

STUDY REPORT ON
HUMAN RESOURCES DEVELOPMENT
(SUMMARY)

MARCH 1987

INSTITUTE FOR INTERNATIONAL COOPERATION
JAPAN INTERNATIONAL COOPERATION AGENCY

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INTRODUCTION

Since the beginning of the 1980's, there has been an increasing interest the world over in Human Resources Development. International institutions and foreign aid organizations in both developed and developing countries are recognizing the significance of Human Resources Development as the foundation for development.

Economic development is accompanied by structural change in industry, which in turn necessitates changes, both quantitative and qualitative, in the work forces of these industries. However, the training offered by traditional schools and vocational training centers in developing countries has not always met the changing needs for human resources. This is due to the fact that human resources development has always been looked at from the standpoint of supply side, and an efficient and effective utilization of trained work force has been neglected altogether. The key to human resources utilization is to establish an effective system in which education, training and personnel management and organizational decision making are mutually reinforced at the enterprise level.

In this study, two perspectives are used to examine Human Resource Development in Thailand. The first, focusing upon a macroeconomic perspective of the labor market in the country, analyses the current situation of the supply and demand for labor and major issues facing them. The second analyses the current demand/supply balances and effective utilization of human resources at the enterprise level. This micro perspective is based on the questionnaires and interviews undertaken at private enterprises and public training and educational institutions.

This report presents a summary of the study findings. It is intended to provide some practical answers to questions which would be raised in the future for developing national policies on Human Resources Development in Thailand and, for that matter, in other developing countries.

I would like to thank the members of the study team for their invaluable work on this exhaustive study. I would also like to extend my appreciation and thanks to Ms. Busaba Kunasirin, assistant professor of Chulalongkorn University, who kindly assisted the study team in conducting a comprehensive questionnaire survey and interviews with company managers on personnel management policies and practices in a large number of Thailand corporations.

Masao Hasegawa
Director,
Institute for International Cooperation
JICA

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Part I. Summary of the Study

1. Major Issues in the Effective Utilization of Human Resources at National Level

1-1 Background: the Economy and the Labor Market

Although the economic growth rate, was approximately 8% in the 1960's, and declined to 5% in the 1980's, the Thai economy has been growing satisfactorily in recent years. The changes in industrial structures during this time have been remarkable. The GDP percentage of agricultural industries has declined drastically, while those of the mining, manufacturing and service industries have risen. Although agricultural produce still accounts for as much as 50% of exports, manufactured products are on the way to becoming a leading export item.

The Thai government has been promoting economic development plans aggressively since 1961. The first two five-year development plans concentrated on agricultural development as well as regional and social development. These plans focused on infrastructural changes and industrialization. The third, fourth and fifth development plans concentrated on the necessary changes in social and economic structures required by, and based upon the relative changes in growth. The sixth development plan, which is currently under way, aims at strengthening economic stability by maintaining the economic growth target as low as 5%, by reducing unemployment problems and by dealing with imbalances caused by regional differences.

In 1985, the population of Thailand reached approximately 52 million. The population increase rate declined steadily from 3% in 1960 to 1.7% in 1985. However, regional differences in population increase are large. For instance, the average annual population increase rate of Bangkok is 3.5%, which is remarkably high, whereas that of the northern part of Thailand stays as low as 1.8%. One of the reasons for this is that although much of the population movement occurs within rural areas, the pattern is shifting rapidly from rural areas to urban areas, and between urban areas, as well.

The working population of Thailand is estimated at approximately 27 million; about 52% of the total population. In 1982, the agricultural work force accounted for 68.4% of the population, while the manufacturing accounted for only 8.1%. A major characteristic of the working population of Thailand is that it fluctuates dramatically from one season to another. For example, the difference between the working population in the agricultural off-season (the dry season) and the agricultural season (the wet season) is four to seven million,

respectively. A great change in the distribution of Thailand's working population is expected in the future because of rapid urbanization.

With the rapid increase in Thailand's population over the past twenty years, the demand for education has grown: elementary school attendance has reached almost 100%. However, enrollment in secondary and higher education is much lower; less than 5% complete higher education. Education outside the school system is readily available and there are many social programs for vocational education and training offered as well. However, many problems remain, such as, accommodating the changing demands of the labor force.

1-2 Changing Imbalances in Labor Supply and Demand

(1) Quantitative Discrepancies

Due to a recent drop in the population increase rate, the population of the younger generation in the late 1980's will also drop. This means that the supply of labor will balance with the demand, in the long run. As a result, a quantitative gap in the supply and demand of human resources will mainly be a question of medium and short term unemployment.

In agricultural areas especially, the work force fluctuates sharply from one season to another, and thus, instability of employment is a big problem. This seasonal fluctuation in rural areas is currently adjusted by family-oriented labor and independent businesses, however, it is still necessary to stabilize the employment of the younger generation and of women, for it is they whom are most affected by seasonal fluctuation.

From the macro-perspective, surplus labor during the agricultural off-season is absorbed in urban areas, but these sectors are small: family-labor, independent manufacturers and service industries. These are normally referred to as informal sectors. In spite of the fact that informal sectors have been playing an important role in absorbing surplus labor, the actual situation has not been studied, and thus, has failed to become implemented in governmental policy. In the future, however, it will become necessary to reevaluate their role.

In recent years, formal sectors in urban areas have been expanding rapidly. This exacerbates the regional imbalance of employment opportunities and incomes. The concentration of the working population in Bangkok and other big cities causes a serious problem. Nevertheless, industrial centers are expected to shift from primary to secondary and tertiary industries, so the interdistrict movement of the labor force from

rural to urban areas will become an important issue towards improving imbalances in labor supply and demand.

Hypertrophic and inefficient organizations have also become recent problems and call for the review of governmental and public sectors as an important feature of governmental policy. As a result, private formal sectors are expected to become an area of future growth.

(2) Qualitative Discrepancies

With the rapid diffusion of education, the number of people with higher academic backgrounds has increased rapidly. However, unemployment is now a serious issue. It stems primarily from the fact that the existing educational institutions - - - especially institutions of secondary and higher education - - - have not been able to keep up with the changing demand in the quality of human resources.

Since the main areas of the labor market which are absorbing those with secondary and higher education have shifted from governmental and public sectors to private sectors, the required human resources have also shifted from favoring those with liberal arts and social science backgrounds to those with science and engineering backgrounds. This is the new criteria sought by private manufacturers and service industries in urban areas. The current education system, however, fails to accommodate this shift fully.

This change in the demand structure of human resources has been affecting not only the new labor force but also the existing labor forces, and it threatens to enlarge the discrepancy between supply and demand in human resources especially in stagnating industries. A serious examination is essential, then, to reorganize and to consolidate the current education and training systems so that they may more effectively meet the new requirements for labor.

In thinking the quality of human resources, the importance of the informal sectors has almost never been considered. It is now becoming necessary to regard these sectors as the labor pool which is required by the formal sectors as the seedbed of future entrepreneurs. Therefore, advanced measures must be taken in order to improve the human resources of this labor pool qualitatively.

(3) Inter-district Movement of Human Resources and Regional Gaps in Supply and Demand

Looking at the population distribution and the patterns of the population movement up to present, much of the population movement has been to rural areas despite of urbanization. However, in the future, with the growth of industries and the improvement of employment opportunities and incomes, it is likely that the population of Bangkok and other urban areas will increase rapidly. The population movement from the northeastern and northern parts of the country to metropolitan Bangkok is expected to increase both seasonally and permanently.

In agriculturally-dominated districts, local manufacturing and service industries have up to now been buffers which absorb surplus labor in the agricultural off-season. This signifies, however, that these industries have not grown enough to provide stable employment in agricultural regions. It is essential then to promote the development of these industries.

