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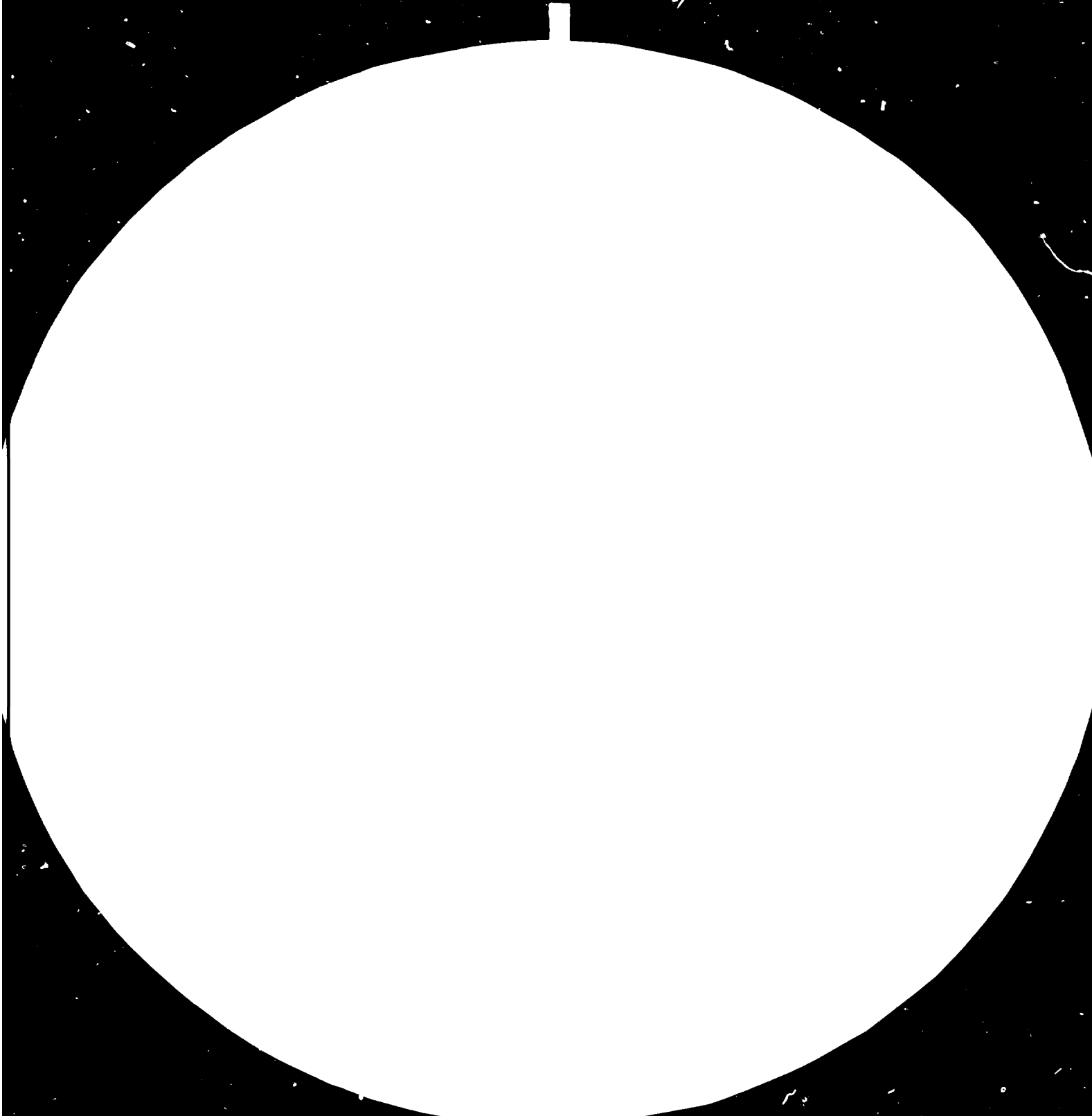
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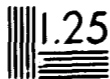
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Manila, Philippines, 2 - 6 November 1981

