

- (d) Strengthening the main supporting elements, strengthening global competitiveness of production and distribution especially in eastern part of Indonesia;
 - (e) Development and application of product and service standardization in accordance with regional/global requirement;
 - (f) Improvement of product quality and industry productivity; and
 - (g) Increasing of expertise and capability on processing technology, production technology, engineering technology and industry engineering according to requirement.
- 2) Empowering of Competitive Sphere and Non-discriminative Regulation Program**
- (a) Law enforcement in commercial endeavor, including job regulations, business guarantee, and excellent partnership;
 - (b) Direct and decentralization of production and distribution procedures;
 - (c) Improvement of the role of business on production and distribution of strategic commodity;
 - (d) Supervision of participants endeavor in policy formulation process of business development;
 - (e) Provision of responsive economic infrastructure in business improvement potency and requirement;
 - (f) Empowerment of system and protection institution of intellectual right reserved;
 - (g) Arrangement and empowerment of standardization and certification institutions in products and service quality;
 - (h) Revitalization of research and commodity/production development institutions in national and regional level;
 - (i) Reduction of import tariff and non tariff constraints according to national importance and international commitment; and
 - (j) Enhancement of investment, export, tax facilities, and valuable of usage especially for SME.
- 3) Export Development Program**
- (a) To enhance and optimize the frequencies of trade diplomacy;
 - (b) Institutional arrangement and international trading facility system;
 - (c) Arrangement of international trading information system, and enhancement of information distribution quality of international trade commitment/cooperation results;
 - (d) Improvement power of foreign market penetration system;
 - (e) Enhancement of business participation on foreign market penetration; and
 - (f) Enhancement of SME participation on international trade.

e) HRD Policy Industrialization Process Import, expert, and K-Economy

Empowerment industry stakeholders for:

- a. Having entrepreneurship vision and character, sturdy, patriotic, and professional;
 - b. Capable to identify, develop and utilize business opportunities;
 - c. Capable to empower productive resources and to access market (local, domestic, and export);
 - d. Having business management capability, skills, and competent on technology; and
 - e. Capable to develop competitiveness (visionary on efficiencies, productivity, and qualified, proactive -creative-innovative).
- f) HRD Master Plan of Industry is as follows:
- Motivating, socializing and enhance of the job training activities and labor productivity to supply qualified, productive, high competitiveness labor in domestic or international labor market;
 - The rapid development and urgent requirement of industry on qualified labor force require standardization and labor competency certification development, (consequently, the main activity is establishment of standardization and competency certification by standardization and competency certification institution. This activity involving the association of professions, company associations, labor units, government and related experts; and
 - Enhancement of the relevant fields, training quality and efficiency by supervision and empowering training institution that are conducted by government, private sector or company. On the hand, to improve working productivity, it should implement the socialization of productive value and culture, system development and productivity improvement methods, and cadre and experts of productivity development.

Planning Program of Education and Training in fiscal year 2005 of Ministry of Industry is listed in Table 3.3.

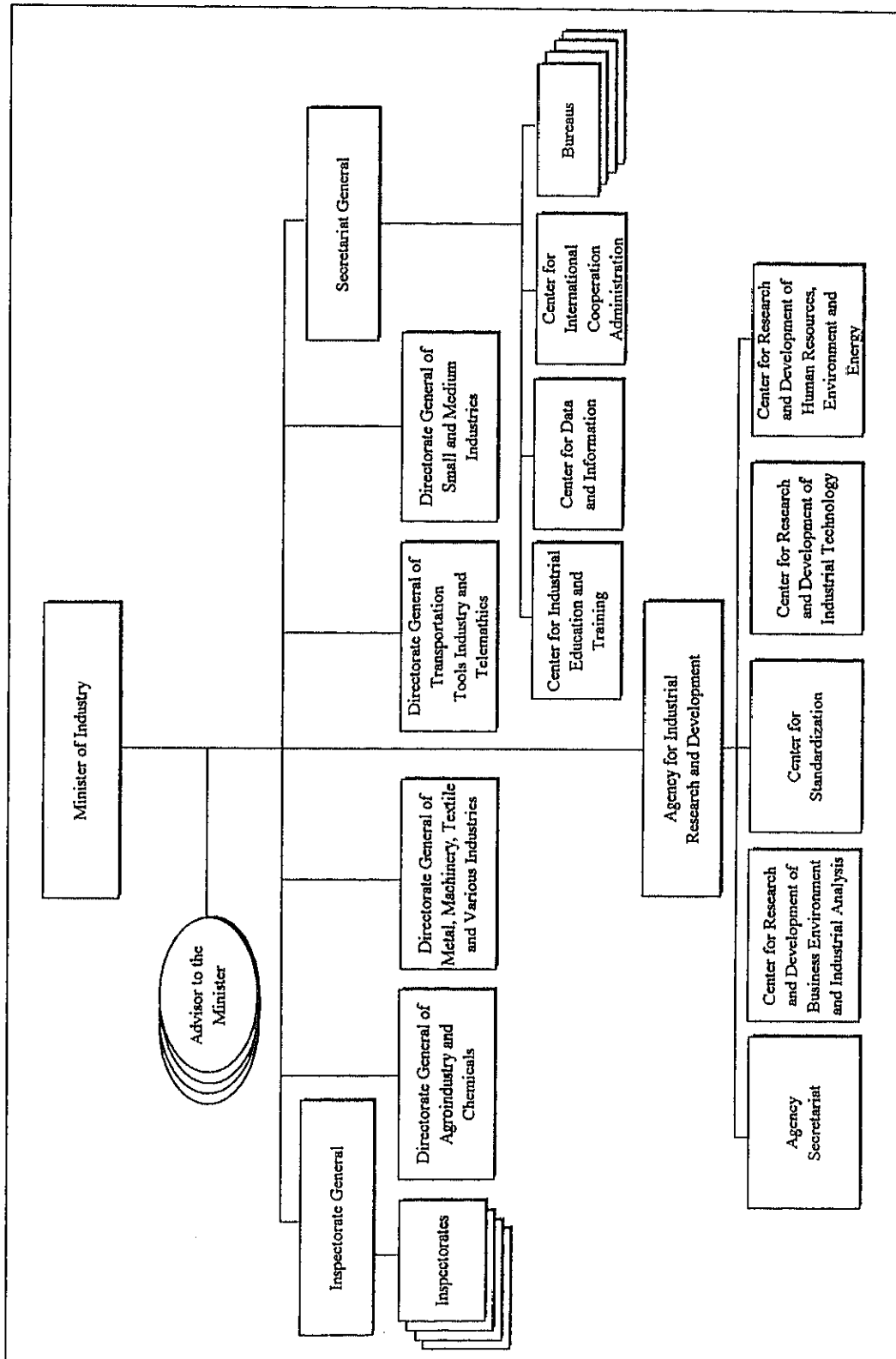
Table 3.3 Planning Program of Education and Training of Ministry of Industry in Fiscal Year 2005

No.	Name of Education and Training	Participant
Technical Education and Training		
1	Performance Measurement	Supervisory/Officer
2	Supply chain Management	Supervisory/Officer
3	Management of Training	Supervisory/Officer
4	TOT of Senior Lecturer	Senior Lecturer
5	Personal Empowerment	Supervisory/Officer
6	Team Building	Supervisory/Officer
7	Achievement Motivation Training	Supervisory/Officer
8	Achievement Motivation Training for Trainers	Supervisory/Officer
9	Entrepreneurship Motivation Development (EMD)	SME/Extension Officer of SME
10	Remote Education and Training (Technical Industry and Trade) for Basic, Medium, Intermediate, High level	Supervisory/Officer
11	International Business Communication	Supervisory/Officer
12	Negotiation Technique	Supervisory/Officer
13	Future Trading	Supervisory/Officer
14	Actual Issue of WTO and Anti-Dumping	Supervisory/Officer
Functional Education and Training		
1	Statistics	Supervisory/Officer
2	Extension Officer of Industry and Trading	Supervisory/Officer
3	Engineering Research Technician	Supervisory/Officer
4	Goods Quality Assessor	Supervisory/Officer
5	Personnel Analysis	Supervisory/Officer
6	Expending Treasure	Supervisory/Officer
7	Planning	Supervisory/Officer
Business Human Resource Education and Training		
A. Industry Technical Education and Training		
1	Production Control	Businessman
2	Food and Beverage Package Design	Businessman
3	SME Accountant System	SME
4	Business Contract	Businessman
5	HACCP	SME
6	SNI Certification	SME
7	Leather Product Design	SME
8	Food Preservation Technology	SME
9	Marketing Communication	Businessman
10	Total Quality Control	Businessman
11	Cleaner Production	Businessman
B. Management Education and Training		
1	Competency Based Book Writing	Lecturer/Teacher
2	Examination Writing	Lecturer/Teacher
3	CBT Evaluation	Lecturer/Teacher
4	AKTA IV	Teacher

Source: Pusklat Indag (2005)

The organization structure of Center for Industry Education and Training of Ministry of Industry is illustrated in Figure 3.6.

Figure 3.6 Organization Structure of Ministry of Industry



Source : President Decree of the Republic of Indonesia No. 10 Year 2005

3.2.4 Other Institutions

a). Ministry of Agriculture

Programs

- To create assessment of agricultural human resources;
- To develop agricultural agency cooperation network in agricultural human resources development;
- To construct agricultural officer career development system;
- To arrange educational and training system based on work competency;
- To develop agricultural education system (Middle and Higher education);
- To develop participative agricultural information system;
- To improve farmer competition and other farmer society;
- To enhance affective and efficient distribution of the information of science and technology, market and production inputs; and
- To strengthen the agricultural institution function and roles as a center for information and specifically local technology.

The organization chart of Agency for Agricultural Human Resources Development of Ministry of Agriculture is illustrated in Figure 3.7.

b). Ministry of Social Affairs

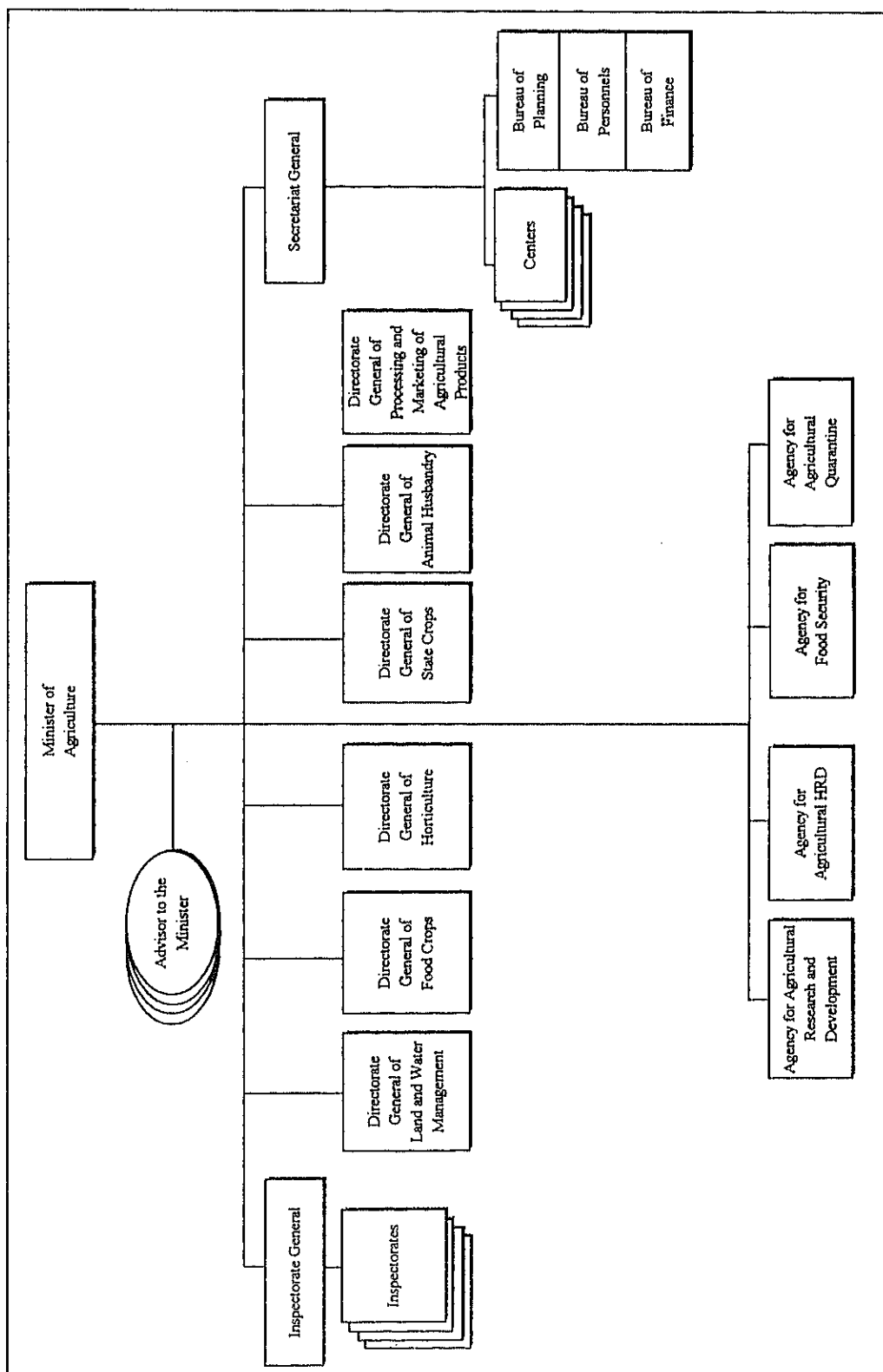
Strategy of MOSA in Education and Training of Human Resources is as follows:

- Empowerment education and training personnel of social welfare human resources;
- Development of network among operational institution, service users, and alumni of social welfare human resources;
- Assessment and development of education and training methodology and technology of social welfare human resources; and
- Distribution of information on the subject of education and training of social welfare human resources.

Program in HRD of Agency for Training and Social Development of MOSA among others covering:

- To perform assessment and analysis of education and training of social welfare human resources in regional scale;
- To built and develop education and training of social welfare human resources networking;
- To build and develop education and training of social welfare human resources information system;

Figure 3.7 Organization Structure of Ministry of Agriculture



Source : President Decree of the Republic of Indonesia No. 10 Year 2005

- To increase and develop knowledge, attitude, and skill of education and training of social welfare human resources organizer;
- To improve facilities and infrastructure of education and training of social welfare human resources;
- To create guideline and manual of education and training operation;
- To perform monitoring and evaluation of education and training of social welfare human resources operation in regional scale;
- To plan, develop, and manage education and training on technical and function of social welfare for officials and technical staff of social service management and practice of social work for social worker in regional scale, urgent, and strategic; and
- To improve and develop methodology and technology of education and training of social welfare human resources.

Program Plans and activities of MOSA in 2005 covering:

- Designing of information media;
- Strengthening public relation capability;
- Exhibition of activity and program;
- Research and development of the organization of Center for Social Training and Development (CSTD);
- Preparation of job description for CSTD;
- Strengthening of law officials in CSTD;
- Supervision of officials management administration;
- Supervision of administration facilities;
- Supervision of non tax government revenue;
- Preparation of references for social workers;
- Preparation of master plan for social worker functional status;
- Preparation of program and work plan for CSTD; and
- Preparation of social worker's standard.

Organization chart of Agency for Training and Social Development of Ministry of Social Affairs is illustrated in Figure 3.8.

c). State Ministry of Cooperative and Small & Medium Enterprises

Policies

First, the creation of a conducive atmosphere for business, that aims to enable the opening of business opportunities as wide as possible and to establish a secure business, as a pre-requisite to guarantee the development of CSME.

This strategy among others cover:

- Improvement of legal regulations, simplification of permits, bureaucracy, regional regulations and retributions and the increased efforts to uphold the law and business protection against unfair competition;
- Development of fiscal policies, taxation, sector policies including trade and inter regional and international services and investments;
- Provision of incentives and facilities for the development of a wider regional network of CSME stakeholders, including financial institutions, traditional/ people (NGO), credit guarantee institutions, and institutions for business development services, training, technology, information and advocacy services; and
- Enhancement of capacity and the involvement of stakeholders in the development of CSME at central and regional levels in planning, implementation and the supervision of policies and development programs, including the development of the coordination mechanism and the development of business ethics and culture.