2. Major Issues in the Effective Utilization of Human Resources at Enterprise Level

243 representative firms in Thailand were surveyed, and a case study was conducted on 9 firms, in order to understand the current utilization and development of human resources at enterprise level. The first two sections (2-1, 2-2) are based on the results of the survey while the last section (2-3) is based on the results of the case study.

2-1 Characteristics of Human Resource Development and Personnel Management Practices

(1) Managerial Issues on Effective Utilization of Human Resources

The major managerial issues in corporations are reinforcement of the financial structure, enlargement of exports, and effective utilization of human resources. In the field of personnel management, the improvement of employee performance, and the rationalization of recruitment and placement are the central issues towards upgrading the quality of human resources.

(2) Characteristics of Supply and Demand in the Labor Force

The labor force become stable due to the fact that employees tend to stay in one firm, and that long service is becoming common. Managerial and administrative positions are especially stable, and those who are in these positions are evaluated very highly in the firms. On the other hand, the turnover rate of engineers, technicians, and skilled workers is high. They form of the most unstable stratum of the work force despite the fact of being important human resources for the firms. Consequently, there is always a shortage of personnel in these job categories, and they are the main targets of recruitment activities.

(3) Internal Promotions and Training Patterns in an Academically-gearred Hierarchy

Although half of the companies recruit employees on a regular basis, and recruit new graduates, the methods of recruiting are quite different from those in Japan. While a majority of the engineers are employed through schools, managers and administrative staff are employed chiefly through newspaper advertisements, and a majority of skilled workers are hired through introductions by company employees. However, in both the administrative and manufacturing divisions, internal promotion and training is the prevailing method for key personnel, and this is regarded as a characteristic of seen in Japanese enterprises. Therefore, transfers or flexible allocation of the work force within a company is quite common. Internal promotion and training, however, is conducted on the basis of a distinct academic hierarchy within the internal labor market. In other words, educational backgrounds and positions are closely related. For instance, managerial and administrative staffs consist of college graduates; technicians, of vocational school graduates; foremen, of vocational and secondary school graduates; and skilled workers, of elementary and secondary school graduates. This hierarchical system causes extreme discrepancies in salaries.

(4) Education and Training

According to most firms, middle managers and skilled workers most of all require the ability-development programs. The major methods of education and training are " Off-JT " (Off the Job Training) which includes the extra-corporate training, and " OJT " (On the Job Training) which takes place within the corporation. Managers, administrative staff, engineers, and technicians tend more towards the former, whereas skilled workers and clerks tend more towards the latter. Compared with Japan, the main difference is that administration, engineers, and technicians are more Off-JT-oriented. However, the major problems involved in implementing education and training programs seem to be quite similar to those experienced in Japan. These include "not being able to attend the training program because of over-working", and "difficulty in determining education programs". However, "lack of enthusiasm on the part of managers and foremen in guiding and training the subordinates", another current problem, should be given serious consideration, because it impedes effective human resources development regardless of the education system.

(5) Degrees of Effective Utilization

The objective effective-utilization indexes illustrate that turnover rate and absenteeism of skilled workers and factory workers are low, whereas those of managers and administrative staff are high.

The subjective effective-utilization indexes such as work evaluation are generally high, although the evaluations of skilled workers and factory workers are relatively low, while those of the managerial and administrative staff are high, as shown in the objective effective-utilization indexes.

(6) Requests to the Government

Financial aid and less taxation are the main requests to the government in relation to the development and effective utilization of human resources. These are followed by educational requests such as: an increase in vocational education in the school system, enrichment of technical guidance offered by public institutions, and reinforcement of public training institutions.

2-2 Differences in Human Resource Development and Personnel Management Practices by Nationality of Ownership

So far, we have dealt with the general situation in Thailand's private firms. The characteristics in human resource development and personnel management practices by nationality of ownership, i.e. local firms, Japanese-owned firms and other foreign-affiliated firms, will now be discussed.

(1) Types of Organization Management

Japanese-owned firms' employees with high educational background are concentrated in managers and engineers, whereas those in foreign affiliated firms are, in administrative positions and clerks. Local firms stand in between the two. This seems to indicate that organization management policies vary from one nationality to another, as does the composition of their respective labor forces.

Japanese-owned firms allocate qualified personnel intensively in production-related line systems. This is known as "line-oriented management." Other foreign-affiliated firms emphasize administrative skills in the allocation of their personnel. This is commonly known as "staff-oriented management." Management policies of local firms stay between the two.

(2) Types of Internal Labor Markets

Hierarchies based on academic background exist in the internal labor markets of all nationalities, however, the nature of these hierarchies differs from one nationality to another. For example, in the manufacturing division of foreign-affiliated firms, there are clearcut distinctions based on academic background separating managers/engineers, foremen/technicians, from skilled workers. On the other hand, in Japanese-owned firms, there is little difference in academic background between foremen/technicians and skilled workers, although managerial and engineering positions do differ from other job categories in terms of educational background just as in other foreign-affiliated firms. This is due to the fact that Japanese-owned firms regard the job categories of skilled workers and foremen/technicians as successive. That is to say that through internal promotions and training

programs the positions of foreman and technician are filled by promoted skilled workers, therefore these firms stress the importance of a vertically intergrated work force. On the other hand, the internal labor markets of other foreign-affiliated firms are more academic hierarchies-oriented, while the internal labor markets of local firms come in between.

(3) Characteristics of Personnel Management and the Human Resource Utilization System

Within the spheres of management and internal labor, firms of all nationalities are developing employment management, including recruitment, suited to the requirements of their respective organizations. For instance, the employment policy of Japanese-owned firms relatively favor lower educational background whereas the policy of foreign-affiliated firms favor higher educational backgrounds. Local firms once again sit in between these two. As for the human resources utilization system, Japanese firms are encouraging the internal movement of their work force, while other foreign-affiliated firms do not and local firms take an intermediate stand. Thus, the measures taken by individual firms correspond to the structures of their respective internal labor markets. The situation differs, however, in the areas of education and salary system of employees. Signifigant features of local firms include less enthusiasm in education and training programs and larger salary discrepancies between job categories, compared to Japanese-owned and other foreign-affiliated firms.

(4) Degrees of Effective Utilization of Human Resources

Judging from effective utilization indexes of human resources, the degree of effective utilization is highest in Japanese-owned companies, followed by other foreign-affiliated firms, and lowest in local firms.

2-3 Case Studies on Human Resources Utilization at Enterprise Level

The results of a case study of nine firms in Bangkok reveals that there is a personnel shortage of middle managers, skilled workers, and sales personnel, while there is a surplus of unskilled workers and middle managers. The reason for co-existing shortage and surplus of middle managers is that firms with a high growth rate lack middle managers assisting administration, while firms with a low growth rate have an excess of middle managers in general clerical sections. There are three ways in which to deal with such shortages and excesses namely head-hunting, layoffs, and internal promotion/reallocation. While spontaneous resignation provides a valuable opportunity for staffing adjustments, reallocation is infrequent.

In spite of the fact that employees frequently leave their jobs, many of the companies studied provide some form of internal training. However, the training is limited in individual companies for three reasons:

- (a) Many of the employees quit their jobs after they received training.
- (b) Training activities lack continuity since they are only carried out during peak seasons and discontinued when business slows down.
- (c) The results of the training are unclear.

3. Government Measures and Institutions for Effective Utilization of Human Resources

3-1 Government Measures for the Development and Effective Utilization of Human Resources

The sixth five-year plan, which is currently under way, concentrates on international competitiveness by improving productivity; to upgrade education and training systems in order to improve the labor force qualitatively. The four perspectives below outline government measures to be taken towards the development of effective utilization of human resources in Thailand.

