and B. Note that "Shindan-shi" in the diagram refers to persons who completed the SME Diagnosis Consultant Training Course" in 2006.

6.3 Activities and Results of Model Program A

(1) East Java

Two study team experts and four Shindan-shi formed two groups (each group consisting of one expert and two Shindan-shi). Using Industry and Trade DINAS in East Java as the activity base, they conducted corporate diagnosis and advisory services (Table 6-1 lists issues that were selected for the ten model companies covered in the report and that were to be addressed in the model program).

(2) West Java

Using Industry and Trade DINAS in West Java as the activity base, each of seven Shinda-shi and one PFPP formed a pair with one study team expert to conduct corporate diagnosis and advisory services (Table 6-2 lists issues selected for kaizen activities for model companies).

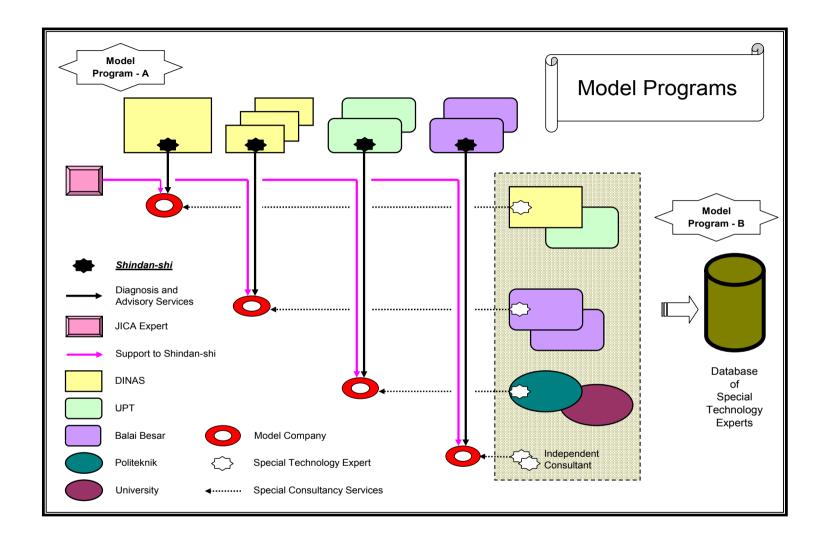




Table 6-1 List of Key Kaizen Issues Selected for Model Companies in East Java

Model company			
No.	No. of employees	Products	Kaizen issues
E-13	100	Auto engine parts	 Preparation of a work instruction sheet that can indicate standard time and production record. Problem solving by small group activity (QC circle) Resumption of 5S activities Implementation of cost analysis and development of cost reduction measures
E-34	30	Machine parts	 Implementation of 5S activities, focusing on warehouse Productivity improvement through identification of causes for defectives and prevention of recurrence by using 7 QC tools Preparation of SOP (standard operation procedures)
E-35	15	Furniture parts	 Implementation of 5S activities Establishment of five-year visions and the development of strategies to achieve them Establishment of work regulations and implementation of labor management Cost analysis and promotion of cost reduction plan Appointment of factory operation manager and definition of role Preparation of production plans and implementation of progress control Promotion of sales activity for production increase Layout of a new factory
E-42	16	Machine parts	 Exclusion of unused articles and productivity improvement through implementation of 5S Analysis of causes for defect and reduction of defectives by using 7 QC tools
E-59	40	Motorcycle parts	 Implementation of 5S activities Establishment of product codes Establishment of work regulations and implementation of labor management Preparation of production plans and implementation of progress control Cost analysis and promotion of cost reduction plan Establishment of five-year visions and the development of strategies to achieve them
E-62	85	Auto parts Agro-machine parts	 Implementation of 5S activities Upgrading of workers' skill level Formulation of visions and strategies 1 Strategy for increasing sales and profit 2 Establishment of the production system (machinery and equipment, layout, work standardization, etc.) 3 Establishment of the management system (management plan, budget, organization, etc.)
E-152	30	Agro-machine parts	 Implementation of 5S activities Formulation of a factory integration plan Improvement of employees' morale Work time management and the establishment of the payroll system according to working hours Appointment of management assistant and factory manager, and definition of their roles Creation and maintenance of cash-based books Preparation of production plans and work instruction sheets, and implementation of progress control
E-203	22	Auto parts	 Implementation of 5S activities Formulation of visions, strategies, management plan, and budget Cost analysis and promotion of cost reduction plan Establishment of product codes Preparation of production plans and implementation of progress control Appointment of factory operation manager and definition of role Improvement of the method to store work-in-process on the floor
E-303	25	Furniture metal parts	 Implementation of 5S Implementation of progress control based on SOP, such as production instructions and records
E-307	8	Motorcycle parts	1. Optimal machinery layout 2. Safety measures

Company No.				ŀ	Kaizen issue	S			
	Implementation / enforcement of 5S	Reduction of setup time	Reduction of rejection rate	Reduction of erroneous work	Establishment of the cost accounting method	Work safety	Improvement of worker's skill level (implementation of practical training)	Bookkeeping	Monitoring and analysis of planned and actual production time
W-27	•	•	•						
W-34		•		•					•
W-52	•	•	•						
W-59					•				
W-60	•	•							
W-64	•	•	•						
W-74	•					•			
W-77	•						•		
W-94	•							•	
W-96	•							•	

 Table 6-2
 List of Key Kaizen Issues Selected for Model Companies in West Java

6.4 Results of Model Program B

This program is designed to collect vital data on special technology experts in relevant fields, whom UPL-IKM under Industry and Trade DINAS relies on in relation to direct consulting service for SMEs to be conducted in the future.