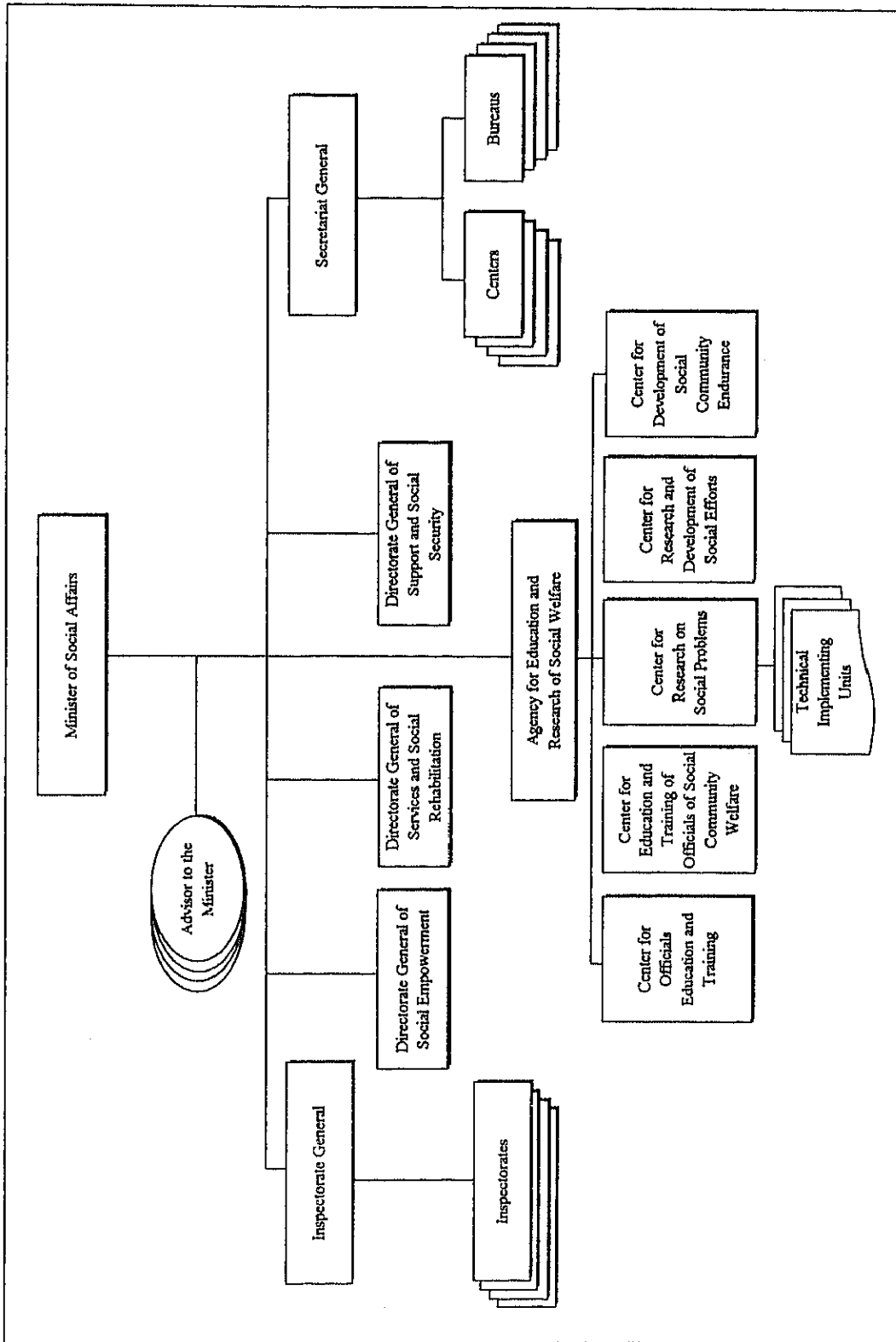
Second, is to facilitate access to productive resources for CSME so that they can utilize the opportunity and the local resources for improving their business.

This strategy among others include:

Quality improvement of people's financial institutions and secondary financial institutions especially to support micro enterprises at domestic level;

- Extension of financial sources for CSME among others by the extension of credit guarantee services, extension of the role of venture capital, support from the incentive system for foreign investors who make an equity financing in a venture capital business and the extension of the leasing industry as one of the institutions for fixed capital financing of CSME;
- Improvement of the institutional capacity of service providers for business development, technology and information for CSME at the local level and the creation of the network through the support of strengthening management in a participative and competitive manner;
- Development of the incentive system and strengthening of training institutions for CSME, cooperative managers and members and the cooperation network among training institutions;
- Re-orientation and re-structuring of training and research establishments owned by several government institutions into a self supporting business development institute for CSME;
- Improvement of the capacity for BDS (Business Development Service) in providing business development services, technology, information, market access, etc. for CSME and the establishment of a network system through strengthening management or guidance; and
- Strengthening the organization and modernization of cooperative management that will become the center for SME to increase their business scale to become more economical and efficient.

Figure 3.8 Organization Structure of Ministry of Social Affairs



Sources : President Decree of the Republic of Indonesia No. 10 Year 2005

Third, is the development of entrepreneurship and CSME that have competitive advantages with the purpose to improve entrepreneurship behavior and to increase the competitiveness of the CSME. The goal to be reached is an increased knowledge and entrepreneurship behavior and an increase in the productivity of CSME.

The strategy covers:

- Socialization of entrepreneurship and development of the incentive system for new start ups;
- Development of an incubator for business and technology especially those that are managed by the business world/people to support the development of CSME and new star ups based on technology;
- Provision of the incentive system and guidance for the growth of technology based CSME among others to take advantage of the local innovations/technology, commercialization of technological innovations; business partnership between CSME and foreign businesses that applies technological transfer or modern management to the CSME as partner; the provision of partnership facilities within the framework of modernization or to increase the added value of the business;
- Development of production and distribution network through the use of information technology for the business development of CSME within a cooperative by way of a horizontal and vertical integration and a network among CSME and large businesses through partnership; and
- Development of the quality of SME including SME for women in order to instill the spirit of cooperation to be able to take advantage of the potentials, skills and professionalism to make innovations and to create work opportunities.

Programs

Programs and activities, that further on will be able to enhance the following:

- Productivity, efficiency and competitive power;
- Absorption of labor force;
- Market Niche so that they can increase their contribution towards the Gross Regional Income;
- Contribution in exports;
- CSME investments;
- A healthy CSME; and
- CSME that can play an active role in the regional autonomy era and in the development of CSME with a vision and gender orientation.

Based on the above foundations and due to the shift of the national development paradigm and the implementation of the reform agenda and regional autonomy, the Ministry of Cooperative and SME decided upon four groups of policy programs as follows:

- The creation of a conducive atmosphere for business through the formulation of policies and coordination,
- Increased access to productive resources,
- Development of entrepreneurship for CSME with a competitive advantage, and
- Increasing the support and participation of the people.

Organization structure of Deputy of Human Resources Development of SMCSME is illustrated is Figure 3.9.

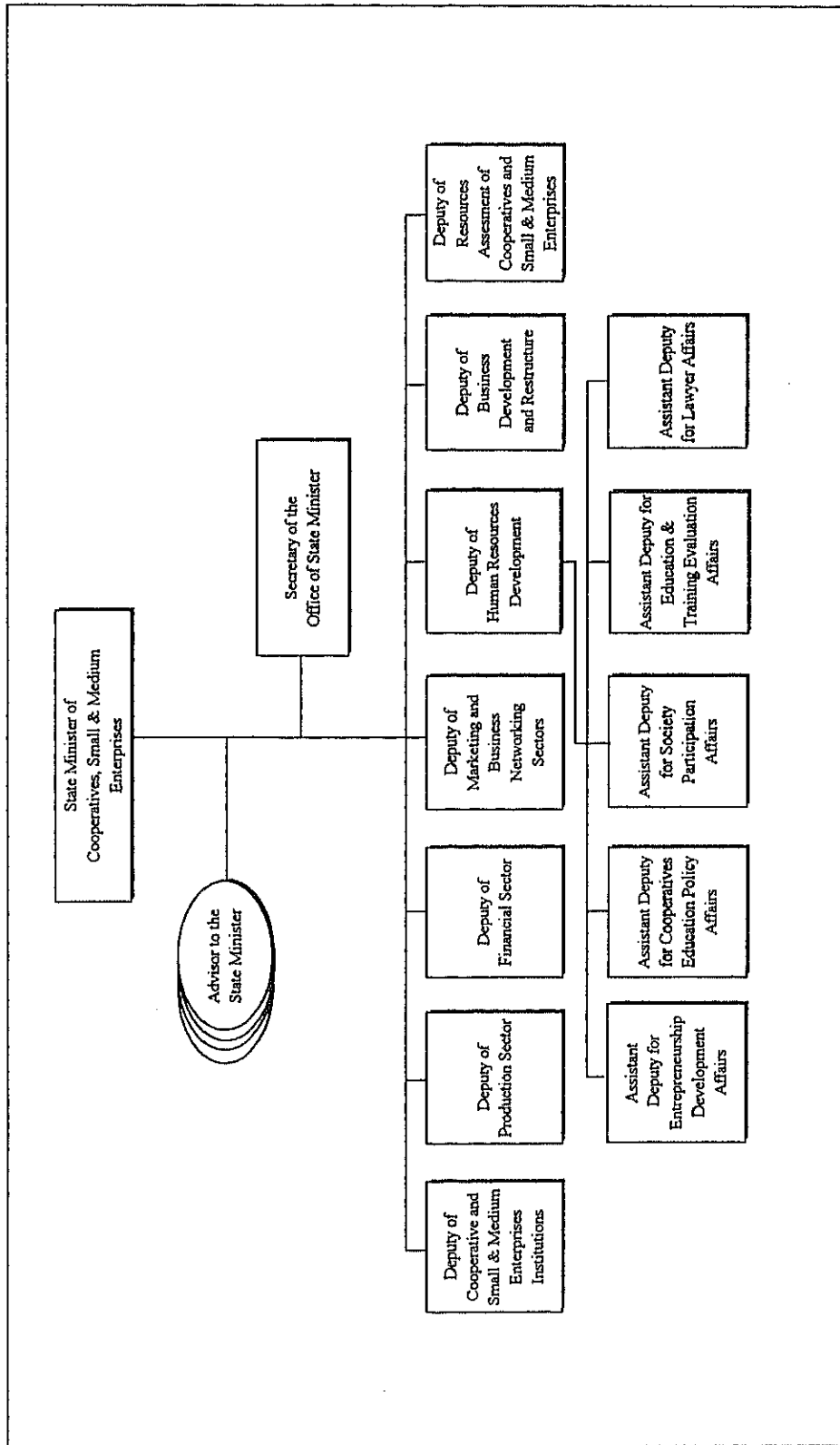
d). Ministry of Marine Affairs and Fisheries (MOMAF)

Strategy

- Reaching the international standard education by serving suitable curriculum, complete facilities, and best quality teachers;
- Helping the industry to grow by bringing professional human resources in the field;
- Developing the fisherman and fish breeding through the “Partner Village” program and series of training;
- Creating a paradigm suited to the dynamic situation in developing and democratic society;
- Expanding the network and information by developing relationship with other universities, research institutions, inter-related sectors, businessmen, and other communities; and
- Exploring the great potential of the tropical of the sea based on the application of science and technology.

To support the main functions and responsibilities, Ministry of Marine Affairs and Fisheries developed 17 centers of Fisheries Education and Training as listed in Table 3.4.

Figure 3.9 Organization Structure of State Ministry of Cooperatives, Small & Medium Enterprises



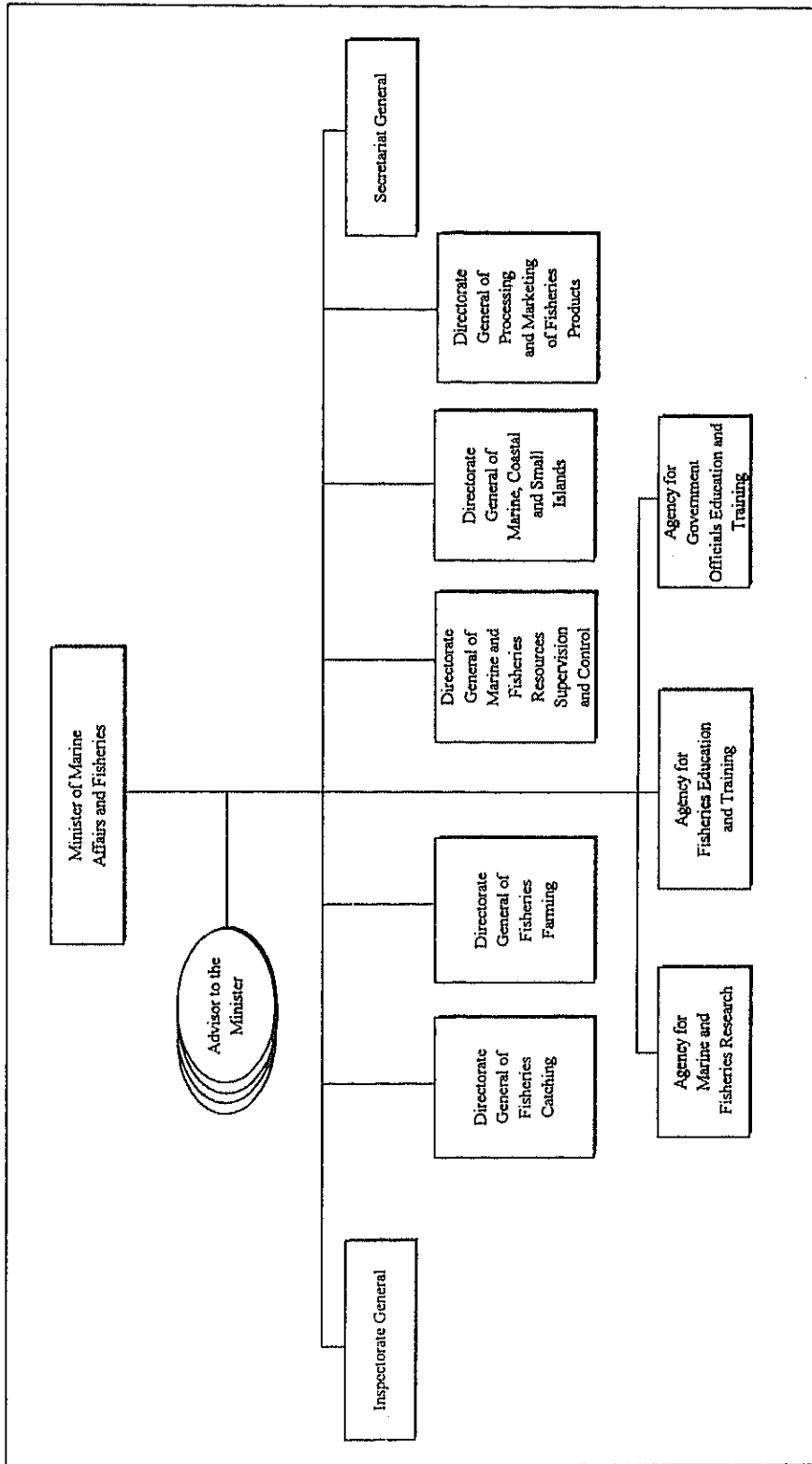
Source : President Decree of the Republic of Indonesia No. 10 Year 2005

Table 3.4 The Center of Fisheries Education and Training (CFET) in Indonesia

No.	CFET	Location
1.	Jakarta Fisheries University	Jakarta
2.	Sidoarjo Fisheries Academy	Sidoarjo, East Java
3.	Bitung Fisheries Academy	Bitung, North Sulawesi
4.	Sorong Fisheries Academy	Sorong, Irian Jaya
5.	Ladong Fisheries High School	Ladong, NAD
6.	Pariaman Fisheries High School	Pariaman, West Sumatra
7.	Tegal Fisheries High School	Tegal, Central Java
8.	Pontianak Fisheries High School	Pontianak, West Kalimantan
9.	Bone Fisheries High School	Bone, South Sulawesi
10.	Wachaeru Fisheries High School	Wacheru, Maluku
11.	Sorong Fisheries High School	Sorong, Irian Jaya
12.	Kota Agung Fisheries High School	Kota Agung, Lampung
13.	Medan Fisheries Training Center	Medan, North Sumatra
14.	Tegal Fisheries Training Center	Tegal, Central Java
15.	Banyuwangi Fisheries Training Center	Banyuwangi, East Java
16.	Aertembaga Fisheries Training Center	Aertembaga, North Sulawesi
17.	Ambon Fisheries Training Center	Ambon, Maluku

Organization structure of Fisheries Education and Training of MOMAF is illustrated in Figure 3.10.

Figure 3.10 Organization Structure of Marine Affairs and Fisheries



Source : President Decree of the Republic of Indonesia No. 10 Year 2005

CHAPTER 4

VOCATIONAL TRAINING CENTERS

4.1 Introduction

The information of the current status of the Vocational Training Centers in Indonesia is compiled and analyzed mainly from primary sources. The questionnaire was designed by the Study Team to be used for the face-to-face interviews with four CTIUs (Central Technical Implementation Unit), three PTIUs (Provincial Technical Implementation) and five VTCs of Private Sectors in the targeted locations, covering: Bandung and Bekasi (West Java), Surabaya (East Java), Makassar (South Sulawesi), and Denpasar (Bali).

Table 4.1 summarizes the coverage of the in-depth interviews by the institutions and coverage by provinces. Table 4.2 shows the coverage of in-depth interview of VTCs by location.

The designed questionnaire used for the surveys enable the Study Team to:

- Gather information of the budget and trainees of the institutions;
- Gather information of curriculum and textbooks of the institutions;
- Gather more information of the facilities and equipments of the institutions; and
- Gather information of the lecturers and the training system.