(1) Human Resource Development Measures in conjunction with Changing Demand

In Thailand, there is a large discrepancy between the supply and demand of labor. Although demand exceeds supply in some categories of modern industries, there is an excess of labor in many job categories of traditional industries. A high unemployment rate has resulted and become a social problem. The government has been devising various measures to reduce and even eliminate this gap, but it still remains quite large. This must stem from the fact that human resource development measures taken by the government have not coincided with the changing demands.

Considering Thailand's economic development in the past twenty years or so, and changing demands for labor within job categories, it is evident that insufficient secondary education created a gap in the supply and demand for labor and was a serious obstruction to increasing productivity. Thus, the recent educational government policy to increase the budget for secondary education, especially in vocational training, is an appropriate measure.

As for higher education, the Thai government has been taking great measures to enrich higher education, and, as a result, enrollement has increased. However, the budget allocated to improving higher education compared with the overall budget for education has been steadily declining since 1981.

(2) Measures for Creating Labor Demand with Relation to the Changes in Labor Supply

The Thai government has aimed at creating a demand for at least 3.5 million new workers within the fifth five-year plan, and for 3.9 million workers within the sixth five-year plan. These figures are based on target figures for economic growth, and if they are not met, it will be impossible to create the additional demand for new labor, and will result in increased unemployment and underemployment.

The labor demand development policy adopted by the government consists of a financial policy which promotes the formation of capital, and a policy of maintaining a high coefficient of employment. The most significant feature of the second policy was its emphasis on the development of primary industries, such as agriculture in which the

average coefficient of employment was highest. Thus, the government has depended primarily on agriculture to create the demand for new labor. As a result, the real income per capita of primary industries showed virtually no increase. The same phenomenon was observed in the traditional service industries, as well.

As a measure to increase employment, the development of labor-intensive industries has been given priority in secondary industries. This open-door policy for foreign capital-especially in labor-intensive industries has in general been successful. The machine parts industry, considered to grow in the future, is expected to increase employment in the manufacturing industry, as well as to improve the international competitiveness of Thailand's manufacturing industry as a whole and to contribute to the advancement of technology.

(3) Labor and Employment Measures to Improve Productivity at National Level

Through the five stages of its five-year plans, the Thai government has expended considerable effort in reorganizing and modernizing the foundations of production and of people's lives. As a result, education has been diffused, and contributed much towards a qualitative improvement of the labor force.

The most important of the Thai government's labor and employment policies is that of industrial relations, which helps indirectly to redistribute the labor force from low-productivity industries to high-productivity industries. The decision-making of wage schemes and working conditions is based on agreements between labor and management or private corporations. This policy of nonintervention facilitates the necessary supply and demand adjustments, and contributes significantly to the efficient utilization of labor at national level. While it is important for the government to maintain this policy, it will be necessary to introduce aggressive personnel adjustment measures in order to accommodate for changes in industrial structures.

(4) Labor and Employment Measures at Enterprise Level for Improving Productivity

Improving corporate productivity basically depends on corporate efforts to improve management, but at the same time, indirect government support through industrial and labor and employment measures is indispensable. In Thai firms, modernization of production facilities and machinery as well as increased investment in production, depends heavily on the financial measures of the government. The Industrial and Financial Corporation of Thailand (IFCT) has contributed greatly to the expansion of production facilities in Thailand's various industries, especially the manufacturing industries, as the Bank for Agricultural Credit and Corporatives (BAAC) has towards the expansion of production facilities in agriculture.

However, in both agriculture and manufacturing industries, increased investment in production and/or modernization of production facilities do not immediately improve productivity. Modernization and rationalization of corporate management must be achieved simultaneously. In this respect, the role played by the Thai government, especially that of the Thailand Management Development and Productivity Center (TMDPC) of the Ministry of Industry, was significant.

To improve productivity at enterprise level, the development of effective utilization of human resources is also indispensable. While this must be achieved fundamentally through corporate efforts, it is also important for the government to reorganize public vocational training institutions, to provide administrative and financial support, and to relax taxation for private vocational training institutions and intra-corporate education and training. There still remains much room for improvement in this area.

3-2 Major Issues in Government Institutions for Human Resources Development

This section discusses the problems encountered in public and social projects of human resource development operations in Thailand, based on case studies of the following institutions:

- (a) The National Institute for Skill Development, Department of Labor, Ministry of Interior: NISD.
- (b) The Thailand Management Development and Productivity Center, Department of Industrial Promotion, Ministry of Industry: TMPDC.
- (c) The Hotel and Tourism Training Institute, Tourism Authority of Thailand: HTTI.
- (d) The Trade Training Center, Department of Export Promotion, Ministry of Commerce: TTC.
- (e) The School of Banking Training, Thai Bankers Association: SBT.

Activities implemented by public and social human resource development institutions must follow four points, in order to contribute effectively to the national economy.

First of all, training programs should accommodate changes in the demand for labor which coincide with changing industrial patterns and the advancement of technology. It would be necessary, then, for institutions to prepare various kinds of training courses in technical knowledge and technology, and to establish guidelines which would allow the flexibility for course changes.

Secondly, training programs should be effective for the use of small and medium-sized businesses since the majority of non-agricultural labor is being absorbed by small and medium-sized businesses. Unlike large corporations, these lack the manpower for internal training. This can be provided by human resource development institutions so that they too, may develop effective utilization of human resources.

Thirdly, these programs should include measures which deal with security of employment since the economy, with its surplus of manpower, is likely to remain for some time. In other words, the minimum requirement for effective utilization of human resources is to secure employment.

Finally, these programs should account for such characteristics of Thailand's labor market as the frequent job-hopping and the importance of qualifications for successful job-hopping and promotion. Accordingly, these features should be incorporated into programs, as for example proficiency examinations in technical training courses.

Part II Conclusions and Recommendations of the Study: Plan of Action for Human Resources Development and Utilization

1. Future Agenda for National Employment Policy

- (1) Standard government measures taken to increase private and public investment, in order to increase the demand for labor, are necessary to reduce the gap between supply and demand. In addition, an industrial policy is needed which focuses on development of labor-intensive industries, natural resource processing industries, and also industries which yield highly added value. They are the machine-part industry and modern distribution/service industries, specifically tourism-related, financial/insurance, and wholesaling/retailing.
- (2) In order to improve productivity at national level, the government must promote reallocation of labor to other job categories, industries, corporations, and to other districts according to the needs dictated by change. For example, aggressive personnel adjustment measures will be necessary. Furthermore, a policy to give the responsibility of determining working conditions and wages to labor and management of private firms, and a policy of nonintervention in labor markets are necessary.
- (3) Powerful governmental measures are required to deal with employment issues which might occur in situations noted above. Specific measures include offering special enrollment for the unemployed to public vocational training, grants for acquiring certification, and temporary relief work for the unemployed in urban areas. As a long-term measure, full-scale introduction of unemployment insurance is greatly desired.
- (4) The first measure to eliminate regional economic differences is the diffusion of urban employment to the provinces, but in most cases, as noted in other countries, this has not been very effective. A more realistic measure would be to utilize the labor concentrated in urban areas, and make good use of employment opportunities which are concentrated in certain districts. Specific measures to minimizing social problems include smooth transfer of the population from agricultural areas to urban areas, developing the human resources in agricultural areas

for the requirements in urban areas and linking these developed human resources to employment opportunities in urban areas.