(1) East Java

Data on 29 special technology experts were collected from the following organizations and were entered into a file in Excel format.

- BDI
- BARISTAND
- ITS (Surabaya University)
- Industry and Trade DINAS
- BALAI PELAYANAN TEKNIS INDUSTRI LOGAM (BPTI Logam)

(2) West Java

In West Java, many Balai Besar under BPPI are concentrated and there are two polytechnics. The following organizations are expected to have qualified special technology experts.

- POLMAN	- POLBAN
- MIDC	-B4T
- Textile Laboratory	- State enterprises
- NVTC	- Bandung Institute of Technology
- Metal Manufacturers Association	- Industry and Trade DINAS

Data submission was requested to the above organizations and data representing 181 persons were collected and recorded digitally.

Chapter 7 Evaluation of Model Programs

Chapter 7 Evaluation of Model Programs

7.1 Model Program A

(1) Questionnaire survey of model companies

<u>Objective and Methodology of interview survey</u>: The primary objectives of the interviewsurvey are as follows.

- 1) To determine demand and expectation for SME diagnosis and advisory activities in local regions' SME of Indonesia.
- To determine whether the diagnosis and advisory methods are suitable for local SMEs in Indonesia.
- To understand expectations for the SME diagnosis and consulting system of local SMEs in Indonesia.
- 4) To determine expectations of local SMEs for provincial Industry and Trade DINAS and UPL-IKM of local SMEs in Indonesia.

The interview survey was conducted of 9 companies in East Java and 8 companies in West Java, which had participated in Model Program A under the present study. Using a specially designed questionnaire, it was conducted in early December when Model Program A nearly completed.

(2) Results of analysis of interview survey and lessons learned

Demand and expectation for SME diagnosis and advisory service in local regions:

Local SMEs recognize problems facing them and the need for improvement. Also, many of them show interest in the corporate diagnosis and advisory scheme implemented under the program, suggesting high demand for diagnosis and advisory service in rural regions. As for expectations for SME diagnosis and advisory service, responses to Question (3) 1) b) "What do you expect for the diagnosis and advisory program" indicate that the large number of companies cite "the improvement of their employees' skills". This can be interpreted that they expect something different from the main objective of the diagnosis and advisory program. Furthermore, local SMEs have great expectation for soft technology support in the diagnosis and advisory program more than "the improvement of own's company employees' skills".

Nevertheless, evaluation on Model Program A by participating companies shows that many of them cited that they could not get an expected results.

The diagnosis and advisory method for local SMEs:

Overall evaluation was considered to be adequate, but most companies in West Java cited that the diagonosis and advisory method was considered to be inadequate.

As for the time spent for each advisory service, most companies responded that the time spent under Model Program A was adequate. On the other hand, the number of responses to the same question stating "the program period was to short"

Demand and expectation for SME diagnosis consultant and the consulting system:

Local SMEs generally feels that the SME consulting system is useful for development of local SMEs. Also, SMEs in both provinces want to use the SME diagnosis and consulting system in the future. However, as for capacity of Shindan-shi, who has completed the 2006 SME Diagnosis Consultant Training Course and has implemented Model Program A, overall evaluation is on the side of "partially sufficient."

Demand for diagnosis and consulting service by local SMEs seems to be fairly high as judged from responses, where no company responded that they did not want to use the consulting system in the future. However, there is a significant difference in level of demand between the two provinces. A service fee for the SME consulting system should be separately established for each province in consideration of local conditions, rather than a uniform fee for the entire country.

Roles of provincial Industry and Trade DINAS and UPL-IKM:

SMEs in local regions want to receive consulting service on "soft technology" (including production management and accounting/financial managemen) from provincial Industry and Trade DINAS and UPL-IKM. In West Java, support relating to SME loan is strongly expected.

- (3) Findings of study team experts
 - 1) Common issues for model companies in East Java
 - Lack of basic documents
 - Poor work environment
 - Lack of basic production technology and knowledge

Issues relating to "kaizen activities" by model companies:

- Delay in implementation
- Difficulty in disposal of stocks to prevent smooth implementation of 5S activities
- Lack of commitment to kaizen activities

Opportunities and issues for Shindan-shi

- Lack of experience about diagnosis and consulting service
- Lack of the ability to conduct financial analysis
- 2) Common issues for model companies in West Java
 - Lack of sense of responsibility
 - Reluctance to implementation of 5S
 - Lack of knowledge for production management
 - Old machines and equipment

Issues relating to "kaizen activities" by model companies:

- Shortage of fund
- Low technology level
- Lack of management leadership

Opportunities and issues for Shindan-sh

- Lack of knowledge and experience about diagnosis and consulting service
- Lack of broad knowledge on production technology and skills
- (4) Verification of program results (Model Program-A)
 - 1) Demand and expectation for direct consulting service

Generally, SMEs face various problems and recognize the need for overcoming them. In fact, all the model companies welcomed direct consulting service promoted by the MOI and responded that they would like to receive support service on a continuous basis, with some conditions on content or cost (according to the questionnaire survey conducted by the study team). In particular, they want outside advice and support for their factories.

2) Opportunity for Shindan-shi

The questionnaire survey of the model companies indicates that the majority of them was not satisfied with capability of Shindan-shi. Responses cited the lack of experience in advisory service, the lack of experience in factory operation, and low levels of skills and hard technology knowledge.