Table 4.1 In-depth Interview by Type of Institutions

Institution	Organization	Targeted for Interview	Interview Completed	% Completed
Ministry of Manpower and Transmigration	VTC/I under MOMAT	4	4 (3)*	100
	VTC/I under Provincial Government	3	3 (2)*	100
Ministry of National Education	Polytechnics	4	4	100
Private Sectors	VTC/I	5	5	100
Total		16	14*	100

Notes : * One TIU Excluded from the target due to alteration of status during regional autonomous era.

Table 4.2 In-depth Interviews of VTCs by Location

Province	Targeted for Interview	Interview Completed	% Completed
West Java	4	4	100
East Java	5	5*	100
South Sulawesi	3	3	100
Bali	2	2*	100
Total	14	14	100

Notes : * One TIU Excluded from the target due to a alteration of status during regional autonomous era.

4.2 General

Objective and Function of Surveyed VTCs

The objective of VTCs is to conduct training and labor placement according to industries requirement. Whilst the function of the institution is to prepare capable and skilled labor in order to fulfill job opportunities with high level of competitiveness.

Management System

The management system for the most of the government VTCs surveyed have been changed aiming to simplify program planning according to local needs. According to Article 21 of Government Act No. 71/1991, training plans should be relied upon job market, development of science and technology, and match the requirement of industries. Personnel supervision is conducted based on competency and reformation of training on which should be supported by strategic program in order to reach the objective and goal, which covers: demand driven, human resources development approach, and private basis.

Mid and Long Term Plans:

Mid Term Plan of the surveyed VTCs include:

- To conduct program and improve training quality;
- To develop comprehensive and advanced training system;
- To develop network with related sectors, particularly with industries;
- To support the realization of training standardization and certification at national level;
- To upgrade trainers and equipments according to future industry needs;
- To provide service centers for training information and problems; and
- To support availability of national labor requirement data.

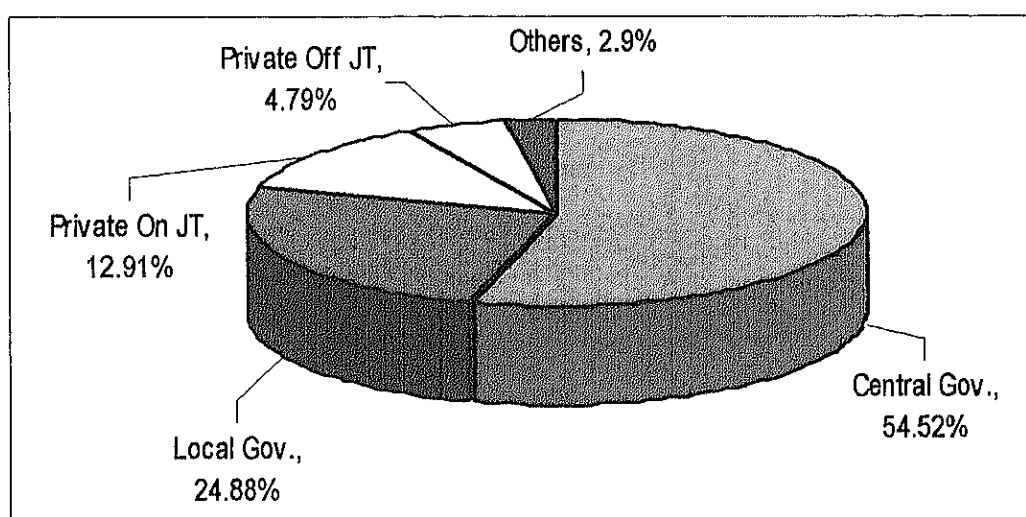
Long Term Plan of the VTCs includes :

- To improve labor quality which has an ability to compete either in country or overseas;
- To support training system availability based on competency and community needs;
- To support international training standardization and certification; and
- To support availability of international labor requirement data.

4.3 Budget

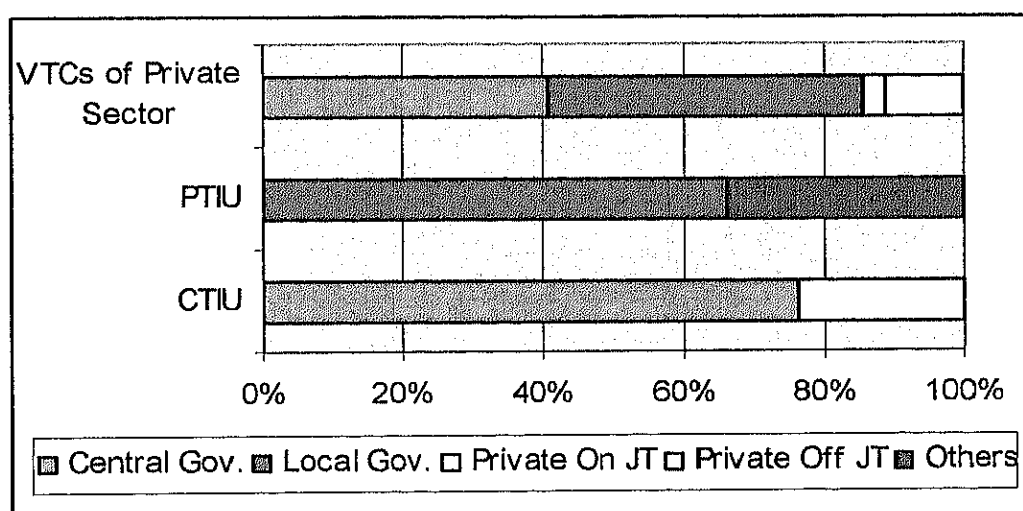
Table 4.3 shows that the main source of the VTCs budget was financial support of government, either central government (54.53%) or local government (24.88%). This result indicates that support from local government on education and training of human resources was quite significant. Contribution of private sector comprised about 12.91% (on job training), and 4.79% (off job training), as illustrated in Figure 4.1 and Figure 4.2.

Figure 4.1 Allocation of Budget by Type of Supporting Institutions



Source: Industry Survey by IKI Research and JICA (2005)

Figure 4.2 Allocation of Budget by Type of VTCs



Source: Industry Survey by IKI Research and JICA (2005)

Table 4.3 Allocation of Budget of VTCs

(in million Rp)

Institutions	Government		Private		Other Source	Total
	Central	District	On Job Training	Off Job Training		
CTIU ¹	3,900.00	-	1,200.25	-	-	5,100.25
PTIU ²	-	600.00	-	-	-	600.00
VTCs of Private Sector	1,822.09	2,011.33	154.60	502.05	304.20	7,794.27
Total	5,722.09	2,611.33	1,354.85	502.05	304.20	10,494.52
	54.52%	24.88%	12.91%	4.78%	2.90%	100%

Source: Industry Survey by IKI Research and JICA (2005)

Notes: ¹Central Technical Implementation Unit

²Provincial Technical Implementation Unit

Expenditure was mostly allocated for training activities, comprising 81.90% of the total budget, which was regularly utilized for training activities, equipment operation & maintenance, and for production of training modules. Expenditure for routine expenses was only 18.10%, as illustrated in Table 4.4.

Table 4.4 Expenditure of VTCs

Institution	Percentage of Expenditure (%)		Total (%)
	Training	Routine	
CTIU	62.30	37.70	100
PTIU	89.10	10.90	100
Private VTCs	94.31	5.69	100
Total (%)	81.90	18.10	100

Source: Industry Survey by IKI Research and JICA (2005)

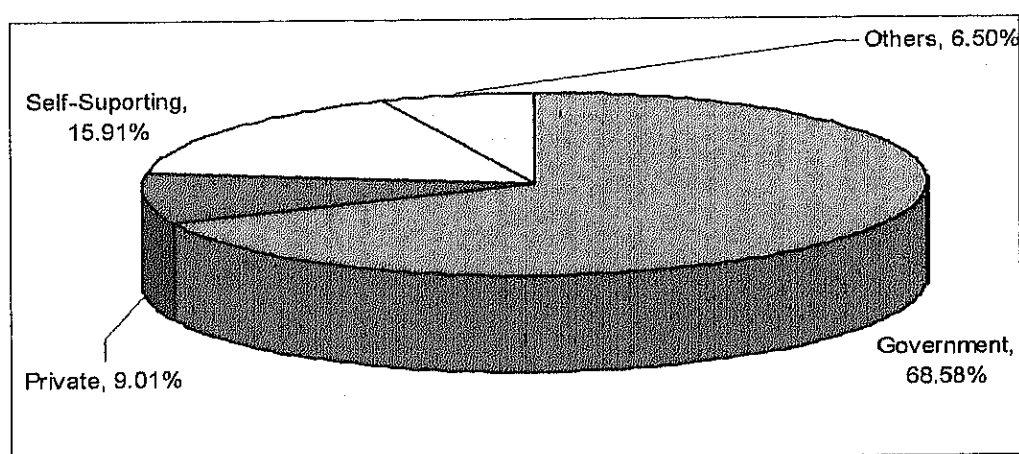
The survey results indicate that the main revenue of the VTCs was obtained from government financial support (68.58%), while self-supporting budget was derived from collaborative program and activities with other institutions (15.91%). Revenue from private sector and others through training comprised about 9.01% and 6.50% of the total budget, respectively (Table 4.5). The revenue allocation by type of supporting institutions is given in Figure 4.3, and by type of VTCs as illustrated in Figure 4.4.

Table 4.5 Percentage of Revenue of VTCs

Institutions	Government	Private	Self-Supporting	Others	Total (%)
CTIU	98.77	0.82	0.41	0.00	100
PTIU	26.26	24.54	41.83	7.37	100
Private	80.72	1.66	5.48	12.14	100
Total (%)	68.58	9.01	15.91	6.50	100

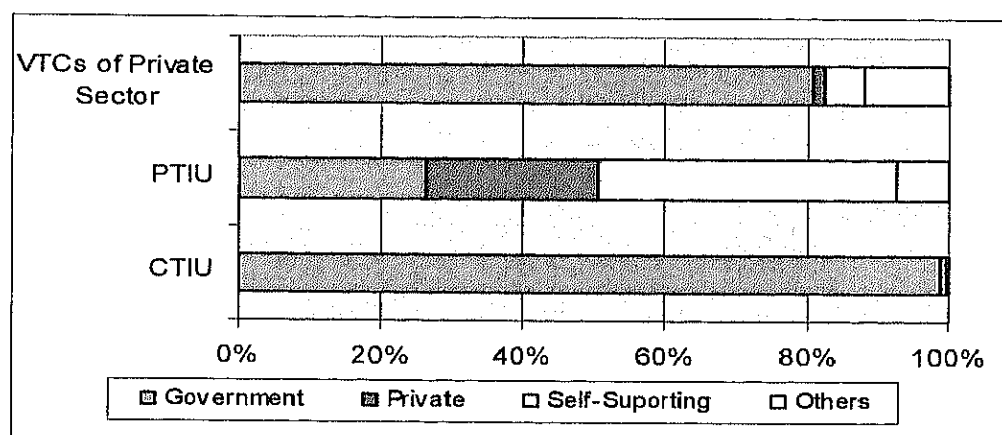
Source: Industry Survey by IKI Research and JICA (2005)

Figure 4.3 Revenue by Type of Supporting Institutions



Source: Industry Survey by IKI Research and JICA (2005).

Figure 4.4 Revenue by Type of VTCs



Source: Industry Survey by IKI Research and JICA (2005)

4.4 Trainees

Selection Method

Selection method of trainee were mostly conducted through written test (50%) whereas interview and other method comprised about 33.33% and 16.67%, respectively. Survey results indicate that written test was considered as the best method to assess capability of trainee general knowledge. Interview was conducted to judge interest of trainee, and other test, such as psycho test was also conducted by VTCs. Trainees from SME were not examined prior to acceptance such as VTI Cibaduyut and IFSC Sidoarjo, whereby selection was conducted by cooperative and each SME association (Table 4.6). Information on selection of trainee is exposed through mass media, such radio station and famplet at each Provincial Manpower and Transmigration office.

Table 4.6 Selection Method of Trainees in VTCs

Institutions	Test	Interview	Others	Total
CTIU	3	3	1	7
PTIU	2	-	-	2
Private VTCs	1	1	2	4
Total	6	4	3	13
	50 %	25 %	25 %	100 %

Source: Industry Survey by IKI Research and JICA (2005)

Criteria of Recruitment

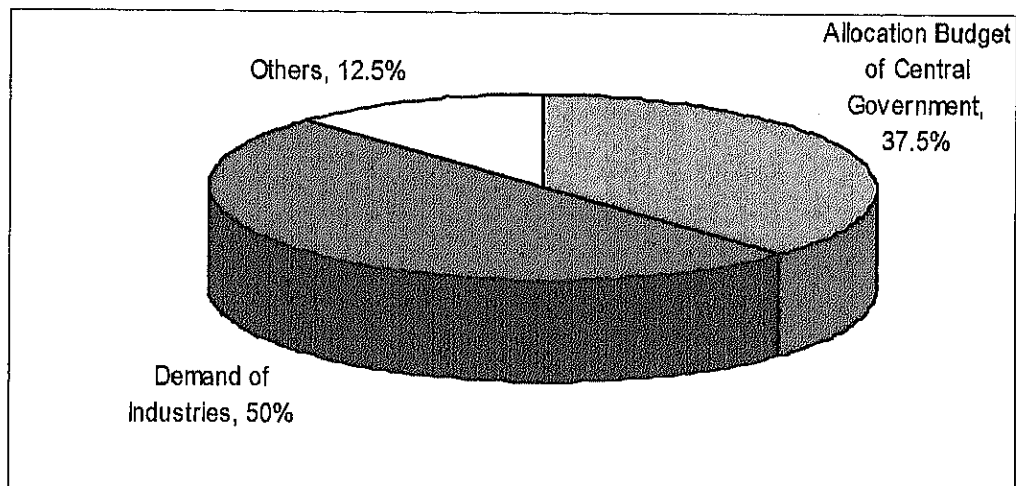
Table 4.7 indicates that training period at VTCs were carried out mostly based on request by interested industries (50%). The requests were generally covered basic training for the new labor and upgrading the skill of the existing labors. Figure 4.5 and 4.6 indicates that the second training period of VTCs was performed according to the allocation budget of annual Budgeted Government Revenues and Expenditures (37.50%).

Table 4.7 Criteria of Recruitment

Institutions	Fiscal Year	Demand of Industries	Others	Total
CTIU	4	4	-	8
PTIU	2	2	1	9
Private VTCs	-	2	1	3
Total	6	8	2	20
	37.50 %	50 %	12.50 %	100 %

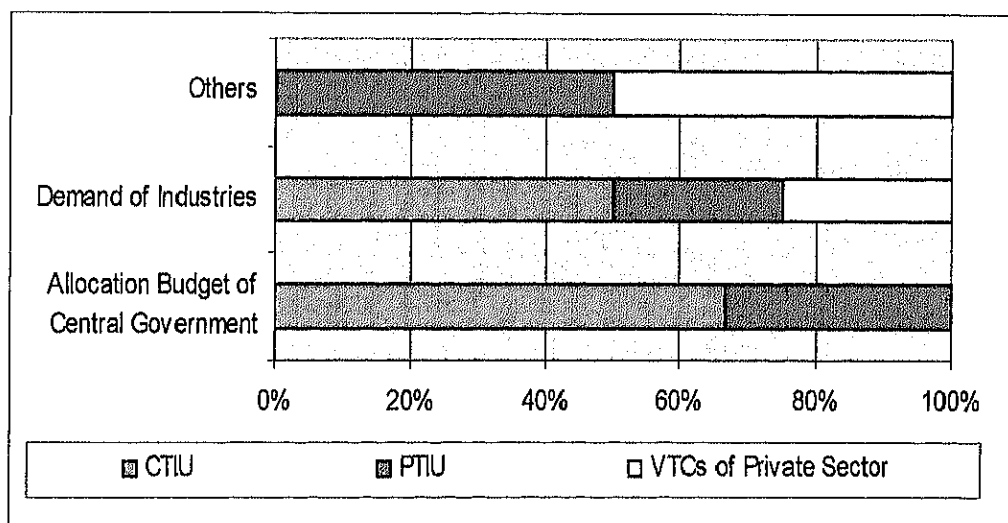
Source: Industry Survey by IKI Research and JICA (2005)

Figure 4.5 Criteria of Recruitment for Trainee by Category



Source: Industry Survey by IKI Research and JICA (2005)

Figure 4.6 Criteria of Recruitment for Trainee by Type of Institutions



Source: Industry Survey by IKI Research and JICA (2005)

Placement of VTCs Graduates

The results of the survey on HRD of VTCs shows that graduates of VTCs were mostly returned to their resourced company. Beside the acceptance by local industries which comprised about 7.28%, the rest of the total were creating their own job as entrepreneur (22.22%). VTCs graduates were commonly employed by industries in their surrounding areas. EEPIS stated, during in-depth interview, that most of the graduates were employed in industries (automotive, electronic, welding, machinery station and agriculture) located around Jakarta, Tangerang, and Bekasi (JABOTABEK), and in Batam instead of East Java, due to salary constraints (Table 4.8).