- (5) Long-term measures to stabilize employment in agricultural regions include actively developing the secondary and tertiary industries which are closely related to primary industries.
- (6) Informal sectors in urban areas should be considered as a source of labor for the formal sectors and as the seedbeds of future entrepreneurs. Thus, it will be important to take advanced measures to develop the quality of their human resources. It is suggested that an information service on seasonal employment be provided to surplus labor in agricultural areas and for formal sectors the suggested measure is to reorganize the system for placement of subcontract work. In addition, financial aid for education and training is required for human resources development.
- (7) In order to eliminate the large gap in supply and demand of labor, the government should enrich education and training measures, and:
 - a. improve its information service on the supply and demand of labor;
 - b. prepare detailed forecasts on the demand for labor and supply them to education and training institutions so as to enable them to function efficiently and accordingly.

2. Measures for Human Resources Development

2-1 Priorities for Human Resources Development

The fields which should be given priority in the future are manufacturing industries and modern service industries in urban areas. Initially, top priority should be given to export-oriented industries in order to improve Thailand's international competitiveness keeping with the economic and social development plan. These industries are expected to set the course for the future development of the Thai economy. Due to their high labor productivity, these industries have the potential to absorb a large number of highly educated and trained human resources, now, and in the future.

2-2 New Directions in Education Policy

- (1) It is the government's most urgent task to improve the quality of elementary education, and to drastically expand and improve the quality of secondary education, in order to equip the future work force with the basic abilities necessary to cope with economic, social, and technical changes, both in Thailand and abroad. This will require further increases in the government's education budget.
- (2) To accommodate a shift in labor from public sectors to private sectors, it will be necessary to alter the focus of secondary and higher education from liberal arts and social science to science and engineering.
- (3) It is suggested that the government should encourage to privatize higher educational institutions and improve the quality in private schools. It is essential to consider the principle that those who benefit should pay.

2-3 New Thrusts in Vocational Training Policy

- (1) An education and training system should be devised not only for the new labor force but also for those who, faced with industrial changes, need to re-develop their abilities.
- (2) Since companies are taking considerable efforts on their own to develop their personnel, it will not be necessary for direct government involvement in such human resources development operations. It would be more effective if the government gave indirect support to corporate efforts, in particular:
 - a. to further the activities of human resource development campaigns such as those implemented by the Thailand Management Development and Productivity Center (TMDPC) which include seminars and booklets, and the promotion and support of exchanges between companies of experience in human resources development.
 - b. to perform incentive measures which encourage and promote investment in human resources by corporations and thus reduce the risk involved in. The SDF (Skill Development Fund) of Singapore is a good example.

- c. to offer technical and financial assistance to private training institutions to enrich these institutions both quantitatively and qualitatively.
- (3) Public vocational training institutions should establish a system which adapts to the individual demands of private sectors, instead of imposing rigid and inflexible training courses and facilities. Focusing upon specific demands will most benefit these private sectors.
- (4) To upgrade the use of human resources, the following four issues, which concern the administration of training institutions, are raised.
- a. The individual operation of public vocational training institutions by each ministry according to its respective needs, instead of one ministry having the jurisdiction and control of these institutions.
 - b. The training should concentrate more on practice than on theory in both its method and its contents.
 - c. The promotion of the understanding of the top management of corporations in training, development, and utilization of human resources in administrative aspects of investment.
 - d. It is necessary, then, to enrich the mutual cooperation system with private corporations, to understand the need for training accurately and quickly, and to provide flexible training services suitable for individual needs.

3. Measures for Improving Productivity

In order to improve productivity at enterprise level, it is essential that the government support the efforts made by individual corporations. Although the government has been taking financial measures to accelerate the modernization and expansion of facilities, what is needed is a policy which supports corporate efforts to improve productivity. Such a policy would initiate and upgrade the effective use of facilities and labor. The government's most urgent task is to consolidate and enrich organizations which promote and improve productivity.

4. Measures for Development and Effective Utilization of Human Resources at Enterprise Level

4-1 Deemphasizing Hierarchical Structures and Effective Utilization of Skilled Workers, Engineers and Technicians

- (1) Overall, the labor force is stabilizing. However, the training and use of skilled workers, engineers, and technicians is an area which needs improvement.
- (2) In order to improve the production and engineering related work force, it will be necessary first of all, to deemphasize the academic hierarchy and to subplant it with a hierarchy in which skills and technical ability are the basis of promotion.
- (3) Under the distinct academic hierarchical structure, engineers are separated from skilled workers, they work away from production sites. Since skilled workers have direct responsibility for actual production, close cooperation between the two is indispensable to improve quality and productivity. It is therefore essential that engineers become more "site-oriented."
- (4) Modifications in wage management will also be required. Specifically, deemphasizing of wage differentials between job categories is called for. Local firms in particular are strongly advised to take this measure.

4-2 Education and Training in the Context of Human Resources Development

- (1) First of all, expanded and reinforced education and training systems for skilled workers are needed.
- (2) The basic measure for improving the skills required for daily work is OJT at the site. In order to be fully functional, it is essential that managers and foremen have the ability and enthusiasm to instruct and train their subordinates. This is pointed out by corporations as one of the most crucial issues.

- (3) Another crucial issue is "the difficulty of framing education programs." A social structure should be developed which enables proper instruction and expert advice at public vocational training institutions.
- (4) In addition, there is a large demand for the expansion of public training institutions. It is necessary to reorganize the system of training and re-training to improve those who are already working at corporations. Since many firms are unable to establish educational systems on their own, public training services to support and supplement corporate endeavors are highly recommended.
- (5) The most effective skill development opportunity, especially for engineers, is to experience new technology directly. Therefore, a system which enables organizations, such as public research institutions, to provide technical guidance and assistance to corporations is ideal. This will be one of the most important means towards the effective use of human resources. Another such measure for engineers is to send for training at the parent companies of foreign-affiliated firms with advanced technology. Japanese-owned companies have already been active in this endeavor. Restructuring of public support systems is much desired in order to give equal opportunities for overseas training to the staff members of local firms.

Appendix I. Results of the Questionnaire

1. Questionnaire

(1) Purpose of the survey

The survey illustrates the present state and composition of manpower in Thailand's private business; and lists basic measures to improve public and private technological cooperation from Japan in the future.

- (2) Questionnaires were sent to 243 representative firms in covering 9 out of 10 industries in Thailand, which were given priority in the Sixth National Economic Social Development Plan of Thailand. These industries are: food processing, furniture, rubber products, textiles, apparel and other textile products, metals, automobile, electrical and electronic products, tourism and hotels and bus and truck transportation.

(3) Method

With the cooperation of assistant Ms. Busaba Kunasirin, assistant professor of Chulalongkorn University, the questionnaires were sent to the sample companies.

(4) Period studies

The survey was conducted during the month of November, 1986.

(5) Response

Of the 243 companies, 139 companies responded at a response rate of 57.2%.

2. The List of Questionnaire (For specifics, please refer to the results.)

A. Outline of Your Company

- (1) What year was your company established?
- (2) Please answer the following questions on the capital of your company.
 - a. Please enter the amount of capital (paid-up capital).
 - b. Does the capital of your company include any foreign capital?
- (3) What was the annual sales of your company in 1985?
- (4) What is the sales and the number of employees indexes of your company in 1985, if they were 100 in 1980?
- (5) What is the ratio of export?
- (6) Is there a trade union?

B. Organization of Employees

Please enter the latest possible data.

- (1) What are the ages of full-time employees?
- (2) What is the length of service of full-time employees?
- (3) What is the academic background of full-time employees?
- (4) How many part-time/temporary employees do you have?

C. Employment System

- (1) Please answer the following questions on the excess/shortage of full-time employees of each job category. Please select the applicable number.
- (2) Employment policy for administration staff and clerks.
 - a. Please select the applicable item among the following concerning the periodic employment policy.
 - b. What is the employment policy for new graduates.