The lack of experience pointed out by the model companies can be resolved by making efforts to acquire broad knowledge including fields other than specialty. In consideration of high demand for advisory service by companies, a formal mechanism to support continuous activities and give incentive to Shindan-shi should be introduced.

- 3) The adequate implementation method for diagnosis and consulting service
 - Selection of a recipient company must be based on the agreement and leadership of the management
 - Producing visible results, however small, give impetus to advisory service and kaizen activities.
- 4) Provincial UPL-IKM's program implementation system

There are the following three obstacles to continuation of its activities in the future.

- There are many Shindan-shi who serve as managerial or general staff and do not have time to perform corporate diagnosis and advisory activities in addition to their ordinary work.
- While Shindan-shi come from a variety of government organizations, including central and provincial, there is no organization responsible for coordination of different organizations to ensure integrated activities.
- Although companies are highly expecting support in the fields of technology and skill improvement and the provision of loan and other information, in addition to soft technology, UPL-IKM has still to form networks with vocational training institutes and private organizations.

5) Collaboration with special consultants

At present, the linkage between DINAS, organizations under the central government, universities, and the private sector is fairly weak and there have been a few joint projects.

7.2 Model Program B

Under Model Program B, data on special consultants in a variety of fields, including soft technology, were collected on an experimental basis in East and West Java.

(1) Demand for special consultants and specialty fields

Interview with model companies indicates that they are dissatisfied with the lack of knowledge of Shindan-shi on specialty fields. It is impossible for one consultant, including a Shindan-shi, to provide advisory service in diverse technical fields, so that collaboration of a special consultant in a respective field is inevitable and is highly demanded.

(2) Intent of participation in UPL-IKM's activities by outside support organizations, educational institutions, and private consultants

Under the model program, data on special consultants were obtained from organizations to which cooperation was requested, and their intent of participation in UPL-IKM's activities was confirmed.

Chapter 8 Questionnaire Survey of Shindan-shi of the SME Diagnosis Consultant Training Course in 2006

Chapter 8 Questionnaire Survey of Shindan-shi of the SME Diagnosis Consultant Training Course in 2006

8.1 Objective and methodology of the Questionnaire Survey

- (1) Objective
 - To understand the problems relating to management of UPL-IKM, and issues to be addressed for UPL-IKM to continue its activities.
 - To identify issues relating to SME consultant's activities by taking into account such recognition as well as issues for SME diagnosis consultants to continue their activities.
 - To identify issues relating to the present SME diagnosis consultant training course for the purpose of developing and proposing a new training course that fits the country's real conditions and needs.
- (2) Methodology

This questionnaire survey was conducted by sending a questionnaire to 100 persons who have participated and completed the 2006 SME diagnosis consultant training course. Response was received from 63 persons

8.2 Results of the Questionnaire Survey

(1) Key attributes of respondents

Provinces represented by participants of the 2006 SME diagnosis consultant training course accounted for 85% of all provinces in Indonesia, while provinces represented by respondents to the questionnaire survey 67%. Managerial (Struktural) and general staff accounted for 69.84% of respondents, and professional staff the remaining 28.57% (below Table 8-1).

Table 8-1	Classification of respondents by their organization and job type
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	Managerial and General Staff	Professional Staff
Provincial Industry and Trade DINAS	62%	38%
Prefectural/ Municipal Industry and Trade DINAS	90%	10%
Central government organization	42%	58%

(2) Status of establishment of UPL-IKM

UPL-IKM has been established in all provinces where respondents are located. At prefectural and municipal levels, 98% of prefectures and municipalities which respondents come from have their own UPL-IKM.

(3) Activity status of Shindan-shi of the 2006 SME Diagnosis Consultant Training Course Shindan-shi, who had completed the 2006 SME diagnosis consultant training course, provided diagnosis service for 422 companies, of which 166 companies received consulting service, or 39.43% of the total.

This means, on average, each consultant performed diagnosis service for 6.8 companies and consulting service for 2.7 companies. In terms of employment, the average number of employees was 23 for companies that received diagnosis service and 29 for those that received consulting service.

Among companies that have received diagnosis service, the largest number of companies are found in the food and beverage sector, followed by the metal parts sector. As for companies that have received consulting service, the food and beverage sector represents the large number, followed by the textile and garment sector, whereas the metal parts sector ranked fourth.

The numbers of companies that have received diagnosis and consulting services, in the top three provinces, are summarized as follows (below Table 8-2).

Number of Companies that	1. East Java	72
have received Diagnosis and Consulting Services	2. South Sulawesi	63
Consulting Services	3. West Sumatera	51
Number of Companies that	1. South Sulawesi	34
have received consulting service	2. West Java	26
	3. North Maluku	20

Table 8-2Number of Companies That Have Received Diagnosis and
Consulting Services (Top Three Provinces)

In East Java, 72 companies have received diagnosis service, but less than 20 companies have received consulting service. In contrast, a fairly large number of companies (26) in West Java have received consulting service, whereas less than 50 companies have received diagnosis service.

East Java has the largest number of companies that have received diagnosis service – 14 - as measured by the average per consultant, followed by 10 in Central Java. On the other hand, North Maluku dominates other provinces in the average number of companies that have received consulting service, totaling 20, although only one respondent represents the province and more companies have received consulting service than diagnosis service.