COUNTRY PAPER ON THE DEVELOPMENT SCHEME FOR  
JAPANESE SMALL AND MEDIUM SCALE INDUSTRIES \*

by

N. Suzuki \*\*

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COUNTRY PROFILE: JAPAN as of 1979<sup>1/</sup>

|   |                                    |
|---|------------------------------------|
| Surface Area (km <sup>2</sup> ): 372,313          | Pop. Growth Rate (%pa) 1970-77:1.3 |
| Urban Population (%): 1975: 75.9                  | Capital City Name: Tokyo           |
| Pop. Density (Persons/km <sup>2</sup> ) 1977: 306 | Capital City Pop. 1976: 8,592,425  |

| SIGNIFICANT SERIES             | 1979        | UNITS     |
|--------------------------------|-------------|-----------|
| POPULATION                     | 115.87      | Millions  |
| ECONOMICALLY ACTIVE POPULATION | 59.14       | Millions  |
| NATIONAL ACCOUNTS              |             |           |
| Gross Domestic Product (GDP)   | 973,897 (A) | Mill US\$ |
| Per Capita GDP                 | 8,476 (A)   | US\$      |
| PRODUCTION - Index Numbers     |             |           |
| Total Agricultural Production  | 108         |           |
| Per Caput Food Production      | 98          |           |
| Industrial Production          | 133         | 1970=100  |
| TRANSPORT AND COMMUNICATION    |             |           |
| Passenger Vehicles in Use      | 21,280 (A)  | 000's     |
| Commercial Vehicles in Use     | 12,228 (A)  | 000's     |
| INTERNATIONAL TRAVEL           |             |           |
| Tourist Visitor Arrivals       | 1038.9 (A)  | 000's     |
| Tourist Receipts               | 470 (A)     | Mill US\$ |
| EXTERNAL TRADE                 |             |           |
| Imports                        | 110,672     | Mill US\$ |
| Exports                        | 103,032     | Mill US\$ |
| PRICES - Index Number          |             |           |
| Consumer Prices                | 219         | 1970=100  |
| Wholesale Prices               | 175.4       | 1970=100  |
| FINANCE                        |             |           |
| Exchange Rate Yen/US\$         | 225         |           |
| Int. Reserves Minus Gold       | 19,522      | Mill US\$ |
| Discount Rate                  | 5.4         | % pa      |

1/ United Nations Statistical Pocketbook/Fifth Edition "World Statistics in Brief"

2/ (A) - as of 1978

(ii)

Context

|   | <u>Page</u> | <u>Para</u> |
|---|-------------|-------------|
| Introduction .....  | 1           | 1-3         |
| I The Outlook of SMI in Japan .....   | 1-2         |             |
| Definition .....  | 1           | 4           |
| Statistics .....  | 2           | 5-10        |
| II The Present State of SMI Development Scheme in Japan. 2-8                        |             |             |
| A Institutional Framework of SMI Guidance<br>System and Respective Activities ..... | 3           | 12-13       |
| B Public Research and Development Institutions..                                    | 4           | 14-15       |
| C Inter/Intro Industry Transfer of Technology<br>System .....                       | 5           | 16          |
| D Vocational Training System .....  | 5           | 17-19       |
| E Organization of SMI into Co-operatives .....                                      | 6           | 20-22       |
| F Financial Assistance .....  | 7           | 23-25       |
| III The In-depth Study of Aichi Prefecture .....                                    | 9           | 26-32       |
| IV Conclusions and Recommendations .....  | 11          | 33-40       |
| Annex I .....   | 14          |             |
| Annex II .....  | 15          |             |
| Annex III .....   | 16          |             |
| Annex IV .....  | 17          |             |
| Annex V .....   | 18          |             |
| Annex VI .....  | 19          |             |
| Annex VII .....   | 20          |             |

## Introduction

1. The development of Small and Medium Scale Industry (SMI) has been one of the major components of the overall economic growth throughout Japan's industrialization process. It did not simultaneously emerge but came into reality with guidelines from the national and prefectural governments. Most of the development efforts have been carefully elaborated and implemented, while enacting a number of laws, reformulating and/or newly institutionalizing relevant development components, e.g., financial assistance scheme, vocational training, advisory service, and R & D activities.