- (3) Did your company hire any full-time employees in 1986?
 - a. If so, what was the employment route?
 - b. What are the means of recruitment?

D. Human Resources Utilization System

- (1) Please answer the following questions on the internal reallocation and transfer of full-time employees within a section.

(Note) A section is the smallest unit in the corporate management and refers to the sphere controlled by the lowest manager.

- a. How is the internal transfer in the section carried out?
 - b. What are the major reasons for internal transfer? Please choose from the following up to two major reasons per each job category.
- (2) How many foremen and managers are there at your firm?
How many among them were employed as full-time employees and have been internally promoted to the present position?
 - (3) What are the minimum academic requirements to be promoted to the following posts?

E. Index of Effective Utilization of the Work Force

- (1) Please enter the turn-over rate of 1985 of each job category.
- (2) What is the absenteeism rate of 1985?
- (3) How have the turn-over rate and the absenteeism rate changed over the past few years?
- (4) How does your company evaluate the work and the turn-over rate of full-time employees?

F. Human Resources Development and Treatment System

- (1) Which personnel among the following does your firm require ability development most, in order to improve competitiveness and productivity? Please select up to three major groups of personnel?
- (2) Does your firm implement any education/training programs for the following personnel? If so, please indicate the major methods and details of those programs.
 - a. Does your firm implement any education/training programs?
 - b. Please pick up to three among the following items concerning details of programs, and list the numbers.
 - c. Please select up to three major methods among the following, and list the numbers.
- (3) What are the main obstacles and problems in conducting ability development (education and training) programs?
Please pick up to three items.
- (4) What kind of measures does your company take in order to promote full-time employees' enthusiasm for work, and to give them higher motivation for work? Please choose up to five among the following.
- (5) This question concerns the annual income of a thirty-five-year-old male employee. Please enter the approximate figure of annual incomes of the following job categories, supposing the annual income (including bonuses) of foremen is 100.

G. Managerial Issues and Requests for the Government

- (1) What is the most important managerial issue for your company at present?
Please list up to three major items.
- (2) What does your firm consider is the most important issue in utilizing human resources effectively in terms of personnel management?
Please pick up to two major items among the following.
- (3) What sort of things does your company expect of the government in the area of development and effective utilization of human resources?
Select as many applicable items as you wish.

3. Results of Questionnaire

(The figures in the charts below are the results of data compiled from 139 companies.)

A. Outline of Companies

(1) Year of company establishments

☆ nationality of capital

	Average year	Number of respondents	
			No response
Local companies	1969	62	5
Japanese-owned companies	1967	35	1
Other foreign-affiliated companies	1966	19	3
Unknown	1969	12	2
Total	1968	128	11

☆ number of employees

	Average year	Number of respondents	
			No response
~ 99	1970	32	4
100 ~ 299	1968	33	3
300 ~ 699	1968	30	0
700 ~	1965	22	1
Unknown	1970	11	3
Total	1968	128	11

☆ type of business

	Average year	Number of respondents	
			No response
Food Processing	1970	19	2
Furniture	1968	7	1
Rubber Products	1966	8	0
Textile, Apparel, etc.	1969	20	2
Metalworking	1965	13	0
Automobile	1960	11	0
Electric, Electronic	1968	19	3
Tourism, Hotels	1972	17	2
Transportation, Freight	1968	11	0
Unknown	1963	3	1
Total	1968	128	11

(2) Capital

a. Amount of capital (paid-up capital)

☆ nationality of capital

(Unit: 1 million bahts)

	Average amount of capital	Number of respondents	
			No response
Local companies	96.8	43	24
Japanese-owned companies	120.1	34	2
Other foreign-affiliated companies	193.0	19	3
Unknown	208.0	5	9
Total	128.3	101	38

☆ number of employees

(Unit: 1 million bahts)

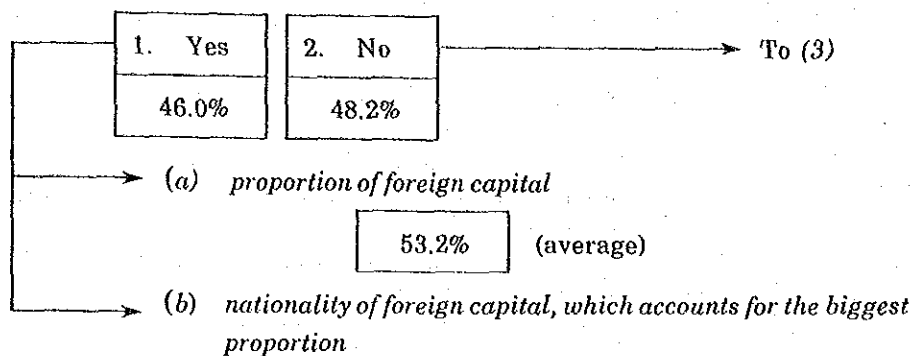
	Average amount of capital	Number of respondents	
			No response
~ 99	64.9	21	15
100 ~ 299	84.9	25	11
300 ~ 699	151.4	26	4
700 ~	266.9	18	5
Unknown	66.4	11	3
Total	128.3	101	38

☆ type of business

(Unit: 1 million bahts)

	Average amount of capital	Number of respondents	
			No response
Food Processing	260.5	15	6
Furniture	123.0	5	3
Rubber Products	35.0	8	0
Textile, Apparel, etc.	180.8	20	2
Metalworking	40.0	10	3
Automobile	58.7	7	4
Electric, Electronic	27.2	19	3
Tourism, Hotels	313.1	10	9
Transportation, Freight	2.6	5	6
Unknown	32.0	2	2
Total	128.3	101	38

b. *Inclusion of foreign capital*



1. U.S.A.	6.3%
2. European countries.	9.4%
3. Japan	56.3%
4. Singapore, Taiwan, Hong Kong	10.9%
5. Others	7.8%
Unknown	9.4%

(3) *Average annual sales of the companies in 1985*

742.3 million bahts

(4) *Index of sales and the number of employees of the companies in 1985, if they were 100 in 1980*

a. sales index 131.0 (average)

b. number of employees index 119.1 (average)

(5) *Ratio of export*

31.5%

(average)

(6) *Trade unions*

1. Yes	2. No
33.1%	63.3%

B. Organization of Employees

(latest possible data entered)

(1) Age of full-time employees

(unit : persons)

	Teens	Twenties	Thirties	Forties	Fifties	Total
Total	11.7	184.1	172.8	60.7	17.3	471.3
Female Employees	9.2	106.1	94.6	17.9	3.2	252.6

(2) Length of service of full-time employees

(unit : persons)

	Less than 1 year	1 to 5 years	5 to 10 years	More than 10 years	Total
Managers	0.5	4.4	5.3	11.5	21.7
Administration, Engineering, and Sales Personnel	6.7	26.5	31.1	28.2	94.4
Production-site Workers (including transport- and service-related employees)	18.0	94.8	78.2	91.8	1,059.0

(3) Academic background of full-time employees

(unit : persons)

Elementary school graduates and lower	159.1
Secondary school graduates	158.8
Vocational school graduates	112.4
College graduates and higher	47.7

(4) Number of part-time/temporary employees

(unit : persons)

Total	283.9
Female Employees	208.9

C. Employment System

(1) Excess/shortage of full-time employees in each job category.