Table 4.8 Placement of VTCs Graduates

Institutions	Return to Resource Company	Placement/ Accepted in the Company	Placement in Government Institution	Enterprises	Total
CTIU	3	3	-	1	7
PTIU	2	2	-	1	5
Private VTCs	3	-	1	2	6
Total	8	5	1	4	18
	44.44 %	27.78 %	5.56 %	22,22 %	100 %

Source: Industry Survey by IKI Research and JICA (2005)

Number of Graduates

Survey results indicate that the number of training graduates from private VTCs comprised about 93.73% (Table 4.9). In the case of BBW, most of the graduates were of social disciplines coming from their branch organizer. Training graduates of Central VTCs was only 4.3%, slightly higher than that of Provincial VTCs (1.73%).

Table 4.9 Number of Graduates

Institutions	Number of Person Per Year	Total	Location
CTIU	1.008	4,30 %	Local, Inter-Regional
PTIU	407	1,73 %	Local, Inter-Regional
Private VTCs	22.047	93,97 %	Local
Total	23.462	100 %	

Source: Industry Survey by IKI Research and JICA (2005)

4.5 Curriculum and Textbooks of CTIU

Basically, training of VTCs was divided into two categories, namely: Training of Trainer (TOT) and Technical & Non-technical Trainings. Education and training of instructors aimed to improve instructor's skill, while Technical & Non-technical Training was arranged to improve skill of trainees according to their basic interests. Education and training model was grouped into technical (e.g. automotive) and continuous packaged

model. In the case of TIU Surabaya, E & T was consisted of 20% theoretical session and 80% practical work in three categories:

- Induction training = 3 weeks;
- Basic training = 20 weeks; and
- Advance training = 30 weeks.

The in-depth interview results indicates that curriculum of Central TIUs commonly enabled to meet the industry requirements, but regular upgrading was certainly needed to gain better achievement. While curriculum that used in Provincial TIUs was relatively out of date and needed harsh improvement to encounter current industry needs. In regard with textbooks, it was revealed that most of the literatures used were out of date and limited in quantity.

Curriculum of Provincial TIUs

Curriculum of Provincial TIUs was basically relied on the synchronized requirement of Provincial Manpower Offices and local needs on specific competency. Basic requirement of TIUs had partly satisfied, but there was a need of enhancement and refreshment of curriculum to pursue future rapid technology development. It was noticeably experiential during the survey that modules of courses have been arranged to conduct the training. However, it was observed that the updating of literatures was very limited due to financial constraint. Curriculum was entirely prepared by General Planning Division, Ministry of Manpower and Transmigration, to be implemented at each VTC, either at Central Technical Implementation Unit or Provincial Technical Implementation Unit. Regular review on curriculum and textbook was not actually carried out by the institution.

Curriculum of Private VTCs

Curriculum of Private VTCs has been fashioned to anticipate imperative needs of education and training activities. In the case of VTC Cibaduyut and BBW, the conduction of training was structured according to curriculum prepared by Provincial Industry and Trade Offices. It was noted that modules supported the curriculum, but barely updated to suit the demand of latest technology. However, since the private VTCs performed the real business, they intended to update modules and other program activities to pursue the current technology necessity. Education and training was generally consisted of 20% theoretically session and 80% practical work.

4.6 Facilities and Equipments

In-depth interview results conducted in Central TIU indicates that the most of existing facilities and equipments were old and out of date to be used for training. It was noted

during visitation to the location that some equipments were made in 1973, which is believed to be out of date to the latest technology. Similar problems were observed on facilities and equipments at Provincial TIU whereby almost half of the equipments were considered out of date. In the contrary, better facilities and equipments were occupied by private VTCs. In the case of Bosowa VTC, the facility was well equipped (Table 4.10).

Table 4.10 Condition of Facilities and Equipments of VTCs

Institution	Facilities/Equipment	
	Conditions	Expected Solution
CTIU		
Surabaya VTC	Good	-
Makasar VTC	Good	-
CEVEST Bekasi	Too old (made in 1973)	Renewal
Bandung	Out of date	Upgrading
PTIU		
Surabaya VTC	Out of date	Upgrading
Bali VTC	Too old	Renewal
Private VTCs		
Cibaduyut	Good, insufficient	Procurement
BBW	Good, insufficient	Procurement
Bosowa	Excellent	

Source: Industry Survey by IKI Research and JICA (2005)

4.7 Human Resources Qualification of VTCs

The terms commonly used for teaching staff in the VTCs under the Ministry of Manpower and Transmigration are instructors or trainers. Therefore, for the purpose of this report the study Team will use the term instructors of trainers to cover all teaching staff.

In term of qualification, the survey results reveal that most of the instructors in VTCs are degree holders (51.29%) including Bachelor, Master, and PhD (Table 4.10). Diploma holders comprised about 20.17% and other (Junior High School and Senior High School) about 28.54%. Analysis of the qualification by type of the institution reveals that central VTCs has the highest proportion of lecturers/instructors (56.65%) followed by provincial VTCs (27.25%) and private VTCs (16.10%). The survey results indicate that private VTCs revealed to be effective in functioning human resources. Bachelor, Master, and Doctoral Degree holders were commonly employed as director, head of division, or instructors. JHS/SHS certificate holders were employed as administration staff, whereas Diploma holders were recruited as extension officer, operator, or assistant of technical training. VTCs frequently conducted technical training such as automotive, electronic, and construction. In the case of Bali VTI, in accordance with local potency, conduction of tourism training was typically carried out (Table 4.11).

Table 4.11 Education Level of Instructors/Lecturers

Institution	JHS/SHS	Univ Graduates Bachelor/Master/PhD	Diploma	Total	
CTIU	84	101	79	264	56.65%
PTIU	19	103	5	127	27.25%
Private VTCs	30	35	10	75	16.10%
Total	133 28.54%	239 51.29%	94 20.17%	466	100 %

Source: Industry Survey by IKI Research and JICA (2005)

Recruitment Method of Instructors/Lecturers

VTCs recruited instructors/lecturers in a number of ways. Normally, recruitment of lecturers/instructors was conducted by proposed recommendation from regional to central government. Through the conventional method, occasionally took time, to be promptly realized due to long bureaucracy and many other obstacles. The survey results reveal that 27.27% of the lecturers requested to central government, and 18.18% was conducted through official recruitment. However, Table 4.12 indicates that lecturers were mainly recruited through other method. In the case of CEVEST Bekasi, recruitment of the instructors/lecturers was conducted through National Official Administration Bureau. VTI Surabaya collaborated with Provincial National Education Office in the recruitment process assisted by University in Malang or Surabaya.

VTI Bali frequently collaborated with Education and Training Station of Department of Manpower, Bosowa VTI conducted the process internally and BBW recruited instructor/lecturer through their branch organizer.

Table 4.12 Lecturers/Instructors Recruitment Method

Institution	Lecturer Recruitment Method					%
	Outsourcing	Proposed to Central/Provincial Gov.	Officials	Others	Total	
CTIU	1	2	2	1	6	54.55%
PTIU				2	2	18.18%
Private VTCs		1		2	3	27.27%
Total	1 9.10	3 27.27	2 18.18	5 45.45	11	100 %

Source: Industry Survey by IKI Research and JICA (2005)

CHAPTER 5

POLYTECHNICS

5.1 General

Objectives

The objective of Polytechnic program is to generate professional human resources that has high competency on their optional job position. In the case of POLMAN Bandung, the objective of the program is mainly to develop the institution as a model as well as center for development and implementation of education and training for instructors and manpower both in services and manufacturing industries.

Function

Polytechnic is an education institution that carries out applied educational programs in various study programs. Applied education is specialized on industry requirement oriented. The main objective of Polytechnic programs is to support new industry development and improve current industry quality. The specialized educational program is expected to produce skillful labor force. Currently, Polytechnic programs consist of Diploma 1, Diploma 2, Diploma 3, and will be upgraded to Diploma 4 programs, within 1 to 4 years period.

Polytechnics programs have been enormously developed due to the fact that some advantages were attained as the following:

- Lesson period is critically controlled and monitored through a positively fixed system;
- High bargaining position of the graduates to fulfill job position in industries since they are more skillful and professional; and
- Graduates could upgrade their education to the higher level.

Management System

On tutorial management system, Polytechnics establish a packaged credit system as compulsory tutorial system whereby all subjects are offered in each academic year and applicable to all department within the institution. To assist educational programs the students have to complete the compulsory subjects in each semester both theory and practical work. The attendance of students is tightly controlled and monitored daily, and applied similarly to each subject, which will determine the completion of their study.

Mid Term plan of the institution covering:

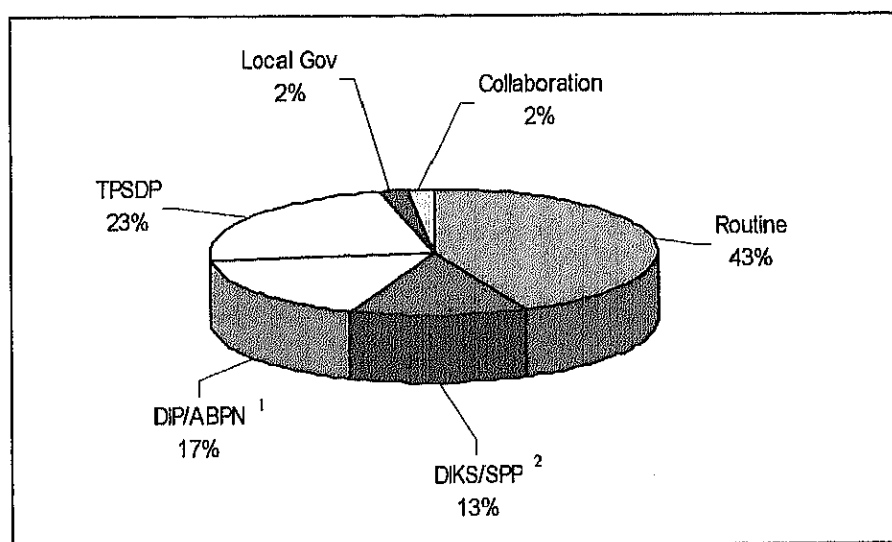
- To establish strong collaboration with industry thus Link and Match system can be optimally applied; and
- To develop an excellent and optimal collaboration with stakeholders, which consisted of government, industry, community, and other universities and polytechnic.

Long Term plan of the institution covering:

- To reduce gap between educational institution and employment market;
- To empower and/or collaborate polytechnic potencies with working partner to support HRD;
- To synergize the polytechnic objectives with national development in technology/industry; and
- To potentially produce and fulfill working opportunities and enable to compete during globalization era, therefore, enable to reduce unemployment.

5.2 Budget Allocation

Figure 5.1 Expenditure of Polytechnics



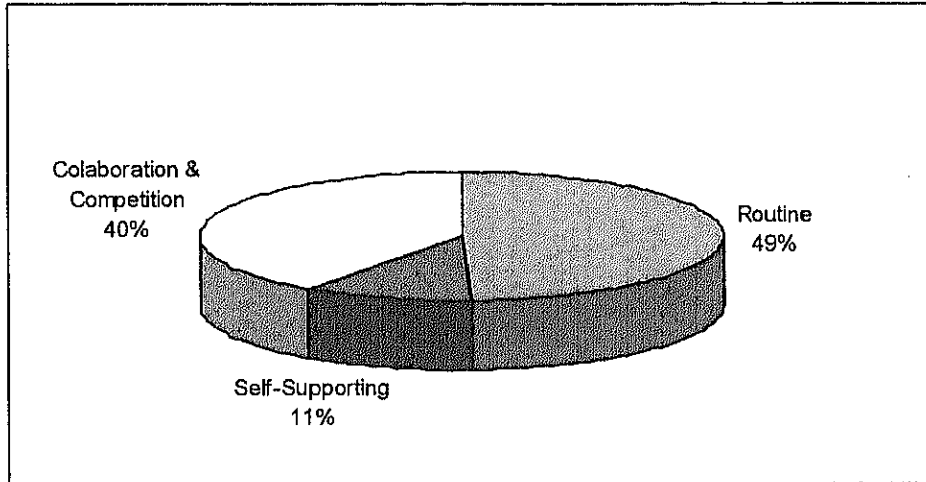
Source: Industry Survey by IKI Research and JICA (2005)

Notes: ¹The Budgeted Government Revenues and Expenditures

²Supplemented Activities Content List/Education and Development Contribution

Figure 5.1 indicates that allocation of expenditure was mainly proposed for routine expenses (43%) followed by expenses on TPSDP (23%). Expenditure on DIKS/SPP and DIP/APBN comprised about 13% and 17%. The least expenses was utilized for local government (2%) and collaboration with the third party.

Figure 5.2 Revenue of Polytechnics



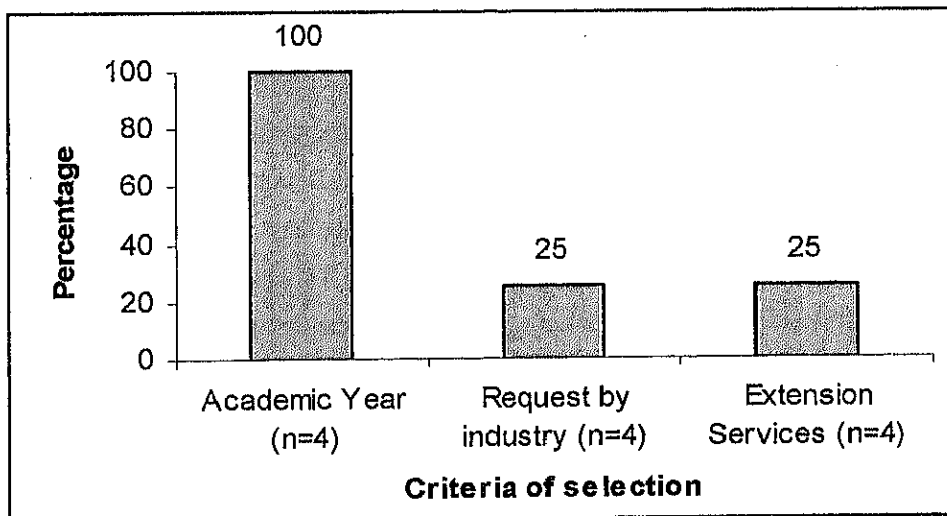
Source: Industry Survey by IKI Research and JICA (2005).

5.3 Trainees

Methodology of Selection

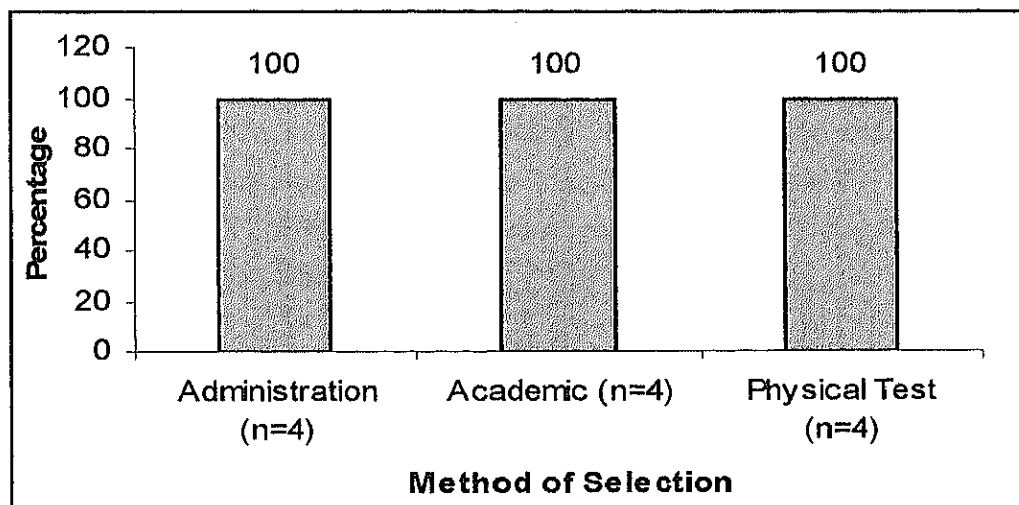
Polytechnic in Indonesia mainly conducted the selection of its new students according to academic year, only 25 percent was conducted through incidental programs according to the needs and request by industries or extension services (Figure 5.3). According to the method of selection, polytechnic conducted three different type of test comprising of: administration, academic, and physical tests (Figure 5.4).

Figure 5.3 Criteria of Selection for Trainee



Source: Industry Survey by IKI Research and JICA (2005)

Figure 5.4 Method of Selection



Source: Industry Survey by IKI Research and JICA (2005)

Qualification of Trainee

Qualification of trainee for polytechnic comprising:

- Good performance with good personality person;
- Graduate from Senior High School or Technical High School, with a maximum age of 24 years old; and
- Not a disabled person.

Placement of Graduates and Alumni

To support education and training, polytechnic performed practical work both in-house and external training/practical programs. External practical were conducted as PKL (Practical Field) and study visit to related company according to their specialization. PKL was classified as a compulsory subject that was divided into 3 time series. In the first years, it was only held one day aiming to introduce the actual job to the student. In the second semester students were subjected to conduct the PKL for about 1-2 and 3-6 months, respectively. PKL was not only to experience the work of the real industry with in-house practical and theory, but also to obtain data for writing up the Final Assessment Report. Besides, there were apprenticeship program about one to two semesters in related companies.