By job type, the number of companies that have received diagnosis service by managerial/general staff is much larger than those that have received consulting service by professional staff, i.e., 247 vs. 132. This is because respondents who are managerial/general staff are much more than those who are professional staff. In fact, the number of companies per consultant is 5.7 for managerial/general staff and 7.3 for professional staff. Similarly, the average number of companies that have received consulting service is 2.4 for managerial/general staff and 3.4 for professional staff. Meanwhile, there is not much difference in employment size between the two job types, around 20 persons. Also there is no significant difference in terms of sector between the two job types.

As measured by the average number of companies that have received diagnosis service, participants from the central government represent the largest number of 9.1 companies, nearly doubling that served by other two organizations. On the other hand, participants from the central government handle the smallest number of companies for consulting service.

As for financial needs of SMEs, nearly all of respondents (94%) have received the request for advice indicating high financial needs of SMEs.

According to the self-assessment of Professional Capability by Shidanshi, the responses indicate that the largest number of respondents cited the lack of knowledge on production (engineering) technology, followed by experience in factory operation.

(4) Future activities of Shindan-shi

Shindan-shi were asked to indicate whether they would intend to continue SME diagnosis and consulting activities in the future. Overall, 83% of respondents showed intention to continue corporate diagnosis and consulting activities in the future. Response patterns are more or less the same between professional staff and managerial/general staf. Notably, 90% of Shindan-shi representing provincial and prefectural/municipal Industry and Trade DINASs responded that they would continue corporate diagnosis and consulting activities in the future, whereas the percentage was limited to 50% among Shindan-shi representing the central government.

As for future sector of activities of diagnosis and consulting service, nearly 70% of respondents cited the "food and beverage" sector as their principal sector for future activity, followed by "textile and garment" (52%).

(5) SME Diagnosis Consultant Training Course

Major areas of improvement desired by Shindan-shi are classified into the following five categories.

- Improvement relating to instructors
- Improvement relating to training materials
- Improvement relating to content of training
- Improvement relating to training method and period
- Improvement relating to recruitment of course Shindan-shi

And Shindan-shi were asked to cite a main area they would wish to study for retraining of corporate diagnosis and consulting techniques. The majority of respondents wanted field training for diagnosis/consulting activity(52%), while second largest percentage (31%) wanted shop floor training.

8.3 Analysis of Questionnaire Survey Results

(1) UPL-IKM

1) Status of establishment of UPL-IKM

UPL-IKM is maintained evenly throughout the country. If UPL-IKM is to be established in new prefectures and municipalities in the future, however, efficient budget allocation should be ensured by taking policy for differentiating areas where manufacturing activities are prospering from those not. 2) UPL-IKM organization and Shindan-shi of the 2006 SME diagnosis consultant training course

UPL-IKM should serve as the place for participants of the SME diagnosis consultant training course to apply knowledge and experience that they have learned after completion of the training course. UPL-IKM is established within local governments (provincial, prefectural or municipal), Shindan-shi representing the central government face various problems relating to their treatment after training. In the future, a new scheme should be devised to allow Shindan-shi representing the central government to participate in SME diagnosis and consulting activities freely, from the viewpoint of promoting effective use of human resources who have completed the SME diagnosis consultant training course. At the same time, conditions to recruit Shindan-shi in the SME diagnosis consultant training course should be revised to take into account the effective use of participants after completion.

3) UPL-IKM budget

It is understandable, however, that budget control by provincial DINAS is a temporary measure in light of the fact that the UPL-IKM is a relatively young organization and many prefectural and municipal governments cannot allocate a new budget to UPL-IKM's activities. Coupled with the fact that the number of SME diagnosis consultants is relatively small and the SME diagnosis and consulting system has just begun, leaving control of UPL-IKM's operating budget to provincial DINAS seems to be justifiable for the time being (up to 2011). After 2011, however, it is recommended to transfer budget authority to each local government (provincial, prefectural or municipal) in phases to ensure efficient budget management by taking into account the number of SME diagnosis consultants and SME special consultants in each area.

- (2) Shindan-shi of the 2006 SME Diagnosis Consultant Training Course
 - 1) Issues relating to SME diagnosis and consulting activities

At present Shidan-shi provide consulting service below 40% actually. It should be noted, however, that the original scope of service of "SME diagnosis consultant" is diagnosis and consulting service based on soft technology (business administration and production management techniques), whereas production (engineering) technology is covered by "SME specialty consultant." Although the true value of SME diagnosis and consulting service lies in the improvement of conditions identified by corporate diagnosis (through guidance and advice), the current situation prevents diagnosis service from being advanced to consulting service if the main theme for improvement is relating to production (engineering) technology, because the method to ensure an effective linkage with the "SME specialty consultant" has not been established. Also, even if the theme for improvement belongs to soft technology (production management), the lack of experience in diagnosis and consulting activities as well as the lack of shop floor experience are reflected in the small number of companies that have actually received consulting service.

2) Sectors for present activities and company size

Note that sectors receiving diagnosis and consulting activities are selected according to the policy of provincial Renstra, but Food and Beverage sector accounts for the highest percentage of companies that have received diagnosis and consulting services. As for company size, the average number of employees was 23 for companies that have received diagnosis service and 29 for those that have received consulting service.

 Relationship between sectors selected for diagnosis/consulting activities, company size, and SME diagnosis consultant training course

Shindan-shi of the 2006 SME diagnosis consultant training course have pointed out a large gap between what they have learned and what they have actually handled in terms of sector and company size. In light of the fact that most Shindan-shi actually deal with local microenterprises, the SME diagnosis consultant training course should address the needs of local industries by increasing the number of local companies as the place for shop floor training and by emphasizing the needs for practical skills and techniques. Such course design is very important to maximize the effect of the "SME diagnosis consultant training course" and to ensure effective implementation of SME diagnosis and consulting services.