(unit : %)

		1 Adequate	2 Over- supplied	3 Insufficient	4 No applicable employees
Managers		87.1	4.3	4.3	1.4
Administration Staff		80.6	3.6	12.2	0.0
Clerks		72.7	14.4	8.6	0.0
Engineers, Technicians		47.5	2.9	31.7	10.8
Sales Personnel		60.4	0.7	18.0	14.4
Factory Workers	Skilled	52.5	2.2	20.1	15.8
	Unskilled	41.7	17.3	2.9	27.3
Transport Work Personnel		57.6	2.9	10.1	22.3
Service Work Personnel		65.5	2.9	14.4	12.9

Q.2. Employment policy for administration staff and clerks

a. Periodic employment policy

(unit : %)

	Administration Staff					Clerks				
	Local	Japan- ese- owned	Other foreign- affiliated	Un- known	Total	Local	Japan- ese- owned	Other foreign- affiliated	Un- known	Total
1. Periodic employment is being carried out, and intended to continue and to be reinforce.	19.7	17.6	23.8	38.5	21.6	12.3	8.8	14.3	30.8	13.5
2. Periodic employment is being carried out, but planned to be curtailed.	9.1	8.8	14.3	15.4	10.4	13.8	11.8	19.0	15.4	14.3
3. Periodic employment not performed, but planned in the future.	13.6	14.7	14.3	7.7	13.1	16.9	23.5	9.5	15.4	17.3
4. Periodic employment, not performed and not planned.	28.8	50.0	33.3	23.1	34.3	32.3	41.2	33.3	7.7	32.3

b. *Employment policy for new graduates*

(unit: %)

	Administration Staff	Clerks
1. New graduates are employed. This policy will continue and will be reinforced.	20.1	20.3
2. New graduates are employed but this policy will be curtailed.	8.2	15.3
3. New graduates are not employed but planned in the future.	11.2	14.3
4. New graduates are not employed and not planned.	37.3	26.3

(3) a' *Full-time employees hired in 1986*

(unit: %)

	1. Yes	2. No
Managers	18.0	69.9
Administration Staff	25.4	62.7
Clerks	44.4	48.1
Engineers, Technicians	50.0	42.1
Sales Personnel	40.0	52.7
Factory Workers, Labourers	54.8	38.1

b' *Means of recruitment*

	Number of employees hired	Most often used routs for hiring employees (three major routes)								
		1 Schools	2 Public job placement offices	3 News-papers	4 Intro-duction by employ-ees	5 Intro-duction by acquaint-ances or rela-tives	6 Flyers and posters	7 Private job place-ment offices	8 Intro-duction by business connec-tions	9 Others
Managers	2.1	8.3	8.3	70.8	33.3	29.2	4.2	4.2	8.3	16.7
Administration Staff	2.8	26.5	8.8	67.6	23.5	32.4	0.0	2.9	0.0	5.9
Clerks	15.5	37.3	13.6	49.2	44.1	35.6	1.7	3.4	5.1	6.8
Engineers, Technicians	4.6	40.4	19.3	57.9	31.6	22.8	3.5	5.3	1.8	8.8
Sales Personnel	8.2	22.7	6.8	63.6	43.2	27.3	0.0	4.5	4.5	2.3
Factory Workers, Labourers	55.2	23.2	18.8	27.5	62.3	34.8	14.5	2.9	7.2	14.5

D. Human Resources Utilization System

(1) *Internal reallocation and transfer of full-time employees within a section.*

(Note) A section is the smallest unit in the corporate management and refers to the sphere controlled by the lowest manager.

a. Internal means of transfer in the section

(unit: %)

		1. Not much transfer once allocated	2. Reallocated from time to time	3. Reallocated on a regular basis
1. Clerical Division	Local	37.9	56.1	1.5
	Japanese-owned	33.3	52.8	8.3
	Other foreign affiliated	35.0	40.0	10.0
	Total	36.8	50.7	4.4
2. Work-Site Division (production, transport, construction, etc.)	Local	25.5	58.2	5.5
	Japanese-owned	15.2	72.7	12.1
	Other foreign affiliated	26.3	52.6	5.3
	Total	21.2	62.7	6.8
3. Sales and Marketing Division	Local	45.2	48.4	3.2
	Japanese-owned	27.6	51.7	0.0
	Other foreign affiliated	52.6	36.8	5.3
	Total	40.5	47.1	3.3
4. Engineering, Designing, and Maintenance Division	Local	39.6	47.2	1.9
	Japanese-owned	30.0	66.7	3.3
	Other foreign affiliated	50.0	27.8	11.1
	Total	37.8	47.7	4.5

b. Major reasons for internal transfers

(two major reasons per each job category)

(unit: %)

		1. Suitable allocation	2. To acquire experience and ability	3. To cope with qualitative and quantitative changes of work	4. Requests from individual employees
1. Clerical Division	Local	28.6	42.9	22.2	0.0
	Japanese-owned	35.3	29.4	8.8	0.0
	Other foreign affiliated	47.1	23.5	17.6	0.0
	Total	34.4	36.8	16.0	0.0
2. Work-site Division (production, transport, construction, etc.)	Local	20.4	49.0	22.4	0.0
	Japanese-owned	18.2	42.4	21.2	0.0
	Other foreign affiliated	18.8	50.0	25.0	0.0
	Total	19.6	47.7	21.5	0.0
3. Sales and Marketing Division	Local	26.7	50.0	11.7	1.7
	Japanese-owned	26.1	39.1	8.7	0.0
	Other foreign affiliated	27.8	44.4	22.2	0.0
	Total	28.2	44.5	13.6	0.9
4. Engineering, Designing, and Maintenance Division	Local	21.3	48.9	23.4	0.0
	Japanese-owned	20.0	50.0	13.3	0.0
	Other foreign affiliated	12.5	50.0	31.3	0.0
	Total	20.0	50.0	20.0	0.0

- (2) *Number of foremen and managers at a firm, and those initially employed as full-timers then internally promoted to present positions.*

(unit: persons)

	Total number	Number of those who have been internally promoted
Top Executives (Presidents, Vice-presidents)	3.8	1.8
Middle Managers (Department Heads, Division Managers, Section Heads)	26.7	22.4
Foremen	38.5	30.2

- (3) *Minimum academic requirements for promotion*

(unit: %)

	1 College graduates and higher	2 Vocational school graduates	3 Secondary school graduates	4 No requirements
Managers	82.7	4.5	0.0	10.5
Administration Staff	64.9	20.9	0.7	7.5
Engineers	82.5	6.1	0.0	5.3
Technicians	28.9	47.4	3.5	12.3
Foremen	13.5	44.2	12.5	24.0

E. Index of Effective Utilization of the Work Force

- (1) *Turn-over rate for 1985*

(unit: %)

	Turn-over rate
Managers	1.7
Administration Staff	1.5
Clerks	4.8
Engineers, Technicians	6.0
Sales Personnel	6.9
Factory Workers, Labourers	10.1
Total	10.3

(2) Absenteeism rate for 1985

(unit : %)

	Absenteeism rate
Office Sector (administration)	2.5
Operational Sector (production, transportation, construction)	6.8
Marketing/Sales Sector	3.4
Technology/Design Maintenance Sector	3.0
Total	5.3

(3) Changes in turn-over and absenteeism rates over the past few years

(a) Turn-over rate

(unit: %)

	1. Drastically increased	2. Increased	3. No change	4. Decreased	5. Drastically decreased
Managers	0.8	4.5	65.4	10.5	3.0
Administration Staff	0.0	9.0	57.5	11.9	4.5
Clerks	0.0	13.5	44.4	21.1	5.3
Engineers, Technicians	1.8	13.2	50.9	14.0	5.3
Sales Personnel	1.8	13.6	47.3	20.0	2.7
Factory Workers, Labourers	4.0	16.7	28.6	22.2	11.1

(b) Absenteeism rate

(unit: %)