Alumni of polytechnic until 2004 in average (n=2) was 5453, and spread out at various placements such as: in country and overseas; private industries and government institutions. The in-depth interview results indicate that in the case of PNB, the average waiting period was about three months and some students successfully employed in the industry where they held the apprenticeship program previously.

In the case of Surabaya Polytechnic, most of the alumni were employed in the electronic industry in Riau (Batam Island) and JABABEKA Industrial Estate. Whereas, alumni of Polman Bandung were mainly employed by industries in West Java. The main industry sectors of employment for alumni are electronic (POLMAN Bandung, Polytechnic Surabaya and Polytechnic Makassar), automotive (POLMAN Bandung and Polytechnic Makassar), telecommunications (Polytechnic Surabaya), information technology (Polytechnic Surabaya and Polytechnic Bali), vessel engineering (Polytechnic Surabaya), tourism and business (Polytechnic Bali).

5.4 Curriculum

In line with technology development and industry/stakeholders requirements, polytechnics have revised competency based curriculums in accordance with Ministry Act No. 232/O/2000, whereby all subjects are divided into five groups, namely: Personality Development Subjects (MPK), Skilled Education Subject (MKK), Working Specialization Subject (MKB), Working Behavior Subjects (MPB), and Socialization and Community Subject (MBB).

Each grouped subject occupies certain target levels in accordance with its education. In general, the subjects group aims to establish, improve, and strengthen applied technology comprehension in certain skilled field.

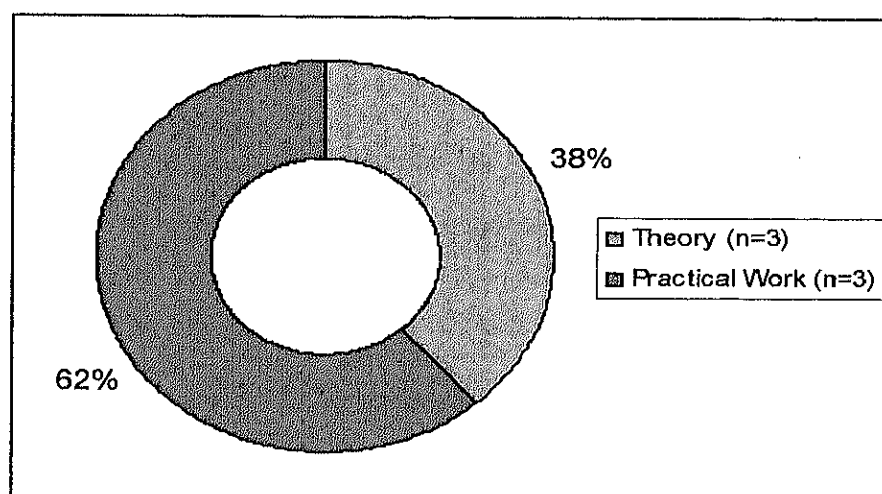
Details of subjects group comprising:

- Personality Development Subjects: consist of relevant subjects, which aiming to visionary enrichment and deepen intensity of understanding;
- Skilled Education Subject: consist of relevant subjects aiming to strengthen understanding, enlarge visionary competency on science according to competitive and comparative superiorities of its operation;
- Job Specialization Subject: consists of relevant subjects, aiming to strengthen understanding, enlarge visionary on working specialization according to regulation in the community, for all study programs;
- Working Behavior Subjects: consists of relevant subjects aiming to strengthen understanding, enlarge visionary on working behavior according to regulation in the community, for all study programs; and
- Socialization and Community Subject: consists of relevant subjects aiming to strengthen understanding and realization of the community regulation, both national and global which could limit constraint working opportunities according to their competency.

Education Program

The survey results indicates that minimum 110 credits must be deliberately passed to complete the degree, or at maximum 120 credits that are distributed in six semesters, or can be taken within six semesters to a maximum of 10 semesters. One academic year consists of two semesters with total session time at least 16 weeks per semester; and Session composition was divided into 62% practical work and 38% theory, session as illustrated in Figure 5.5.

Figure 5.5 Composition of Session



Source: Industry Survey by IKI Research and JICA (2005)

5.5 Facilities and Equipment

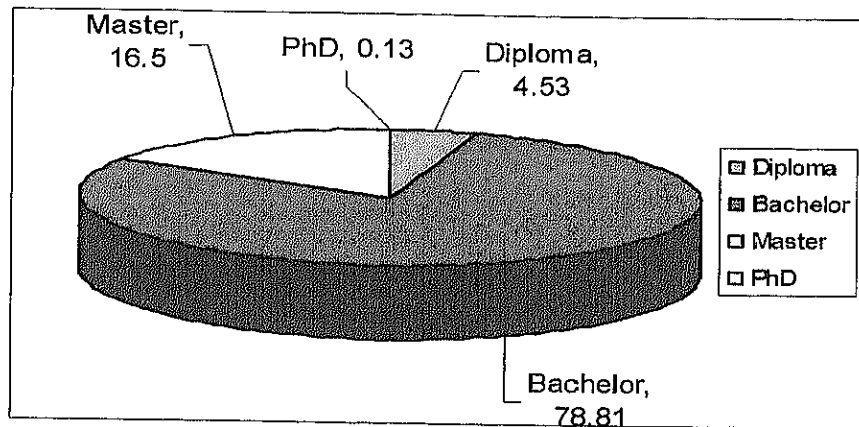
Most of the equipment used in the surveyed polytechnics are either provided by the ministry or partly provided by donor agencies. Some equipment was also provided by local industry. List of facilities and equipments of surveyed polytechnics is illustrated in Annex 3. Most of the facilities and equipments were properly maintained according to the standard system/procedures.

5.6 Lecturers

Qualification and Allocation of Lecturers

Qualification of lecturer in polytechnic according to degree is revealed in Figure 5.6. The survey results indicate that most of the lecturers' degree was Bachelor (78.81%), followed by Masters holders (16.5%), Diploma holders (4.53%) and PhD holders (0.13%), as illustrated in Figure 5.6.

Figure 5.6 Distribution of Lecturer Qualification

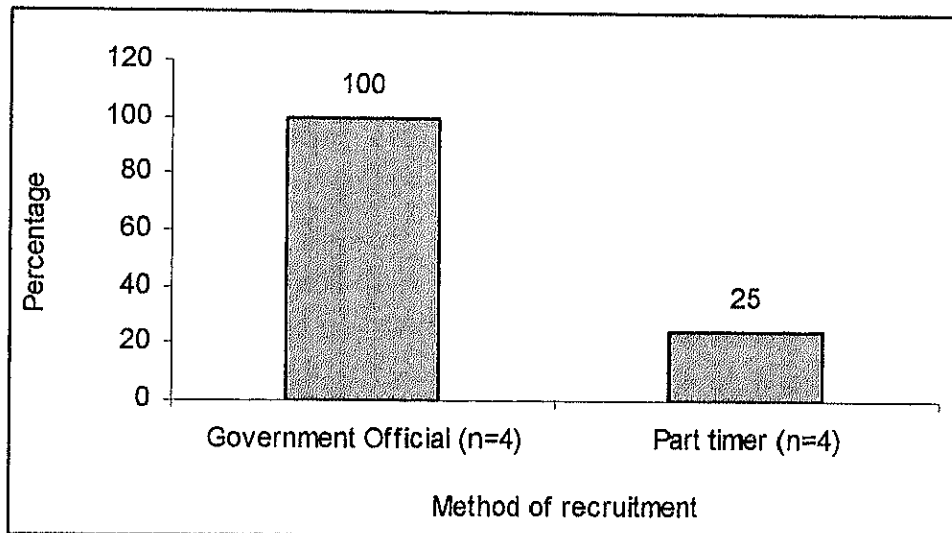


Source: Industry Survey by IKI Research and JICA (2005)

Method of Recruitment of Instructors/Lecturers

Polytechnic recruited their instructors/lecturers mainly through government guidelines and regulations (Figure 5.7). However, part timer instructors/lecturers were also recruitment annually accordingly to the needs of the institutions.

Figure 5.7 Method of Recruitment of Instructors/Lecturers



Source: Industry Survey by IKI Research and JICA (2005)

CHAPTER 6

INDUSTRY SURVEY

6.1 Industry Survey Findings

The Study Team has conducted a survey to understand the training needs and requests from industries and industrial associations. Five CCIs, four EAI, 10 Japanese MNCs, 10 Non-Japanese MNCs and 20 Local Companies were either contacted, interviewed or surveyed by questionnaires. As at the end of March 2005, fortunately eight industrial associations and all companies have responded, thus giving a response rate of 96%. Table 6.1 demonstrates the survey status and response rates.

Table 6.1 Industry Survey Status and Response Rates

Industry Survey	Number of Companies/Association Contacted	Number of Companies/Association Responded	% Response Rate
Japanese MNCs	10	10	100
Non-Japanese MNCs	10	10	100
Indonesia Companies	20	20	100
CCIs	5	4	80
EAI	4	4	100
Total	49	48	96

Source: Industry Survey by IKI Research and JICA (2005)

Analyses of the respondents by their main activities indicates that the Indonesia companies are engaged in construction (20.0%), agro-industry and cosmetics (20.0%), textile manufacturing (15.0%), electronics/electrical (10.0%), steel/fabricated metal (10.0%), chemicals/rubber/plastics (10.0%), ceramics and furniture (10.0%) and automotive (5.0%). About 50.0% of the Japanese MNCs are engaged in chemicals/rubber/plastics, and each of 10.0% are in construction, electronics and electrical, automotive, tourism, and other manufacturing activities. In the case of Non-Japanese MNCs, it was observed that 30.0% are engaged in steel and fabricated metal as well as agro-industry and cosmetics, and each of 10% are in chemical/rubber/plastics, automotive, tourism and other manufacturing (Table 6.2).

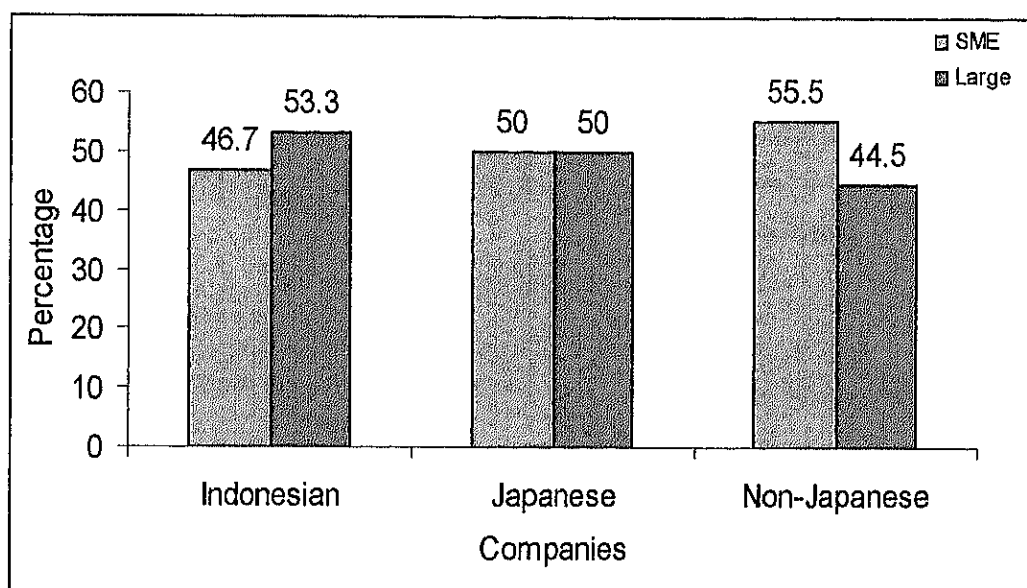
Table 6.2 Distribution of Respondent by Main Activities and Ownership

Main Activity	Indonesian Companies	Japanese MNCs	Non-Japanese MNCs
Construction (%)	20	10	-
Steel, Fabricated Metal (%)	10	-	30
Electronics, Electrical (%)	10	10	-
Chemical, Rubber & Plastics (%)	10	50	10
Textile Manufacturing (%)	15	-	-
Automotive (%)	5	10	10
Agro-industry & Cosmetics (%)	20	-	30
Ceramics and Furniture (%)	10	-	-
Tourisms (%)	-	10	10
Other Manufacturing (shoes, pearl) (%)	-	10	10
Total	100%	100%	100%

Source: Industry Survey by IKI Research and JICA (2005).

Analysis by size and ownership of industry surveys indicates that 53.3% of Indonesian companies are classified as large companies (Figure 6.1). In the case of Non-Japanese and Japanese MNCs, large companies accounted for about 55.5% and 50.5%, respectively. The classification of the company was made based on definition given by Indonesia Statistical Bureau.

Figure 6.1 Distribution of Respondent by Size and Ownership



Source: Industry Survey by IKI Research and JICA (2005)

The survey on employment by education, size and ownership shows that most of the employee holds an education level between Junior High School and Senior High school for Indonesian companies (73.78%), Non-Japanese companies (74.0%) and Japanese companies (36.11%), as illustrated in Table 6.3. Only 7.16% of the employee in Indonesian companies graduated from VTC/Is.

Table 6.3 Employment by Education, Size, and Ownership

Industry	JHS/SHS (%)	Diploma/Vocational (%)	Graduates/ Postgraduates (%)
Indonesian Companies	73.78	7.16	19.06
Japanese MNCs	36.11	29.12	34.77
Non Japanese MNCs	74.00	17.00	9.00

Source: Industry Survey by IKI Research and JICA (2005)

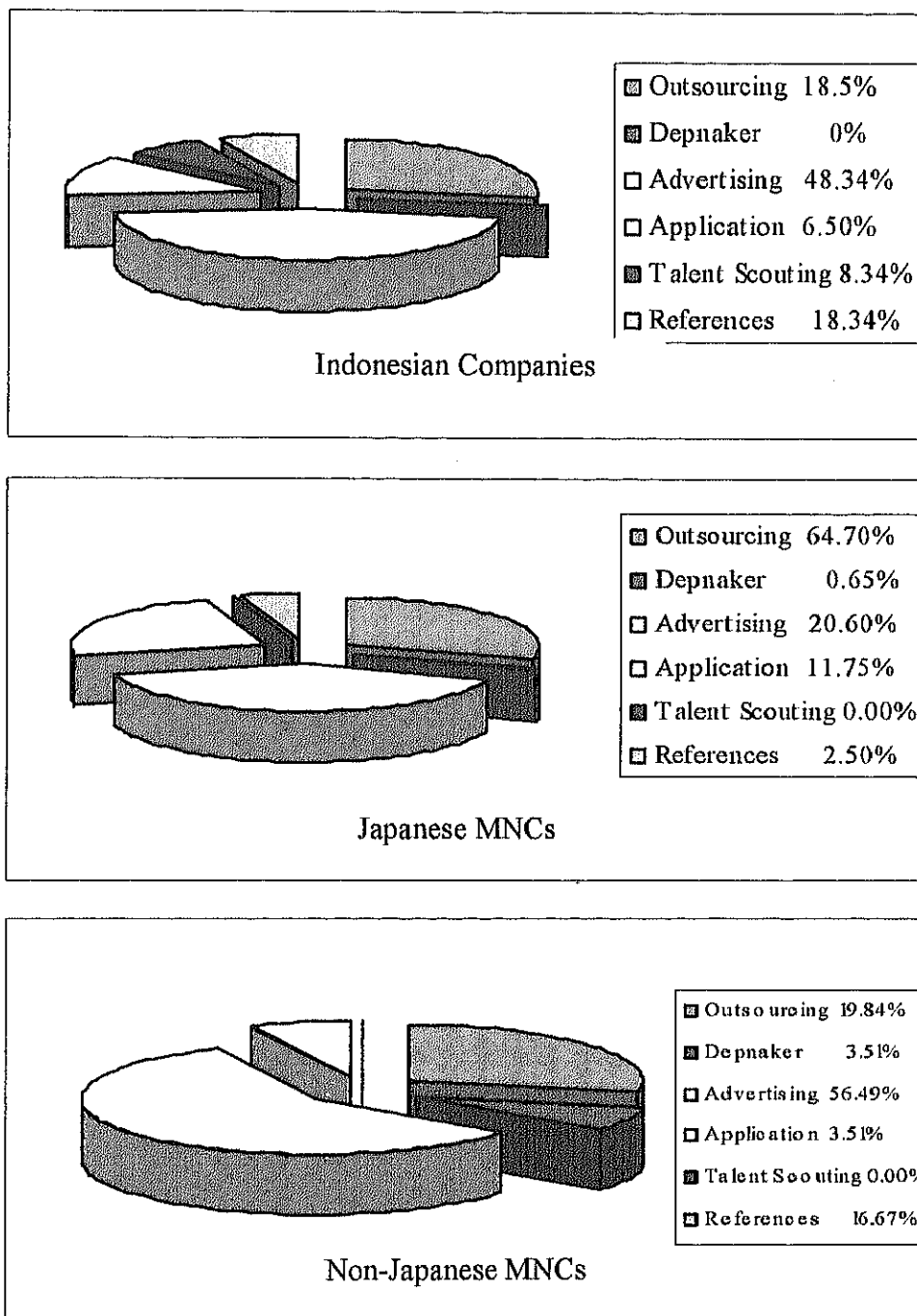
Notes: JHS ~ Junior High School

SHS ~ Senior High School

The analysis of recruitment method of their employees for respondents from industry indicates that Indonesian companies (48.34%), and Non-Japanese firm (56.49%) recruited their workers mainly through advertising. In the case of Japanese MNCs, most of their employees were recruited through outsourcing (64.7%). The second method of

recruitment for Indonesian companies and Non Japanese MNCs was through outsourcing, ranged from 27 - 29.4% (Figure 6.2).