4) Issues relating to continuation of SME diagnosis and consulting activities that are planned for the future

83% of Shindan-shi who have responded to the questionnaire survey are expected to continue SME diagnosis and consulting activities. 90% of Shindan-shi representing provincial and prefectural/municipal DINASs responded that they would continue diagnosis and consulting activities, whereas the percentage was limited to 50% of Shindan-shi representing the central government. As seen here, an obstacle to continuation of diagnosis and consulting activities come from organization problem between central government and local government.

5) Sectors selected for future activities

For sectors selected for future activities, most of Shindan-shi have selected the food and beverage sector. The same trend applies to the company size, which is more or less the same between present practice and future choice. These responses suggest the need for development of "SME diagnosis consultant training course" that reflects the current state of qualified consultants who have completed the training course. In the process, it is important to clarify human resource development policy in the context of SME diagnosis consultant training.

(3) SME Diagnosis Consultant Training Course and retraining

1) Issues relating to the SME diagnosis consultant training course

Shindan-shi have indicated a variety of requests for improvement. In particular, many respondents express the need for correcting the substantial gap between what they have learned in the training course and what they actually deal with, in terms of industry sector and employment size. It is therefore important to develop the training course that reflects actual conditions in the country. Based on the current state of activity by Shindan-shi and the future activity outlook, the present training course needs to be reviewed to maximize its effectiveness.

2) Need for retraining

The fact that only 40% of companies that have received diagnosis service are covered by consulting service seems to come from the lack of experience in corporate diagnosis and consulting as well as the lack of work experience in factory operation, which is substantiated by the results of self-assessment made by Shindan-shi in the questionnaire survey. Furthermore, many Shindan-shi cited field training for diagnosis and consulting service (52%) and shop floor training (31%) as main themes for retraining. To increase the number of companies that receives consulting service after diagnosis and to stimulate demand for SME diagnosis and consulting service for the purpose of ensuring sustainable SME diagnosis and consulting activities, therefore, it is imperative to provide opportunities for field training relating to diagnosis and consulting service and factory operation.

Chapter 9 Current Status of Human Resource Development for Local SMEs of the Manufacturing Sector

Chapter 9 Current Status of Human Resource Development for Local SMEs of the Manufacturing Sector

9.1 Human Resource Development for Local SMEs of the Manufacturing Sector

(1) Manufacturing SMEs

The expected role of SMEs of the manufacturing industry and their positioning are summarized as follows.

- 1) SMEs inherently take root in a local area and constitute a core element of local economy and industrial concentration. Invigoration of their activities creates a driving force for local economy and contributes to local community.
- 2) SMEs or their loosely organized network can show a clear advantage over large companies. Furthermore, SMEs have strong potential to create a new market by developing a new product that incorporates their proprietary technology and responds flexibly to the niche market needs.
- 3) Job creation.
- 4) SMEs in supporting industries are adaptive to flexible production (small lot and large variety) that is becoming norm in the manufacturing sector.
- (2) Human resource development for SMEs of the manufacturing industry Technologies required by the manufacturing industry and covered by human resource development for SMEs are roughly classified as Table 9-1.

Theme	Target	Subjects (examples)
Management	1) Corporate managers	1) Management
technology	2) Administrative staff	2) Production control
	3) Entrepreneurs	3) Marketing/Sales
		4) Human resources development
		5) Finance
Production	1) R/D staff	1) R/D
technology	2) Engineers	2) Die/Molds, Jig/Tools
		3) Material processing
		4) Finishing/Final treatment
		5) Assembly
Vocational skills	1) Technicians	Skills for administrative and production
		technologies

Source: JICA Study Team

For the manufacturing sector, each of the three technologies is indispensable in supplying a competitive product to the market. It is often the case that production technology and skills receive much attention and the importance of corporate management and production management technologies is overseen, but the latter is a vital tool – especially for SMEs – to achieve productivity improvement as discussed below.

(3) Role of government in industrial human resource development

Industrial policies formulated in the industrialization process are generally classified into the following two categories.

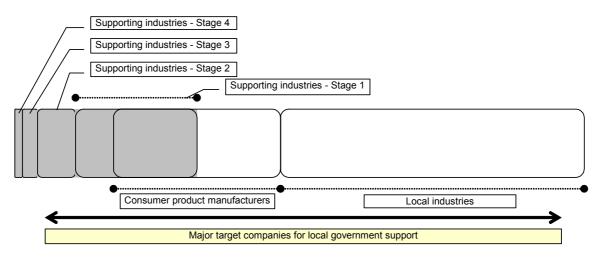
- Selective policy
- Inter-industrial (neutral) policy

Government intervention in SME promotion as part of inter-industrial (neutral) policy can be justified by the argument that it serves the public purpose "to provide a level playing field for SMEs by means of support programs that help SMEs to overcome some of disadvantages against large enterprises, which cannot be mitigated or eliminated by the working of a market mechanism." (4) Roles of central and local governments in industrial human resource development Table 9-2 shows a general framework of roles to be assumed by the central and local governments.