	1. Drastically increased	2. Increased	3. No change	4. Decreased	5. Drastically decreased
Office Sector (administration)	0.0	7.2	48.8	26.4	8.0
Operational Sector (production, transportation, construction)	0.9	11.2	36.4	31.8	9.3
Marketing/Sales Sector	0.9	1.8	50.9	27.3	6.4
Technology/Design Maintenance Sector	0.0	5.0	53.0	24.0	6.0

(4) *Company evaluations of work and turn-over rate of full-time employees*

(a) *Turn-over rate*

(unit: %)

	1. Satisfied	2. Neither	3. Dissatisfied
Managers	28.6	30.8	11.3
Administration Staff	24.6	32.8	12.7
Clerks	24.8	33.8	13.5
Engineer, Technicians	21.9	29.8	22.8
Sales Personnel	22.7	33.6	18.2
Factory Workers, Labourers	24.6	28.6	22.2

(b) *Work*

(unit: %)

	1. Satisfied	2. Neither	3. Dissatisfied
Managers	63.9	13.5	3.8
Administration Staff	56.7	17.2	3.0
Clerks	50.4	25.6	4.5
Engineer, Technicians	52.6	13.2	10.8
Sales Personnel	49.1	22.7	6.4
Factory Workers, Labourers	49.2	16.7	11.1

F. Human Resources Development and Treatment System

(1) *Areas most requiring ability development for improved competitiveness and productivity (three major groups of personnel)*

(unit: %)

	Local	Japanese-owned	Other foreign-affiliated	Unknown	Total
1. Top Executives	10.4	5.6	18.2	7.1	10.1
2. Middle Managers	59.7	72.2	50.0	57.1	61.2
3. Administration Staff	28.4	41.7	59.1	35.7	37.4
4. Clerks	17.9	16.7	18.2	7.1	16.5
5. Engineer, Technicians	22.4	47.2	27.3	414.3	28.8
6. Sales Personnel	52.2	22.2	36.4	50.0	41.7
7. Factory Workers, Labourers	61.2	63.9	63.6	57.1	61.9

(2) *Implementation - if any - of education/training programs, and methods and details of each.*

(unit: %)

	a. Implementation of education/training programs	
	1. Yes	2. No
1. Top Executives	26.9	62.7
	33.3	47.2
	40.9	40.9
	33.1	53.2
2. Middle Managers	50.8	46.2
	82.4	8.8
	81.0	14.3
	67.7	27.3
3. Administration Staff	54.5	37.9
	67.6	20.0
	71.4	19.0
	63.4	28.4
4. Clerks	46.2	44.6
	52.9	32.4
	52.4	38.1
	50.4	39.1
5. Engineers, Technicians	52.8	35.8
	80.0	13.3
	73.7	21.1
	67.5	24.6
6. Sales Personnel	51.7	41.7
	57.1	38.1
	57.9	26.3
	56.4	35.5
7. Factory Workers, Labourers	45.9	44.3
	62.5	28.1
	47.6	38.1
	52.4	36.5

(Note) Order of figure: first local firms, second Japanese-owned, third other foreign-affiliated, and fourth total.

b. *Details of programs:*

(three major items)

① Management in general such as administrative policies and administrative plans
② Personnel and organization management
③ Training and guidance of subordinates
④ Ability and methods to find out and sort out problems
⑤ Ability in personal relations
⑥ Creativity development
⑦ TQC
⑧ OA and computers
⑨ Expertise in the work one is responsible for

(unit: %)

	①	②	③	④	⑤	⑥	⑦	⑧	⑨
1. Top Executives	60.9	43.5	26.1	32.6	10.9	15.2	8.7	10.9	15.2
2. Middle Managers	52.2	50.0	47.8	26.7	11.1	13.3	17.8	8.9	21.1
3. Administration Staff	27.1	48.2	37.6	34.1	25.9	17.6	12.9	16.5	23.5
4. Clerks	4.5	6.0	7.5	11.9	37.3	40.3	20.9	38.8	46.3
5. Engineers, Technicians	7.8	13.0	31.2	33.8	14.3	22.1	22.1	19.5	64.9
6. Sales Personnel	6.5	6.5	9.7	33.9	61.3	30.6	4.8	8.1	59.7
7. Factory Workers, Labourers	1.15	6.1	6.1	16.7	48.5	25.8	33.3	4.5	57.6

c. Major methods

- | |
|--|
| ① Internal training |
| ② Extra-corporate seminars, lectures, and study sessions |
| ③ Overseas studies |
| ④ Study elsewhere in the country |
| ⑤ Job rotation |
| ⑥ OJT |
| ⑦ Self-enlightenment |

(unit: %)

	①	②	③	④	⑤	⑥	⑦
1. Top Executives	54.3	71.7	30.4	6.5	8.7	4.3	26.1
2. Middle Managers	54.4	83.3	30.0	7.8	11.1	10.0	23.3
3. Administration Staff	57.6	74.1	23.5	7.1	12.9	23.5	22.4
4. Clerks	65.7	43.3	6.0	14.9	23.9	40.3	20.9
5. Engineers, Technicians	54.5	61.0	32.5	7.8	18.2	26.0	22.1
6. Sales Personnel	64.5	54.8	8.1	6.5	11.3	35.5	30.6
7. Factory Workers, Labourers	68.2	25.8	6.1	1.5	36.4	56.1	24.2

(3) *Main obstacles and problems in conducting ability development (education and training) programs.*

(three major items)

(unit : %)

	Local	Japanese-owned	Other foreign-affiliated	Total
1) Some employees are not able to make time to participate in training programs because of too much work.	49.3	36.1	40.9	45.3
2) Employees are not highly motivated in developing their abilities.	13.4	8.3	18.2	12.2
3) Managers and foremen lack sufficient enthusiasm for training and giving guidance to their subordinates.	34.3	38.9	45.5	35.3
4) The necessity of education and training are unclear.	20.9	16.7	22.7	19.4
5) The results of education and training are unclear.	13.4	25.0	27.3	18.7
6) The top management lacks understanding and enthusiasm for education and training.	11.9	16.7	22.7	15.1
7) The corporate budget does not allow expenditure in education and training.	10.4	13.9	13.6	12.9
8) It is difficult to find lecturers and trainers.	3.0	22.2	9.1	9.4
9) The link between educational training and personnel management is not satisfactory.	6.0	8.3	9.1	6.5
10) There is a shortage of personnel in charge of education and training.	11.9	22.2	18.2	16.5
11) It is difficult to devise effective programs.	44.8	47.2	40.9	44.6

(4) Measures taken to promote full-time employees' enthusiasm and motivation to work harder.