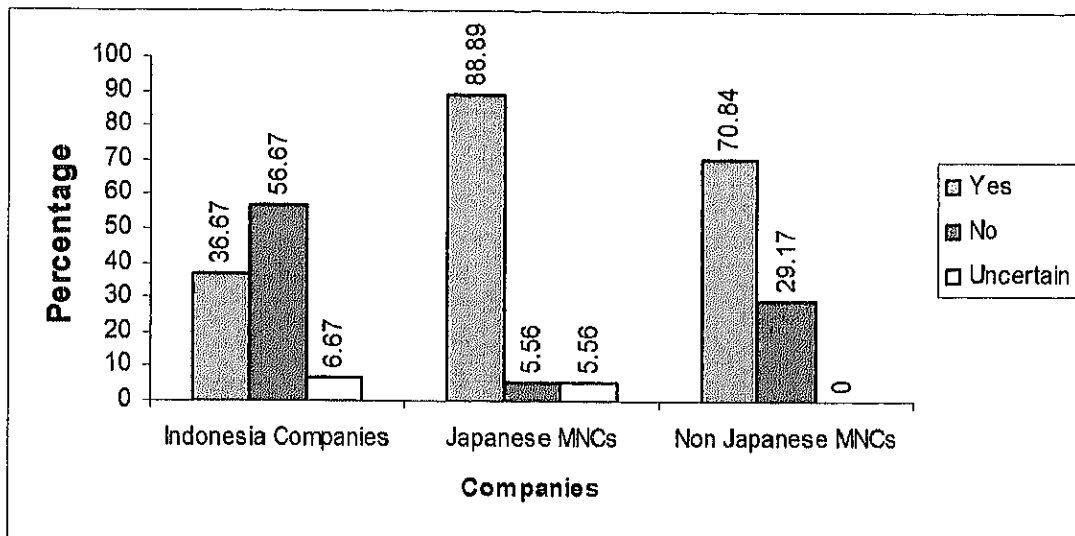
Figure 6.2 Recruitment Methods in Indonesian, Japanese, and Non-Japanese Companies



Source: Industry Survey by IKI Research and JICA (2005)

Most of respondents of Indonesian companies (56.67%) stated that the formation of their employees did not met their expectation. However, both Japanese MNCs (88.89%) and Non-Japanese MNCs (70.84%) stated that their expectation were mainly achieved (Figure 6.3).

Figure 6.3 Employment Formation in the Companies



Source: Industry Survey by IKI Research and JICA (2005)

Analysis of the industry survey shows that training in house on management administration and technical activities was conducted by Indonesian companies, Japanese MNCs and Non-Japanese MNCs. Among the training by category, most companies carried out management training including Internal Management (67.5%), Good Manufacturing Practices (30.0%), and Total Quality Management (27.5%). For technical training, the main training in house was on operator training (25%), personality (10%), electronic (5%), computer (5%), English language (5%) and others (Table 6.4).

Table 6.5 summaries the type of proposed training by industry companies that are relevant to the industry needs, covering: internal management (47.5%), technical aspects (32.5%), marketing (22.5%), and others (70%) according to the internal needs and necessities.

To wrap up the industry survey, the respondent were asked to indicate their expectation and criticisms on human resources certified by the existing VTC/Is in Indonesia. The companies expectations include needs of capable workers and ready to be employed (55.0%), improvement of competency and leadership (40.0%), improvement of attitude/Good manner (22.5%), requirement of overseas training (Japan, Malaysia, etc) (7.5%), and improvement of language proficiency (7.5%) and apprentice program (7.5%), as indicated in Table 6.6.

The criticisms and suggestion were made by the industry survey on urgent requirement on advanced training (45.0%), performances on weakness on skills and improper attitude/behaviors of workers (37.5%), low motivation achievement (20.0%), and enormous requirement of national and international certifications (5.0%).

Table 6.4 Relevant Training of Industry¹

Type of Training	Indonesia Firm (n=20)	Japanese MNCs (n=10)	Non Japanese MNCs (n=10)	Total (%)
Management:				
Good Manufacture Practices	3	7	2	30
HACCP	1	0	1	5
ISO	1	0	3	10
TQM	8	1	2	27.5
OHSAS 18001	1	0	1	5
Internal Management	15	8	4	67.5
Administration:				
Finance/FINON/Tax	4	0	0	10
Marketing	4	2	4	25
Technical:				
Operator	7	2	1	25
Boiler	0	1	0	2.5
Electronics	1	1	0	5
Color Composition	0	1	0	2.5
Drawing Construction	1	0	0	2.5
Surveying	1	0	0	2.5
Interior Design	1	0	0	2.5
Computer	1	0	1	5
English	1	0	1	5
Personality	1	0	3	10
Medicinal Plant	1	0	0	2.5
Guide License	0	1	0	2.5
Production	0	0	1	2.5
Motivation	0	0	1	2.5
Chemical for Industry	0	0	1	2.5
Silver	0	0	1	2.5

Source: Industry Survey by IKI Research and JICA (2005)

Notes: ¹Number of Companies conducted training in house

Table 6.5 Proposed Training by Industry Companies¹

Type of Training	Indonesian Firms (n=20)	Japanese MNCs (N=10)	Non Japanese MNCs (n=10)	Total (%)
Management:				
Internal Management	9	6	4	47.5
Marketing	4	4	1	22.5
Attitude	0	1	1	5.0
Accounting	1	0	1	5.0
Quality	1	0	0	2.5
HACCP	2	0	0	5.0
Administration:				
Communication	0	1	0	2.5
Finon/Finance/Fax	2	0	0	5.0
Technical:				
Computer	0	0	1	2.5
Basic Module for Construction	2	0	0	5.0
Other Technical aspect	7	6	0	32.5
Internal needs and Necessity	15	9	4	70.0
Leadership	1	0	0	2.5
Design	1	0	0	2.5
Food Safety	1	0	0	2.5

Source: Industry Survey by IKI Research and JICA (2005)

Notes: ¹Number of Companies proposed training in house

Table 6.6 Expectations and Criticisms of Industry Companies¹

Expectation and Criticisms	Indonesian Companies (n=20)	Japanese Companies (n=10)	Non-Japanese Companies (n=10)	Total (%)
Expectations:				
1. Needs of capable workers and ready to be employed	14	4	4	55.0
2. Requirement of overseas training (Japan, Malaysia, etc)	1	1	1	7.5
3. Improvement of language proficiency	1	2	0	7.5
4. Improvement of competency & leadership	10	4	2	40.0
5. Improvement of attitude/Good manner	5	3	1	22.5
6. Apprentice program	0	0	3	7.5
Criticisms & Suggestions:				
1. Advanced training requirement	11	6	1	45.0
2. Weakness in skills and improper attitude/behaviors	6	6	3	37.5
3. Achievement motivation & leadership	2	3	3	20.0
4. Requirement of national and international certification	0	1	1	5.0
5. Others	1	1	0	5.0

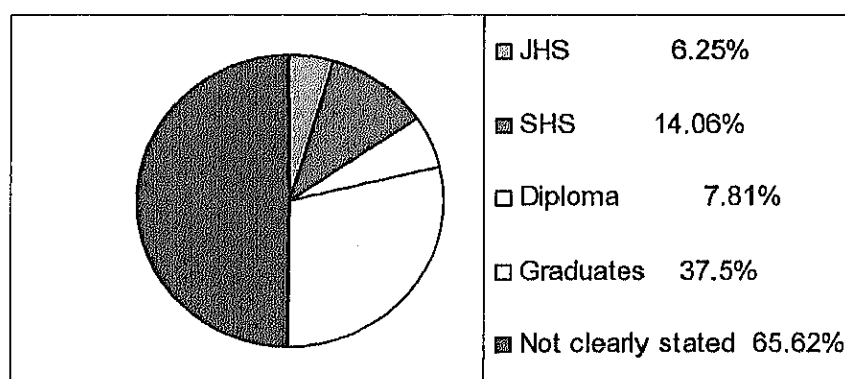
Source: Industry Survey by IKI Research and JICA (2005)

Notes:¹Number of Companies stated their expectations and criticism

6.2 Industry Association Survey Findings

Analyses of the employment of the Industry Association by educational level indicates that most of the employee holds graduate degree (37.5%), followed by Senior High School (14.06%), diploma (7.81%), and Junior High School (6.25%), as illustrated in Figure 6.4. Unfortunately, 65.62% of the Industry Association respondents did not clearly state the qualification of their employees.

Figure 6.4 Employment by Educational Level



Source: Industry Survey by IKI Research and JICA (2005)

Analysis of the Industry Association survey shows that the relevant training were mainly: on public relation and industrial relationship (63.0%), as well as new entrepreneurships and safety (50.0%). Nine other relevant topics of training was also carried out, covering: Leadership (38.0%), management (25.0%), intellectual right (25.0%), computer (25.0%), English Language (25.0%), export and import (25.0%), design management (0.96%), training on presentation (13.0%), heavy equipment (13.0%), and design management (13.0%) as indicated in Table 6.7.

Table 6.7 Relevant Training in Industry Associations¹

Type of Training	CCIs ² (n=4)	EAI ³ (n=4)	Total (%)
1. New entrepreneurship	3	1	50
2. Public relation	3	2	63
3. Management	2	0	25
4. Intellectual right	2	0	25
5. Computer	2	0	25
6. English language	2	0	25
7. Leadership	2	1	38
8. Safety	2	2	50
9. Industrial relationship	2	3	63
10. Design management	0	1	13
11. Training on presentation	0	1	13
12. Export & import	1	1	25
13. Heavy equipments	0	1	13

Source: Industry Survey by IKI Research and JICA (2005).

Notes: ¹Number of Associations proposed the relevant training

² CCIs =The Chamber of Commerce and Industries

³ EAI^s =The Employer's Association of Indonesia

Table 6.8 summarizes the type of proposed training offered by Industry Associations. The proposed topics are mainly on Entrepreneurship (50.0%) and export & import (50.0%), followed by topics on business management (25.0%), English course (25.0%), tourism (25.0%), team work (13.0%), training for disable (13.0%), and safety (3.13%).

Table 6.8 Proposed Training by Industry Association¹

Type of Training	CCIs ² (n=4)	EAI ³ (n=4)	Total (%)
1. Entrepreneurship	4	0	50
2. Export & Import	4	0	50
3. Business Management	2	0	25
4. English Course	2	0	25
5. Team Work	1	0	13
6. Tourism	1	1	25
7. Safety	0	1	13
8. Training for Disable	0	1	13

Source: Industry Survey by IKI Research and JICA (2005).

Notes: ¹Number of Associations proposed the future training

² CCIs =The Chamber of Commerce and Industries

³ EAI^s =The Employer's Association of Indonesia

The expectations of the Industry Association include the urgent need of training either locally or overseas (6.25%), improvement of labor skill capability (8.75%), improvement of curriculum and program of VTCs (3.75%), requirement of recognition on national and international certification (1.25%), and updating of its (1.25%), as indicated in Table 6.9.

Table 6.9 also summarizes the criticisms and suggestions made by the Industry Association respondents. It was revealed that advanced training and skill capability improvement are critically required (88.0%), business access was insufficient (50.0%), improper skill and attitude of labor needs improvement (75.0%), national and international certifications are urgently required (38.0%), updating of Its (38.0%), as well as program and curriculum for training (25%) are needed.

Table 6.9 Expectations and Criticisms of Industry¹

Expectation and Criticisms	CCIs ² (n=4)	EAs ³ (n=4)	Total (%)
Expectations:			
1. Training overseas/domestic	4	1	63
2. Skill capability improvement	4	3	88
3. Requirement of national & International certification	1	2	38
4. Program & curriculum improvement	1	1	25
5. Updating ITs	3	0	38
Criticisms & Suggestions:			
1. Advanced training requirement	3	4	88
2. Improper skill & attitudes	2	4	75
3. Business access insufficiency	3	1	50

Source: Industry Survey by IKI Research and JICA (2005)

Notes: ¹ Number of Associations stated their expectations and criticisms

² CCIs =The Chamber of Commerce and Industries

³ EAs =The Employer's Association of Indonesia

Chapter 7

CONCLUSION AND RECOMMENDATION

As a conclusion of the baseline survey on vocational training, the Study Team formulates recommendations draws up upon the findings of the earlier chapters as summarizes below.

Vocational Training Centers

Type of Training

- Training system need to be reformed to develop a new system with market/industry oriented. Such system should covers curriculum and training period of each training category. To attain the impractical system, collaborations are needed with related institutions, particularly users/industries, whether training in one category is required (such as welding or tune-up) or continuous packaged system at once;
- The curriculums have to be critically arranged in a proper manner between VTCs and users/industries. Therefore, roles and active participation of associations, industries, related institutions, and universities are primarily required to be accomplished; and
- Need to accomplished national and international certification of training, thus graduate of VTs enable to be employed either at domestic companies or overseas.

Training Budget

- VTCs training budget was mainly obtained from government, consequently the amount and frequency of the approved budget will entirely depend on the government financial plan. Financial support is fairly needed from government, local industries, or overseas grant. Besides, VTCs must proactively build networking, especially expected users or interested trainee from industries;
- There is also a need to gain other additional budget to upgrade and procure new equipment and its maintenance; and
- Salaries of trainers are proposed to be augmented to encourage teaching capacity and enthusiasm.

Trainers/Instructors

- Most trainers of VTCs are relatively close to retirement. Replacement is vitally required and actively mutual collaboration with other concerned institutions, such as universities, government staff, or interested companies is primarily needed to attain the training objective;
- Insufficient number of trainers in the VTCs requires recruitment of new fresh instructors;

- Proficiency and capabilities of the trainers in VTCs occasionally does not match subject requirements. Refreshment training is highly recommended for those instructors to put the objective in place; and
- Salaries of trainers are proposed to be augmented to encourage teaching capacity and enthusiasm.

Facilities and Equipments

- The equipments of VTCs are typically out of date and short in number, so there is an urgent need to upgrade and support procurement of equipments and facilities accordingly;
- The existing equipments occasionally do not match with the obligation current industry development. Need to procure equipment which fitted with the latest technology; and
- Lack of participation of industry on training, especially for procurement of equipment. Need to develop more active collaboration between VTCs and institutions or industries to attain more participation.

Polytechnics

Type of Training

- Education and training systems in polytechnic in Indonesia showed progressive improvement, even though this effort remains to be maintained and developed in the future. Competency based curriculum reflected that polytechnics expanded the system to be the excellent vocational institution in the country. Currently, various programs have been accomplished to match the need of company/industry with graduates;
- Development of excellent systems at each polytechnic would build the fair competition among the polytechnics and the higher education institutions. Parallel with the objectives and functions, polytechnic in Indonesia had successfully run the activities, therefore, need to be enhanced and improved following the future technology;
- Need to accomplish national and international certification of training, thus graduate of polytechnic enable to be employed by either domestic companies or overseas; and
- Need to construct sturdy performance to fight during high competitive era by conducting the education and training in line with market orientation on their curriculum, at lease by offering entrepreneur subjects.

Training Budget

- Polytechnic budget was restricted by new government regulation in regard to higher education institutions that have to search out their own budget to conduct their activities. Recently, government budget was still provided but it will be gradually diminished;
- Competitive budget system was applicable to support polytechnics activities. Therefore, institution with qualified and excellent activities would be able to seek budget definitely easier than others. Currently, budget for polytechnic was focused on renewal and rehabilitation of their facilities and equipments.

Lecturers/Trainers/Instructors

- Most lecturers in polytechnic were relatively capable to support the education systems. However, due to rapid advancement of technology, refreshment training and capacity building of the lecturers must be accomplished either regularly or periodically; and
- Need to develop networking among the polytechnics to collaborate and exchange experiences in information and technology.

Facilities and Equipments

- The equipments of polytechnic were relatively sufficient to support education and training programs on polytechnic. Budgeting system of facilities and equipment procurement were occasionally provided through grant system;
- The existing equipments tended to match with the obligation of current industry development. Proper maintenance is needed for long lasting use and preparation budget is required for renewal with the latest version, which fitted with the most recent technology; and
- Good collaboration with industry and users must be built to meet the needs and supply between the producer and the user.

ANNEX 1
Scope of Work

Annex 1 Scope of Work

Scope of Work For The Baseline Survey on Indonesian Policy on Industrial Human Resources Development Focusing on Vocational Training Institutions

1. Background

The Government of Indonesia stresses the importance of sophistication of industries and transition of its economy to a knowledge-based economy from export - oriented economy, where the basis is on Multi National Companies. The Government of Indonesia also stresses the importance of development of human resource, to obtain high of level knowledge and technology.