	Central government	Local government
1) Improvement of society's ability to adopt technology	0	\bigtriangleup
2) Reduction of service link cost	0	
3) Development of the environment to support the buildup of inter-company relationship		0
4) Formation of industrial clustering		0
5) Promotion of trade between local companies		0

 Table 9-2
 Roles of Central and Local Governments

As the central government formulates national policy for industrial human resource development as well as a general support scheme, local government implements the support scheme in a manner to meet local demand. Figure 9-1 shows a conceptual image of major target industries and companies in the manufacturing industry for local government support.



Source: JICA Study Team

Figure 9-1 Conceptual Image of Target Manufacturers for Local Government Support

Note:

- Stage 1: Companies that are satisfied with the supplying of materials and products (parts and components) to aftermarkets
- Stage 2: Companies that desire to enter the OEM market but cannot do so because they are not capable of meeting requirements (quality, cost, and delivery schedule) of OEM customers
- Stage 3: Companies that supply products to OEM customers but cannot secure a longterm contract due to failure to reach advanced level of technical requirements
- Stage 4: Companies that supply products to OEM customers by receiving their periodical audit and support including technical information

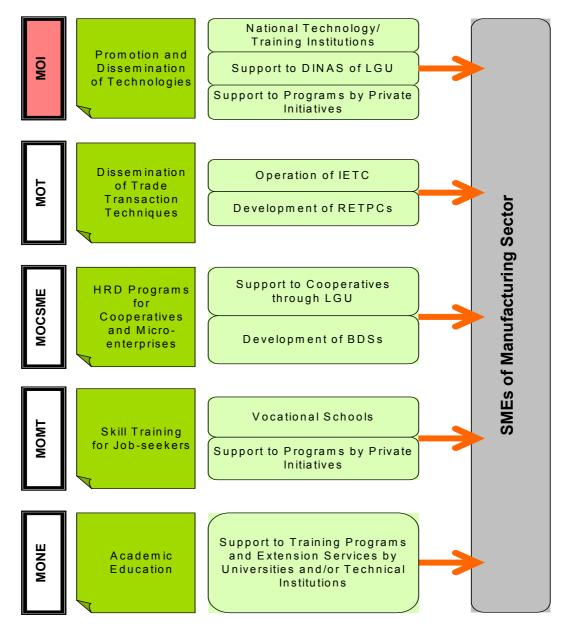
9.2 Current State of Human Resource Development for Local SMEs of the Manufacturing industry

(1) Human resource development programs for manufacturing SMEs by ministries

Within the Indonesian government, the following ministries are responsible for policy making and implementation in the area of human resource development for SMEs as described in Figure 9-2. According to a presidential decree in 2001, formulation and coordination of SME promotion policy is under the jurisdiction of the MOCSME, which worked together with other ministries to develop and announce the Medium Term Action

Plan (MTAP) in 2002.

- Ministry of Cooperatives and SMEs (MOCSME)
- Ministry of Industry (MOI)
- Ministry of Trade (MOT)
- Ministry of Manpower and Transmigration (MOMT)
- Ministry of National Education (MONE)

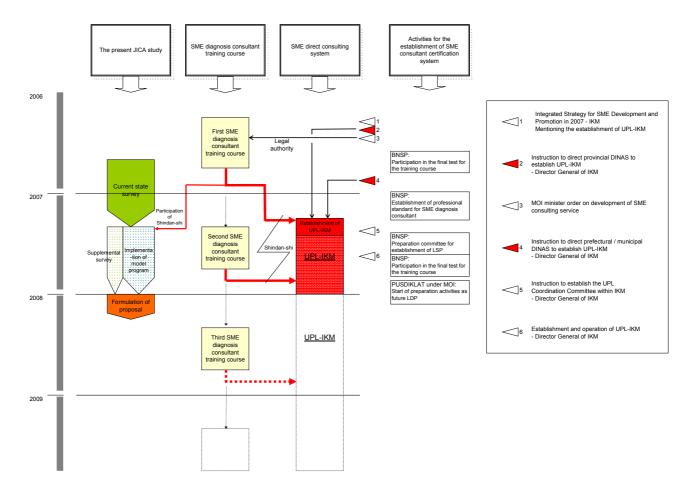


Source: JICA Study Team

Figure 9-2 Roles and Activities of Ministries in Human Resource Development for SMEs of the Manufacturing Industry

(2) New approach by IKM of MOI

Figure 9-3 shows a structural image of IKM's new approach to industrial human resource development after 2006, together with activities under the present study and in the process of establishing the SME consultant certification system.



Source: JICA Study Team

Figure 9-3 IKM's New Approach to Industrial Human Resource Development

By the aid of support programs by the Japanese government that was started in 2003, IKM has been taking various initiatives for industrial human resource development and technology dissemination through consulting, including the administration of the consulting training courses, discussion in preparation for the establishment of the national certification system, and the establishment of a division in charge of consulting within local government.

(3) Current state of human resource development initiatives for SMEs of the manufacturing industry by Provincial Industry and Trade DINAS

Accompanied with the development of decentralization, at present, IKM's polices still form the core of local DINAS's policies, but the earmark from the MOI is on the steady decline, whereas the central government allocates more money directly to prefectural and municipal governments. As a result, provincial, prefectural and municipal governments formulate and implement different industrial development policies.