(three major items)

(unit : %)

	Local	Japanese-owned	Other foreign-affiliated	Total
1) Establish a target for each employee or each work group	19.4	25.0	4.5	18.7
2) Let employees experience various types of work by means such as job rotation	17.9	22.2	27.3	20.9
3) Increase promotion opportunities	6.0	5.6	13.6	6.5
4) Raise the upper limit of promotions	26.9	16.7	27.3	24.5
5) Educate managers and foremen in methods of subordinate management, in ways to motivate subordinates, etc.	38.8	36.1	36.4	38.1
6) Introduce a reward system based on the success of the business	28.4	33.3	36.4	29.5
7) Introduce a wage system in which employees get paid according to their work accomplishments	56.7	52.8	54.5	54.0
8) Reduce wage differentials among job categories	9.0	11.1	22.7	11.5
9) Improve working conditions	1.5	2.8	4.5	2.9
10) Enrich welfare programs	40.3	58.3	31.8	44.6
11) Introduce and reinforce QC circles	28.4	19.4	22.7	25.9
12) Try to include the opinions and requests of employees reflected in management decisions as much as possible	20.9	50.0	36.4	30.9
13) Share management-related information such as administrative policies and business conditions with employees as much as possible	50.7	38.9	40.9	42.4
14) Emphasize employment stability	17.9	25.0	22.7	21.6

- (5) Annual income figure of a thirty-five-year-old male employee if the annual income (including bonuses) of foremen is 100.

	approximate figure
Manager	336
Administration Staff	254
Engineer, Technician	207
Sales Personnel	150
Foreman	100
Skilled Worker	88
Unskilled Worker	61

G. Managerial Issues and Requests for the Government

- (1) Most important managerial issues
(three major items)

(unit : %)

	Local	Japanese-owned	Other foreign-affiliated	Total
Financial reinforcement	49.3	38.9	45.5	46.8
Expansion of leading products	14.9	22.2	36.4	20.1
Development of new products	22.4	27.8	9.1	20.1
Introduction and development of new technology and new facilities	26.9	30.6	22.7	25.9
Enrichment of basic research	9.0	16.7	22.7	14.4
Reinforcement of marketing capabilities and multi-shop strategies	22.4	19.4	18.2	21.6
Simplification of the organization to increase efficiency	20.9	16.7	18.2	18.7
Diversification of business	14.9	8.3	22.7	13.7
Aggressiveness in export and advance into overseas markets	32.8	38.9	40.9	36.7
Effective utilization of human resources	46.3	50.0	40.9	46.8

(2). *Important issues in the effective utilization of human resources in terms of personnel management*

(two major items)

(unit: %)

	Local	Japanese-owned	Other foreign-affiliated	Total
Appropriate recruitment	29.9	22.2	36.4	27.3
Improvement of employees' ability	47.8	61.1	40.9	50.4
Improvement of employees' morale	14.9	19.4	9.1	15.1
Ability-oriented wage schemes and promotion	9.0	25.0	31.8	17.3
Suitable and flexible allocation of employees	44.8	19.4	36.4	36.0
Encouragement of employee participation	19.4	33.3	18.2	23.7

(3) *Measures expected of the government in the area of development and effective utilization of human resources*

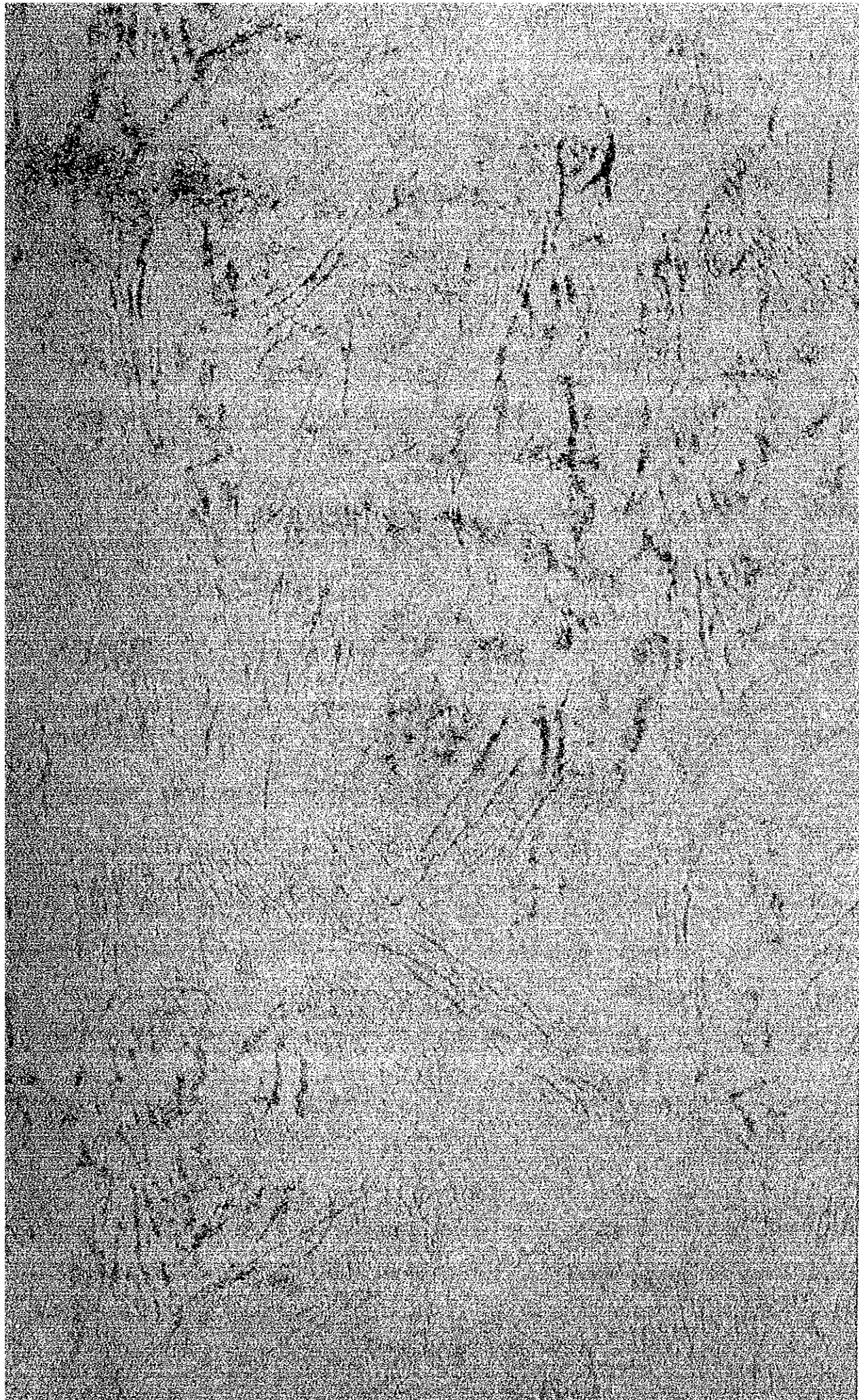
(Selection of all applicable items)

(unit: %)

	Local	Japanese-owned	Other foreign-affiliated	Total
Reinforcement of public job placement functions	16.4	13.9	22.7	15.8
Reinforcement of public vocational training functions	37.3	36.1	36.4	37.4
Enrichment of public support--financially and in the taxation system--for intra-corporation education and training	55.2	41.7	50.0	53.2
Enrichment of technical guidance offered by public organizations	41.8	38.9	31.8	38.8
Enrichment of vocational training in school education	38.8	36.1	40.9	39.6
Relaxation of governmental regulations on employment and such	19.4	8.3	13.6	14.4
Others	1.5	0.0	0.0	1.4
No requests	6.0	19.4	13.6	10.1

Appendix II: List of Members of the Study Team

<i>Ryohichi Hirono</i>	Professor, Seikei University (Chief of the Study Team)
<i>Koichiro Imano</i>	Associate Professor, Tokyo Gakugei University
<i>Mitsuhide Shiraki</i>	Lecturer on Labour Economics, Seisen Junior College
<i>Jinichiro Yabuta, Ph.D.</i>	Senior Regional Planner, International Development Center of Japan
<i>Yoshio Koyama</i>	Assistant Managing Director, Engineering Consulting Firms Association, Japan
<i>Masako Otsuka</i>	Managing Director, INTERCOM
<i>Yoshiaki Nakaune</i>	Senior Researcher, Research Department, International Management Association of Japan, Inc.
<i>Takeo Fujimura</i>	Head, Training Division, Institute for International Cooperation, JICA
<i>Kozo Tsukada</i>	Research and Development Division, Institute for International Cooperation, JICA



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