In the field of vocational training, JICA has consistently extended cooperation to Indonesia, as represented by cooperation to the Center for Vocational Training Center in Makassar, the Center of Vocational Extension Service Training Center (CEVEST) and Electronic Engineering Polytechnic Institute in Surabaya (EEPIS). Recently, JICA has also dispatched individual experts attached to Ministry of Manpower and Transmigration and Ministry of National Education, Senior Expert and Junior Expert in related fields order to develop capability of lecturers there.

The Government of Indonesia has also emphasized policy on development of human resource and has conducted several measures such as strengthening of capabilities of vocational training institutions and polytechnics.

Therefore JICA decided to conduct Baseline Survey, "Indonesian Policy on Industrial Human Resource Development - Focusing on Vocational Training Institution" in order to gather comprehensive information and data which contribute to the future Japanese Technical Cooperation in the area.

2. Objective

To gather comprehensive information and data for the Japanese Technical Cooperation in the area of Industrial Human Resource Development.

3. Outline of the Survey

3-1 Vocational Institutes to be Surveyed

- Vocational Training Centers/Institutes, Ministry of Manpower and Transmigration;
- Vocational Training Centers/Institutes, local government (province level);
- Polytechnics, Ministry of National Education; and
- Vocational Training Centers/Institutes under the private sector.

3-2 Item to be Surveyed

(1) To gather basic information of policy and program on industrial development from related ministries

- Strategy on industrial human resource development;
- Allocation of the budget for industrial human resource development;
- Position of vocational training center/institute and larger education institute including university in the industrial human resource development;
- Methodology on the estimation of the demand from industry for human resources; and
- Program on promotion of the industrial human resource development by private sector.

(2) To gather basic information of vocational training institutes by documental and interview Baseline Survey

1). General

- Midterm and long tem plan of the institutes;
- Management system;
- Objectives;
- Function; and
- Activities on introduction of place of employment.

2). Budget

- Allocation of the Budget;
- Expenditure; and
- Income from tuition, amount of tuition.

3). Trainees

- Methodology of selection of trainees;
- Qualification of trainees;
- Place of employment of ex-trainees; and
- Alumni.

(3) To analyze curriculum and text books of vocational training institutes by documental and interview Baseline Survey

- To analyze structure, covering area, consistency of curriculum and text books;
- To gather information of procedure on preparation of the curriculum and text books; and

- To analyze curriculum and text books from the point of matching with the needs from industry.
- (4) **To gather information of facilities and equipment in vocational training centers/institutes by documental and interview Baseline Survey**
- Contents (Specification, Manufacturer and so on);
 - Role in the curriculum;
 - Rate of operation;
 - Allocation of expert/lecturer;
 - System for maintenance and so on; and
 - Needs for new facilities and equipment.
- (5) **To gather information of lecturers in vocational training institutes by documental and interview Baseline Survey**
- Qualification of lecturers (experience, educational background);
 - Number and allocation of lecturer and related staff;
 - Method of recruitment of lecturer and related staff; and
 - Method and system of training of lecturer and related staff.
- * The Technical Proposal should contain the plan of the above interview Baseline Survey. The interview Baseline Survey is expected to be conducted at major both national and private vocational Institute/center such as CEVEST, major both national and private Polytechnic School such as EEPIS.*
- (6) **To analyze needs and request from industry by interview and questionnaire Baseline Survey**
- Needs and request from industrial associations such as KADIN, APINDO to the public and private vocational institutes and the government); and
 - Needs and request from private companies (10 Japanese MNCs, 10 other MNCs, 20 Indonesian companies) to the public and private vocational institutes:
 - * To gather information on graduates from vocational training institutes in MNCs;
 - * To gather information on policy of MNCs' employee training and recruitment; and
 - * To gather information on expectation of industry toward government policy on human resource development.
- (7) **To discuss on future direction for vocational training**
- Interview Baseline Survey on related ministries such as Min. of Manpower and Transmigration, Min. of National education, Min. of Industry and Trade, BAPPENAS and so on.

4. Reporting

(1) Inception Report (3 copies)

Inception Report will be submitted by the End of December 2004. JICA Indonesia Office shall provide the Consultant with its comments.

(2) Draft Final Report (3 copies)

Draft Final Report will be submitted by the end of January 2005. The JICA Indonesia Office shall provide the Consultant with its comments.

(3) Final Report (10 copies)

The Final Report will be submitted by the end of February 2005. The JICA Indonesia Office shall provide the Consultant with its comments.

(4) Digital File

Final Report in PDF (Portable Document Format) Adobe Acrobat File will be submitted with a printed report.

- * Format the data in hybrid CD-R
- * The data should be compatible in Windows.

ANNEX 2

List of Person/Institution Interviewed/Met

Annex. 2 List of Person /Institution Interviewed/Met

Table 2.1 List of Persons/Institutions Interviewed in Ministries

No.	Date	Organizations	Name/Position	Contact
1	January 6, 2005	Directorate General for Domestic Manpower Supervision and Settlement, Ministry of Manpower and Transmigration Jl. Gatot Subroto Kav.51, Jakarta	1. Drs. Togarisman Director, Job Training Supervision	
2	January 7, 2005	Directorate General of Higher Education , Ministry of National Education Jl. Sudirman, Jakarta	1. Ir. G. Muh. Arif Djauhari Head of Sub-directorate for Curriculum and Study Program	Tel: 021-5731956 HP: 0812-1102777
3	January 12, 2005	Bureau of Planning, Ministry of Manpower and Transmigration Jl. Gatot Subroto Kav 51, Jakarta	1. Mr. Stanford Head of Training 2. Drs. Supardjo, IIS.MM Head of General Planning Division	
4	February 2, 2005	Center of Fisheries Education and Training, Jl. MT Haryono Kav. 52-53 Pancoran, Jakarta Selatan	2. Dr. Soen'an H. Poernomo, Director 3. Ir. Herry Maryuto, MMA, Head of Operation Division	Tel: +62 21 79180303 Fax: +62 21 7987525 Email: pusediklatkan@hotmail.com
5	February 2, 2005	Agency of Marine Affair and Fisheries Research, Research Center for Marine and Fisheries Product Processing and Socio-Economy MOMAF, Jl. KS Tubun Pctamburan VI, Jakarta	1. Dr. Ir. W. Farid Ma'ruf, M.Sc, Director 2. Dr. Bagus S.B. Utomo, M.App.Sc, Researcher/Scientist	Tel: +62 21 53650158, 53670087 Fax: +62 21 53650518 Email: wdd_farid@yahoo.com
6	February 2, 2005	Department of Agriculture, Agency for Agricultural Human Resources Development, Jl. Harsono RM No. 3 Building D, 6 th Fl, Pasar Minggu, Jakarta	1. Dr. Ir. Soedijanto Padmowihardjo, Head of Agency 2. Dr. Ir. A. Lucky Longdong, M.Ed, Head of Central of Education and Training Agricultural Staff	Tel: +62 21 7817386, 7891064 Fax: +62 21 7891064
7	February 3, 2005	Agency for Social Training and Development MOSA, Jl. Salemba Raya No. 28 Jakarta	1. Tajuddin Noor Staff of Planning Bureau	Tel: +62 21 3103591 Fax: +62 21 3103740
8	February 3, 2005	HRD Deputy, SMCSME Jl. Jend. Gatot Subroto Pancoran, Jakarta Selatan	1. Dra. Hasanah, Staff of Deputy 2. Suhatri Syam, SE, Staff of Deputy	Tel: +62 21 7942887
9.	February 14, 2005	Directorate General for Domestic Manpower Supervision and Settlement, Ministry of Manpower and Transmigration. Jl. Gatot Subroto Kav. 51, Jakarta	1. Drs. Bagus Marjanto, MA Head of Program, System and Method.	
10	February 14, 2005	JICA Expert Ministry of Manpower & Transmigration Jl. Jendral Gatot Subroto Kav 51, Jakarta	1. Mr. Ejiri Takeshi JICA Expert	Tel: 021-5260488 Email: ejiri3104@ebn.net.id

Table 2.2 List of Persons/Institutions Interviewed in Public Sector VTI

No.	Date	Organizations	Name/Position	Contact
1	January 18, 2005	National Vocational Training Development Centre Jl. Jend. Gatot Subroto No.170, Bandung 40275	1. Yunanto, Director of Program 2. Drs.Edi Dawud,M.Si, Marketing Manager	Tel: 022-7330587 Fax: 022-7330587 Email: pemasaran@bd.centrin.net.id
2	January 27, 2005	Surabaya BLKIP, Jl. Dukuh Menanggal III/29, Surabaya 60234	1. Drs. Hariyadi Budiardjo,M.Pd Head of Section of Training & Certification 2. Supardi, S.Pd Marketing Staff	Tel: 031-8290071 Fax: 031-8287532
3	January 19, 2005	Makassar Industry Vocational Training Center, Jl. Taman Makam Pahlawan No. 4 Makassar 90231	1. Ir. Syahrudin Rauf Head of Industry Vocational Training Center 2. Drs. Amir Jufri, M.Pd. Head of Operation Section	Tel: +62 411-442322 Fax: +62 411-441558
4	January 25, 2005	The Bali Province Industry and Tourism Vocational Training Center, Jl. Imam Bonjol No. 603 (Km. 7) Denpasar	1. Drs. I Made Juana Director	Tel: +62 361-755208 Fax: +62 361-755208
5	January 31, 2003	The Center for Vocational and Extension Service Training, Jl. Guntur Raya No.1 Bekasi - 17144	1. Ir. Besar Setyoko, MM Head of CEVEST	Telp. +62 021 - 8841147 Fax. +62 021 - 8841146 Email: cevest@cbn.net.id Website: www.cevest.or.id
6	January 25, 2005	BPT Logam (Metal Industry Technical Service Station, Jl. Raya Trosobo Km 20, Taman Sidoarjo	1. Drs. Achmad Salch Director	Tel: 031-7884333 Fax: 031-7875197

Table 2.3 List of Persons/Institutions Interviewed in Private Sector VTI

No.	Date	Organizations	Name/Position	Contact
1	January 18, 2005	Installation of Footwear SME Development, Jl. Cibaduyut Raya No.1 Bandung	1. Kusrapidi, Head of Training and Development Installation 2. Gungun Runidi MH, Businessman	Tel: 022-54060296
2	January 27, 2005	East Java Women Moslem Association (Bina Bakti Wanita NU), Jl. Raya Darmo 96, Surabaya	1. Maryam Halim, Staff 2. Nour Endah Nizar, Staff	Tel: 031-5622055 Fax:031-5678027
3	January 27, 2005	Indonesia Footwear Service Centre, Jl. Pasar Wisata Tanggulangin, Sidoarjo. Jawa Timur	1. Ali Mas'ud, Manager 2. Sri Astutik, Head of Finance & General Affair	Tel: 031-7096417 Fax: 031-8855149 HP: 081-803162405 Email: ifsc_tanggulangin@yahoo.com
4	January 19, 2005	Bosowa Berlian, Jl. Urip Sumoharjo No. 266 P.O. Box 27, Makassar 90232	1. Mr. Harwan Jaya HRD Division	Tel: +62 411-444444 Fax: +62 411-447744

Table 2.4 List of Persons/Institutions Interviewed in Polytechnics

No.	Date	Organizations	Name/Position	Contact
1	January 20, 2005	Bandung Manufacture Polytechnic (POLMAN) Jl. Kanayakan No. 21, Dago Bandung 40135	1. Casiman Sukardi, Assistant Director for Academic	Tel: 022-2500241 Fax: 022-2502649 Email: casiman@polman-bardy.ac.id
2	January 26, 2005	Electronic Engineering Polytechnic Institute of Surabaya (EEPIS), Jl. Keputih Sukolilo Surabaya 60111	1. Dr. Ir. Titon Dutono, M. Eng Director 2. Gigih, Assistant for Student Affair 3. Ir. Anang Tjahjono, MT, Assistant Director for Industrial Relation	Tel/Fax.: 031-5947280 Fax: 031-5946114 Email: titon@cepis-its.edu Tel: 31-5910040 Fax: 031-5964677 Email: anang_tj@cepis-its.edu
3	January 18, 2005	Ujung Pandang State Polytechnic, Jl. Perintis Kemerdekaan Km. 10 Kampus Tamalanrea Makassar 90245	Ir. Zulmanwardi, M.Si. Assistant Director for Academic Affair	Tel: +62 411-585365, 585367 Fax: +62 411-586043 Email: poltekup@indosat.net.id Website: http://www.poliupp.ac.id
4	January 24, 2005	Bali State Polytechnic, Bukit Jimbaran Campus, Bali 80364	1. Ida Bagus Sanjaya, SE, MM Director 2. Ir. Lilik Sudiajeng, M.Erg. Assistant Director for Academic Affair	Tel: +62 361-701981 Fax: +62 361-701128 Email: poltek@pnbi.ac.id Website: http://www.pnb.ac.id

Table 2.5 List of Persons/Institutions Interviewed in Industry/Industry Associations

No.	Date	Organizations	Name/Position	Contact
1	January 19, 2005	West Java Chambers of Commercial & Industry, Jl. Suniaraja No. 3 Bandung 40111	1. Fini Fardiani, Head of Secretary	Tel: 022-4203301
2	January 19, 2005	West Java Employers Association of Indonesia (APINDO), Jl. Gading Utama K3 Putraco Gading Regency Bandung	1. Teguh Wibowo, Head of Secretary	Tel: 022-7323131
3	January 26, 2005	East Java Chambers of Commerce & Industry (KADINDA), Jl. Bukit Darmo Raya 1, Surabaya	1. Setyo Wantjoro, Executive Secretary 2. Edu Kusdaryanto, Secretary Staff	Tel: 031-7349231-32 Fax: 031-5963673 Email: cs_trans@yahoo.com
4	January 17, 2005	South Sulawesi Chambers of Commerce & Industry, Jl. Jend. A. Yani No. 23 Makassar 90111	1. Mr. Gazali Kahar Deputy of Executive Director	Tel: +62 411-321704 Fax: +62 411-326553 HP: 08164382783 Email: kadinss@indosat.net.id Website: http://www.kadinss.or.id
5	January 20, 2005	South Sulawesi The Employer's Association of Indonesia, Jl. Jend. A. Yani No. 23,	1. H. Rahin Zulkifli Secretary General	Tel: +62 411-324944 Fax: +62 411-873725
6	January 26, 2005	Bali Chambers of Commerce and Industry, Gedung Merdeka Jl. Surapati 7 Denpasar 80232	1. Drs. Komang Ardana, MM., Executive Director 2. Drs. Ketut Kantun, Head of Administration and General Division	Tel: +62 361-233053 Fax: +62 361-227020 Email: kadinda@representative.com
7	January 27, 2005	The Bali Employer's Association of Indonesia, Jl. Menuh No. 1 Denpasar	1. Drs. I Wayan Suweca, Executive Secretary 2. Drs. Panudiana Kuhn, MM., Director	Tel: +62 361-263243
8	January 25, 2005	PT. Maspion, Jl. Kembang Jepun 38-40, Surabaya	1. H. Socharto Assistant of Director	Tel: 031-3530333-3541040 Fax: 031-3533055 HP: 0816-529158 Email: socharto@maspion.com
9	February 16, 2005	PT. Gajah Tunggal Prakarsa, Jl. Hayam Wuruk 28, Jakarta 10120	1. Rudy Hendrawan General Affair and HRD Manager	Tel: +62 21 3854121/3854125 Fax: +62 21 3854119
10	January 24, 2005	PT. KMK Plastics Indonesia, Jl. Jababeka XI, Blok G-10 Cikarang Industrial Estate, Bekasi 17530	1. Ms. Sesti Alnudiarti HRD Manager	Tel: +62 21 8934072-4
11	February 15, 2005	PT. Astra Honda Motor, Jl. Laksda Yos Sudarso Sunter I, Jakarta 14350	1. Agung Hermawan Training Coordinator	Tel.: +62 21 6518080 Fax.: +62 21 6518801
12	February 3, 2005	PT. KAO Indonesia Chemicals, Jl. Raya Tambun Km 42, Tambun Bekasi	1. Ms. Rini Service Center	Tel.: +62 21 88326188 Fax.: +62 21 88324452