Basically, extensive officers of local governments (professional staff) are responsible for support service directly for individual companies in local regions. Under the direction of IKM, UPL-IKM was established within local Industry and Trade DINASs in 2007. Under UPL-IKM, it is planned to enhance advisory service for SMEs, which was previously provided by professional staff, by mobilizing additional resources, such as extension officers who have received the diagnosis consultant training course and similar courses as well as private SME consultants and consulting firms, although full-fledged activities have still to be started. Chapter 10 Recommendation of Action Plans for Human Resource Development for SMEs of the Manufacturing Industry by Provincial Industry and Trade DINAS

Chapter 10 Recommendation of Action Plans for Human Resource Development for SMEs of the Manufacturing Industry by Provincial Industry and Trade DINAS

10.1 Issues Relating to Human Resource Development for SMEs of the Manufacturing Industry Identified in the Present Study

(1) Issues relating to SMEs in the Indonesian manufacturing industry

Most of SMEs manufacturing companies belong to stage-1 and stage-2 of Figure 9-1. What they need to evolve from the current state to the next stage is as follows:

- The learning and application of basic management knowledge
- The understanding and application of production management technology
- Skills improvement

The primary challenge is to take the first step toward improvement.

(2) Issues relating to the MOI's implementation system for industrial human resource development support

For SMEs in the manufacturing industry, which are divided into supporting industries (further divided into four stages)as described in Figure 9-1, consumer product manufacturers, and local industries, the MOI's mission is to promote human resource development through dissemination of production technology (hard technology) and corporate management and production management technologies (soft technology).

Theme 1: Technology transfer program for supporting industries using private sector initiatives

(The MOI is now expected to create opportunity for local industries - which have sufficient technology and strong commitment - to enter the OEM market by leveraging initiative of assembly manufacturers, which is demanded by local parts suppliers.)

Theme 2: Dissemination of basic technology

(To promote dissemination of basic technology necessary for stage-1 and stage-2, government should step up its effort to build up the system and institution to support smooth technology transfer, followed by its continuous operation and management.)

Theme 3: Establishment of the SME consultant certification system

(In order to solve the Theme 2, SME consulting system plays an important role. And the establishment of SME consultant certification system for national certification system to continue the SME consulting system is a theme of MOI.)

Theme 4: Acceptance and development of the SME consulting system

(MOI is establishing UPL-IKM as an organization spearheading the new SME consulting system by providing direct consulting service at the local government level. With the progress of the decentralization process, the relationship between the province and the prefecture or the municipality is still uncertain in some aspects. As the number of staff members at each UPL-IKM is limited, it is very difficult for a single UPL-IKM in a prefecture or municipality to conduct its activity separately in order to achieve its goal. Instead, integration of limited resources of local UPL-IKMs to meet the needs of local industries in an effective and efficient manner is a major issue for the UPL-IKM Team as well as each local government.)

(3) Issues relating to the provincial government's implementation system for human resource development programs for the manufacturing sector

Local government is expected to provide service that addresses and meets the actual needs of local SMEs. In order to accomplish this purpose, UPL-IKM was established in each local government. The following theme is considered to conduct activities to meet the purpose of UPL-IKM from now on.

Theme 1: Organization and membership of UPL-IKM

(At present UPL-IKM is a temporary organization like a "Project Team". UPL-IKM should be permanent organization and also staff of UPL-IKM should be permanent staff.)

Theme 2: Public organizations in provinces

(Understanding and coordination of central government organization are essential for continuation of activities of UPL-IKM support and training activities separately.)

Theme 3: Special consultant

(UPL-IKM's activities become effective by combining both technologies. In order to accomplish this purpose, it is necessary to arrange the list of special consultant in various fields, which covers different organizations.)

Theme 4: Incentive for individual companies to receive diagnosis and advisory service (UPL-IKM's current scheme does not provide significant incentive for SME owners to continue kaizen activities, except for the government's subsidy to cover diagnosis and advisory service costs partially. Other incentive is necessary to continue this scheme.)

(4) Issues relating to Shindan-shi

Major issues relating to Shindan-shi are as follows:

Theme 1: Job classification and activity record

(It is difficult for managerial and general staff members to perform consulting activities as they have their own work to do.)

Theme 2: Capability

(The results of the questionnaire survey of companies that participated in the model program show that the majority of respondents were not satisfied with professional capability of Shindan-shi and that they pointed out the lack of experience in advisory service, the lack of work experience on the shop floor, and insufficient knowledge on skills and hard technology.)

Theme 3: Other impeding factor for diagnosis and consulting activities

(There is no formal system to provide incentive for consultants to perform their service enthusiastically, other than compensation.)

Theme 4: Loan-related consultation

(UPL-IKM staffs do not realize that they should offer broad knowledge on financial support schemes for SMEs and necessary intermediary service as part of their support activities.)

Theme 5: Scope of service by SME diagnosis consultants, and special consultants

10.2 Future Vision of Human Resource Development Support for the Manufacturing Industry under Collaborative Efforts of Central Government (MOI) and Provincial Governments

Based on the MOI's mission to "develop and disseminate production technology (hard technology) and corporate management/production management technologies (soft technology) required by the manufacturing industry," the study team has conceived the "Future Vision of Human Resource Development Support for the Manufacturing Industry under Collaborative Efforts of Central and Provincial Governments," as proposed in Figure 10-1.