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No.	Date	Organizations	Name/Position	Contact
13	February 1, 2005	PT. Hitachi Consumer Products Indonesia, Jl. Letjen. S. Parman, Kav. 37B, Jakarta Barat	1. Dudi Kusmaya HRD Manager	Tel.: +62 21 5603631 Fax: +62 21 53679039
14	February 14, 2005	PT. Fumakilla Indonesia, Jl. Cikini Raya No. 72 Menteng, Jakarta Pusat 10330	1. Hari Sutikno Manager, General Affair and Personnel Dept.	Tel.: +62 21 3147688 Fax.: +62 21 3146787
15	February 11, 2005	PT. Chugoku Paint, Mid Plaza, 8th Fl, Jl. Jend. Sudirna Kav. 10-11, Jakarta	1. Bambang Wisnu HRD Manager	Tel.: +62 21 5700515 Fax.: +62 21 5733787
16	February 15, 2005	PT. Indokoei International, Jl. Sultan Hasanuddin 45 Jakarta Selatan	1. A. Eko Trihatmoko General Affair Manager	Tel.: +62 21 7237620 Fax.: +62 21 72796068
17	February 16, 2005	PT. Goodyear, Bogor	1. Agung Laksmana Public Relation Manager	
18	February 15, 2005	PT. Charoen Phokphan Indonesia, Ancol Barat VIII/I, Jakarta	1. Wahyu Hidayat ODTM Learning Officer	Tel.: +62 21 6912501 Fax.: +62 21 6907324
19	February 14, 2005	PT. Hunter Douglas, Kedoya Center Blok C-6, Jl Raya Perjuangan No 1, Jak-Bar 11530	1. Jatno Finance Manager	Tel.: +62 21 5492525
20	February 15, 2005	PT. Mane Indonesia, Cikarang Industrial Estate Blok V-66 Cikarang Bekasi 17530	1. Ms. Sri HRD Staff	Tel.: +62 21 8937640 Fax.: +62 21 8936485
21	February 16, 2005	PT. Wijaya Karya, Jl. DI Panjaitan Kav. 9, Jakarta 13340	1. Gunawan HRD Manager	Tel.: +62 21 81920808 Fax.: +62 21 8191235
22	February 16, 2005	PT. Krakatau Steel, Wisma Baja, Jl. Gatot Subroto Kav. 54, Jakarta 12950	1. Darmawan HRD and Planning Division	
23	February 15, 2005	PT Pabrik Cat an Tinta "Pacific", Jl. Industri I No. 1 (RE. Martadinata/Volker) Tanjung Priok, Jakarta	1. Adiputra Legal Staff	Tel.: +62 21 4373848
24	February 16, 2005	PT. Betasurya Tatagraha, Jl. Raya Pasar Minggu	1. Ir. J. Sri Sadono Director	
25	February 14, 2005	PT. Lucky Textile Abadi, Jl. Desa Suka Danau Cibitung, Bekasi	1. Thio Eddy Assistant Manager	Tel.: +62 21 8900631 Fax.: +62 21 8900632
26	February 16, 2005	PT. Lucky Indah Keramik, Jl. Hati Suci No. 4, Jakarta	1. Sarino Training Division	Tel.: +62 21 31900653
27	January 31, 2005	PT. Inti Duta Lestari Plasindo, Jl. Rungkut Industri III/22, Surabaya	1. Junie Njoto Export Import Supervisor	Tel.: +62 21 8436717
28	January 28, 2005	PT. Waskita Karya Jl. Biru Laut X Kav. No. 10 Cawang, Jakarta 13340	1. Ir. Djoko Wilopo, MM Head Division of HRD	Tel.: +62 21 8508510 Fax.: +62 21 8508506

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No.	Date	Organizations	Name/Position	Contact
29	January 14, 2005	PT. Bakrie and Brothers Tbk., Wisma Bakrie 7th Fl, Jl. HR.Rasuna Said Kav.B-1, Jakarta 12920	1. Okdes Pendrian HRD Manager	Tel.: +62 21 5250212 Fax.: +62 21 5200361
30	January 11, 2005	PT. Hutama Karya, Jl. Letjen Haryono MT, Kav. 8 Cawang, Jakarta Timur	1. Eddy Djunaedi Head Division of HRD	Tel.: +62 21 8193708 Fax.: +62 21 8196107
31	February 17, 2005	PT. Budaya Mutiara, Jl. Lombok No. 62, Jakarta 10350	1. Ms. Embun Sekretaris	Tel.: +62 21 31908535 Fax.: +62 21 31908537
32	February 17, 2005	PT. Martina Berto (Martha Tilaar), Jl. Gatot Subroto Kav. 74-75, Jakarta Selatan	1. Ms. Dyah D. Orbandini Recruitment and Training Division	Tel.: +62 21 4603717-9 Fax.: +62 21 4606246
33	February 17, 2005	PT. Jaba Garmindo Jl. Sawah Lio II No. 12	1. Yudi Indra, SH Personnel and GA Manager	Tel.: +62 21 6335658 Fax.: +62 21 6337114
34	February 17, 2005	PT. Dunia Usaha Indah Textile, Jl. Mangga Dua Blok D2 No. 26 Jakarta Barat	1. Boni SDM	Tel.: +62 21 6128072
35	February 19, 2005	Oriflame	1. Grace Marketing Manager	Tel.: +62 21 79198089
36	February 25, 2005	PT. Nike Representative	1. Isla Assistant Development Manager	Tel.: 0818-917282
37	March 20, 2005	PT. Inter Family Citratama Jl. Batuyang, Denpasar, Bali	1. Made Nuka Brach Manager	Tel.: 0361-297681
38	March 20, 2005	PT. KBC Bali Jl. Tegal Harum 14, Denpasar, Bali	1. Made Budi Partawan Personal Manager	
39	March 21, 2005	Udayana Lodge Jl. Kampus Unud Bukit Jimbaran, Bali	1. Gede Ori Ariandika Office Manager	Tel.: 0361-261204
40	March 21, 2005	PT. Intaran Indonesia Jl. Mertasari Gg. Sunrise School No.1 Kuta Utara, Badung, Bali	1. Ade Sukarsa HRD Manager	
41	March 22, 2005	PT. Moena Putra Nusantara Br. Penatih, Denpasar, Bali	1. Djatmiko Assistant Manager	Tel.: 0361-461617
42	March 22, 2005	PT. Arpan Bali Utama Jl. Danau Tondano Gg IX, Denpasar	1. Ida Bagus Rai Budassa Direktur	Tel.: 036-286298
43	March 23, 2005	Indi Handicraft Center Jl. Danau Tondano 18 Denpasar, Bali	1. Agus Wirayudha Owner	Tel.: 081-23931665

Table 2.6 List of Persons/Institutions Interviewed in Provincial Government

No.	Date	Organizations	Name/Position	Contact
1	January 17, 2005	Provincial Transmigration and Manpower Service, Manpower Services, West Java, Jl. Sorkamo-Hatta No. 532, Bandung	1. Suharto Karnen, Head of Provincial Services 2. Dra. Lina Marlina, Head Assistant for Training and Certification	Tel: 022-7514598, 7564327 Fax: 022-7564072 R : 022-7565928 HP: 08122005219
2	January 24, 2005	Provincial Transmigration & Manpower Services of East Java, Jl. Dukuh Menanggal VII, Surabaya 60234	1. Anwar Is, Head of Section of Training	Tel: 031-8295578 HP: 0818-322985
3	January 28, 2005	Provincial of Trade & Industry Service of East Java, Jl. Siwalan Kerto Utara II/42, Surabaya	1. Agus Haryadi, Vice of Director 2. Kusnadi	Tel: 031-84321717 HP: 0811-324408

ANNEX 3

Lists of Facilities and Equipments of Polytechnics

Annex 3 Lists of Facilities and Equipments of Polytechnics

Table 3.1 Bandung Polytechnic for Manufacturing (POLMAN Bandung)

Department	Facilities
1. Manufacturing Engineering	Equipment: <ul style="list-style-type: none"> • Lathe Machine • Milling Machine • Grinding Machine • Shaping Machine • Sawing Machine • Copy Milling/Engraving • Drilling Machines • Heat Treatment Furnaces • Sheet Metal Workshop • Welding • CNC Lathe Machine • CNC Milling Machine • Flexible Manufacturing System • Coordinate Measuring Machine (CMM) • Electrical Discharge Machine • Plastic Injection Machine • Press Machine • Vertical Machine Center • Horizontal Machine Center • NC Universal Milling Machine • CNC Vertical Double Column Milling Machine • Cold Wire Cut • Cold Chamber Die Casting Machine Mobile • Maintenance Service Unit
2. Design Engineering	Laboratories and Studio: <ul style="list-style-type: none"> • CAD Laboratory • Pro Engineering Laboratory • Technical Drawing Studios Facilities: <ul style="list-style-type: none"> • Support device and system • All PC Linked by Windows NT server through a LAN operation
3. Foundry Engineering	Laboratories: <ul style="list-style-type: none"> • Chemistry with Optical vacuum emission spectrometer for Fe, Al, Cu based alloy with 35 sets analytical channel (22 elements) • Metallographic with Metal microscope with 50 to 1000X amplifications • Standard molding sand properties • Mechanical and Physical Property Test, Destructive and Non Destructive • CAE Software: AFS Solidification System
4. Manufacturing Automation and Mechatronic Engineering	Laboratories: <ul style="list-style-type: none"> • Electrical Engineering • Analog Electronic • Digital Electronic • Instrumentation and Control • Microprocessor and Interface • Pneumatic and Hydraulic Laboratory • Power Electronic

Table 3.2 EEPIS (Electronic Engineering Polytechnic Institute of Surabaya)

Department	Facilities
	Laboratories: <ul style="list-style-type: none"> • Applied Communication • Applied Electronics • Automatic Control • Basic Electronic • Computer Lab • Digital Electronic, equipped with darkroom for PCB processing • Electrical Circuit • Electrical Power System • Electromechanical Workshop • Multimedia, equipped with 24 hrs internet service • Network System • Preparation • Radio and Microwave • Technical Drawing • PLC Automation • Language Lab

Table 3.3 (1/2) Ujung Pandang State Polytechnic

Department	Facilities
1. Mechanical Engineering a. Mechanical Engineering Study Program	Laboratories: <ul style="list-style-type: none"> • Mechanic • CNC • Maintenance and Repair • Pneumatic and Hydraulic • Multi Media Workshop: <ul style="list-style-type: none"> • Machine • Manual • Welding
b. Study Program Energy Conversion	Laboratories and Workshop: <ul style="list-style-type: none"> • Boiler • Pneumatic Machine • Electric Machine • High Voltage • Refrigeration • Pump Test Rig • Solar System • Energy System • Basic Measurement • Applied Computer • Electric and Pipe Workshop
2. Civil Engineering	Laboratories and Workshop: <ul style="list-style-type: none"> • Civil Computer • Soil Testing Survey • Concrete Testing

Table 3.3 (2/2) Ujung Pandang State Polytechnic

Department	Facilities
	<ul style="list-style-type: none"> • Pneumatic • Structure Simulation • Asphalt Testing • Surveying
3. Electronic Engineering	Laboratories and Workshop:
a. Electric Engineering Study Program	<ul style="list-style-type: none"> • Measurement • Middle Voltage • Electric and Safety • Control and Power Electronic • Lighting Installation • Power Installation
b. Telecommunication Study Program	Laboratories and Workshop:
	<ul style="list-style-type: none"> • Analog • Digital
4. Chemical Engineering	Laboratories and Workshop:
	<ul style="list-style-type: none"> • Chemical Lab • Analytic Lab • Bioprocess Lab • Process Control • Operation • Pilot Plant • Glass Workshop • Mechanical Workshop
5. Business Administration	Laboratories and Workshop:
	<ul style="list-style-type: none"> • Computer Lab • Office Lab • Manual Typing Lab • Electronic Typing Lab • Language Studio
6. Accounting	Laboratories
	<ul style="list-style-type: none"> • Accounting • Multifunction • Accounting Computer • Multimedia

Table 3.4 (1/2) Bali State Polytechnic

Department	Facilities
1. Civil Engineering	Laboratories and Workshop:
	<ul style="list-style-type: none"> • Wood Workshop • Concrete Workshop • Welding Workshop • Material Testing Lab • Surveying Lab • Computer Lab • Studio
2. Mechanical Engineering	Laboratories and Workshop:
	<ul style="list-style-type: none"> • Mechanical Workshop • Pneumatic and Hydraulic Lab • Material Testing Lab. • Automotive Maintenance Workshop • Refrigeration Lab.

Table 3.4 (2/2) Bali State Polytechnic

Department	Facilities
3. Electronic	Laboratories and Workshop: <ul style="list-style-type: none"> • Electric and Mechanical Workshop • Electrical Equipment Maintenance Workshop • Electric Installation Design Lab • Electric Machinery Lab • Electronic and Instrumentation Lab • Microprocessor and Control System Lab. • Physical Lab.
4. Accounting	Laboratories: <ul style="list-style-type: none"> • Accounting Lab • Computer Lab
5. Business Administration	Laboratories: <ul style="list-style-type: none"> • Manual Typing Lab • Electronic Typing Lab • Office Practice Lab • Language Lab • Word Processing Lab • Audio Video Lab • Resources Center
6. Tourism	Laboratories: <ul style="list-style-type: none"> • Travel Bureau Lab • Tourist Information Center Lab • Front Office Lab

ANNEX 4
Questionnaires

Annex 4.1 Questionnaire for Industrial Companies and Associations



JICA STUDY TEAM "Baseline Survey on Indonesian Policy on Industrial Human Resource Development Focusing on Vocational Training Institutions"

NAME OF COMPANY/ASSOCIATION:

1. Business Category: Automotive
 Construction
 Steels
 Chemicals
 Cosmetic
 Agro-Industry
 Electronics
 Plastic and Rubber
 Others:

3. Name of Respondent :

4. Position :

1. State source of labor force working at the institution:

No.	Education Type	Number	
		Male	Female
1	VTC		
2	Junior High School		
3	Senior High School		
4	Diploma		
5	S1		
6	S2		
7	S3		
8	Others.....		

2. State how are the recruitment techniques of labor force conducted at this institution?

- a. Out Sourcing
- b. Ministry of Manpower
- c. Advertisement
- d. Others.....

3. Has the above percentage (No. 1) fulfilled the formation expected by the company/association:

a. Yes, reasons:

.....

b. Not yet, reasons

.....

4. Particularly for labor force from VTC or Polytechnic, has the standard met as expected by the company/association?

a. Yes, reasons

.....

b. Not yet, reasons

.....

5. Training of labor force conducted by the company:

No.	Type of Training	Internal	Period
1			
2			
3			
4			
5			
6			
7			
8			
9			

6. Training of labor force conducted by the company:

No.	Type of Training	Internal/External
1		
2		
3		
4		
5		
6		
7		
8		
9		

7. What is the company's expectation on trained labor force, either graduates of polytechnics or VTCs ?

8. What are the criticisms and suggestions on trained labor force from polytechnics or VTC:

Thank you for your willingness to complete this questionnaire. Please kindly return to:

JICA STUDY TEAM
Up. Made S. Mahendra, PhD
PT. INDOKOEI INTERNATIONAL
Jl. Sultan Hasanuddin No. 45, Blok K-5
Kebayoran Baru, Jakarta Selatan 12160
Email: iki01jkt@rad.net.id
Phone: (021) 7237620
Fax (021) 72796068

Annex 4.2 Questionnaire for VTCs and Polytechnics



JICA STUDY TEAM "Baseline Survey on Indonesian Policy on Industrial Human Resource Development Focusing on Vocational Training Institutions"

NAME OF INSTITUTIONS:

1. Type of Institution : Central TIV Provincial TIV
 Private TIV State Poltek
2. Major activities of Institutions:
 Education and Training Industry/Business
 Training
3. Name of Respondent :
4. Position :

1. State the budget allocation managed by this institution

No	Type of Training	Budget			
		Source		Source from Private Enterprise	
		Central Gov.	Local Gov.	On Job Training	Off Job Training
1					
2					
3					
4					
5					
6					

* Other source:

2. Explain type and allocation of expenses managed by the institution

No	Type	In million rp.
1.	Routine	
2.		
3.		
4.		
5.		
6.		
7.		

3. Explain allocation of revenue budget managed by the institution

No	Type	In million rp.
1.	Government	
2.	Innate-effort	
3.	Private	
4.	Others	

4. State method of selection used for recruitment of education/training participant:

- a.
- b.
- c.

5. State the criteria of recruitment for education/training participant:

- a. Academic year
- b. Demand of business
- c.

6. State placement of alumni in the institution:

- a.
- b.
- c.

7. Number of alumni and placement:

No.	Number of Alumni	Placement Location	Remarks
1			
2			
3			
4			
5			
6			
7			

8. Facilities and equipment owned by the institutions:

No.	Specification	Number (unit)	Manufacturing year	Suitability with curriculum	Time of operation	Allocation to instructor	Maintenance system
1							
2							
3							
4							
5							
6							
7							
8							

9. Explain method of recruitment for instructor applicable to the institution ?
-
 -
 -
 -
 -

10. Please, fill in the below table to explain education level of HR

No	Division	No. of Supporting Staff	Number of Staff		
			S1/S2/S3	Politeknik /D3	SLTA
1					
2					
3					
4					
5					
6					

11. Explain your opinion relating to upgrading of HR quality; especially from the institutions (covering instructor, equipments, training type and budget):

a. Problems:

b. Expectation, vision, and solution according to problems and owned-potency in the future:

Thank you for your willingness to complete this questionnaire. Please kindly return to:

JICA STUDY TEAM

Up. Made S. Mahendra, PhD

PT. INDOKOEI INTERNATIONAL

Jl. Sultan Hasanuddin No. 45, Blok K-5 Kebayoran Baru, Jakarta Selatan 12160

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