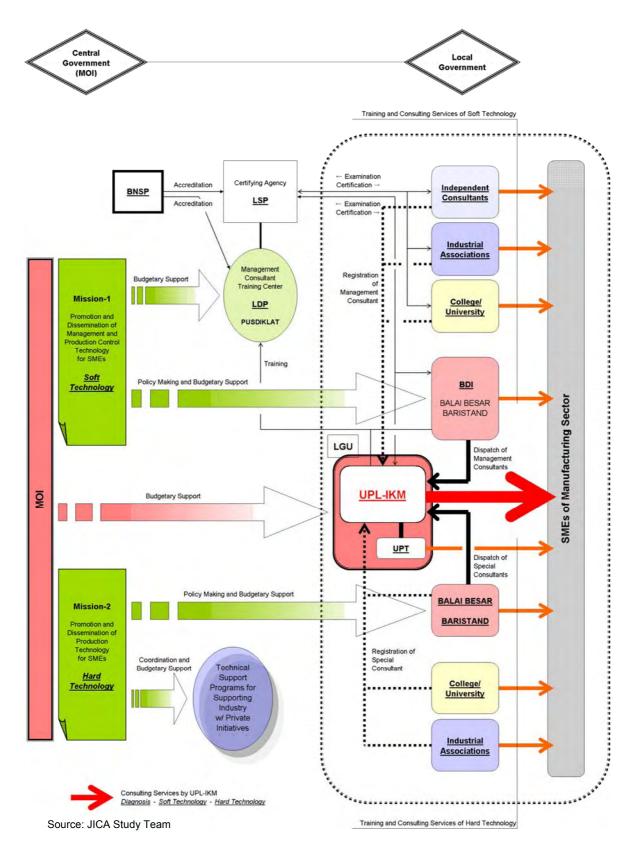


Figure 10-1 Future Vision of Human Resource Development Support for the Manufacturing Industry by MOI and Provincial Industry and Trade DINAS

10.3 Proposal for Human Resource Development Support for the Manufacturing Industry by Provincial Industry and Trade DINAS

(1) Action Plan

In this section, the following action plans are proposed for the purpose of realizing in "Future Vision of Human Resource Development Support for the Manufacturing Industry in 10.2.

Action Plan 1: Organization and membership of UPL-IKM

To make UPL-IKM a formal division of DINAS to allow allocation of the provincial budget. Professional staff will be appointed as UPL-IKM staff members to allow them to be dedicated to corporate diagnosis and advisory activities.

Action Plan 2: Establishment of provincial UPL-IKM committee

To establish the UPL-IKM committee within each provincial Industry and Trade DINAS, which is responsible for coordination of UPL-IKM activities in each province.

It is designed to meet diverse needs of local companies by integrating limited UPL-IKM resources.

Action Plan 3: Development of a database on SME special consultants

The UPL-IKM committee proposed under Action Plan 2 will, as part of its responsibility, develop a database on consultants specialized in SME consulting in each province.

Action Plan 4: Linking UPL-IKM's diagnosis and advisory service with loan schemes

To relate the provincial government's loan schemes with UPL-IKM's diagnosis and advisory services. By requiring a company that applies for a provincial loan scheme to receive UPL-IKM's diagnosis and produce results on the basis of advisory service as loan conditions, the action is designed to provide incentive for local SMEs to conduct kaizen activities on a continuous basis.

Action Plan 5: Retraining program for Shindan-shi

To conduct a retraining program aiming to make up for the lack of experience of Shindan-shi in diagnosis and advisory service and help them to improve skills. It is expected to create incentive for Shindan-shi to continue professional activities.

Action Plan 6: Organization of periodical workshops and events for companies

To hold workshops on a periodical basis to promote UPL-IKM's consulting service.

(2) Implementation Schedule for the Action Plans

Table 10-1 presents implementation organizations of the proposed action plans, related organizations, and their implementation schedule.

			Implementation organizations Central government Local government								Implementation schedule					
		MOLIKM	MOI IKM UPL-IKM Team	PUSDIKLAT-IND	Provincial Industry and Trade DINAS	Provincial UPL-IKM committee	Prefectural/ municipal Industry and Trade DINAS	Provincial/ prefectural/ municipal UPL-IKM	Province-based technical support/ training organizations under MOI	Trade associations	Universities/ polytechnics	Banks extending loans	First half of 2008	Second half of 2008	First half of 2009	Second half of 2009
Action Plan 1	Organization and membership of UPL-IKM	•			•		•									
Action Plan 2	Establishment of provincial UPL-IKM committee				•			•	0							
Action Plan 3	Development of a database on SME special consultants		0			•										
Action Plan 4	Linking UPL-IKM's diagnosis and advisory service with loan schemes				•		•	•								
Action Plan 5	Retraining program for Shindan-shi	0		0		•										
Action Plan 6	Organization of periodical workshops and events for companies					•										

Major implementation organization
 O Imple

O Implementation organization A Related organization



10.4 Proposals Relating to the SME Diagnosis Consultant Training Course

For the SME diagnosis consultant training course, which is expected to serve as the foundation for the SME consulting system operated by UPL-IKM, the following three proposals are made.

Recommendation 1: Sectors covered by diagnosis and advisory service

Consideration should be given in the future course that examples of local industries are taken up as much as possible, especially small enterprises and microenterprises in local industries for case study and field training for corporate diagnosis.

Recommendation 2: Selection criteria for course participants

In selecting participants representing government organizations, therefore, priority should be given to those who can make effect use of what they learn in the course, especially taking into account the following two factors.

- Professional staff, rather than managerial and general staff, can be fully engaged in corporate diagnosis and consulting activities.
- Shindan-shi in an area where the manufacturing industry is brisk and strong should be prioritized to be selected.

Recommendation 3: Implementation of TOT

It is proposed to select and retain Shindan-shi, who show an excellent record in terms of scores at the final test of the training course and professional activities after the course, as course instructors, and to implement the TOT (Training of Trainers) program.