2. The UNIDO project (TF/RAS/77/004) has developed the Technical Service Delivery System (TSDS) on a pilot scheme in the Philippines in order to develop the SMIs on a more concrete basis. This system, which is a typical case, has a similar framework to what Japan has developed in the past. It is expected, therefore, that the contents of this paper will be a valuable addition or new input to the future development of such a scheme at the national/regional level not only in the Philippines but in the countries participating in the Expert Group Meeting for Exchange of Experiences on TSDS organized by UNIDO.

3. The paper will be divided into four sections; (I) The Outlook of SMI in Japan, (II) Present State of SMI Development Scheme in Japan, (III) The In-depth Study of Aichi Prefecture, (IV) Conclusions and Suggestions. It should be noted that since the recommendations put forward were derived from the experience accumulated in Japan as well as reviewing the outcomes of the Philippine's pilot project, they do not necessarily have to be relevant to all the participating countries' present development situations.

### I The Outlook of SMI in Japan

#### Definition

4. The definition given by the Japanese White Paper on Small and Medium Enterprises classifies any manufacturing firms which have less than 300 employees or capital of ¥100 million (US \$0.45 million)<sup>1/</sup> as Small and Medium (SM) enterprises and those which have less than 20 employees as Small Scale (SS)

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1/ The exchange rate of 225yen/dollar

enterprises. Those classified as SM and SS enterprises are subject to the Small Business Organization Law enacted in 1957, the Small Business Basic Law (1963) and other protection and promotion laws for SMIs.

### Statistics

5. The number of establishments of SMIs in Japan as of 1978 was 5,814,882 and its percentage out of the total industrial establishment was 99.4%. The manufacturing sector is the third largest sector and shares about 15% of the whole SMI (Annex I).

6. Approximately 34.3 million people are engaged in SMI and its proportion out of the total employees in non-primary industry is 81% and the manufacturing sector absorbs 25% of the total population in SMI (Annex II).

7. The breakdown of the number of business establishments and employee population in manufacturing industry reveals that almost 76% of business establishments fall into the categories of the firms which employ less than 10 persons. The large scale firms share only 0.5% of the total establishment (Annex III).

8. The total population employed by the large scale manufacturing enterprises, on the other hand, is almost 2.8 million and percentagewise 36% of the total population in manufacturing industry (Annex III).

9. The value of shipment in SM manufacturing industry is ¥98,043 billion as opposed to ¥86,214 billion of large scale manufacturers. The proportion of this is 53% to 47% (Annex III).

10. The value added per employee in the category of the enterprises which have 1 - 9 employees is ¥2,962,000, while that of large scale enterprises is ¥10,508,000. These figures indicate that the added value productivity of the former category is only one third of that of the latter. (Annex III)

## II The Present State of SMI Development Scheme in Japan

11. The overall Japanese SMI development scheme consists of the following components: (1) Financial Assistance, (2) Technical/Managerial Advisory Service, (3) Research and Development Activities, (4) Technical/Managerial



Training, (5) Information Dissemination, (6) Vocational Training, (7) Social Welfare System, (8) Labor Housing Scheme, (9) Co-operative Scheme, (10) Inter/Intro Industry Transfer of Technology System. The specific SMI technical guidance systems have been developed under the Smaller Enterprise Agencies. The eight Regional Bureaus of MITI and the Small Business Corporation execute substantial supporting activities. A brief description is given below and the schematic charts are shown in Annex IV and V.

#### A Institutional Framework of SMI Guidance System and Respective Activities

12. A number of governmental and semi-governmental bodies act as policy implementing agencies. The roles of these organizations are very important in the sense that Japanese economic growth is attributable to a great extent to the elaborated activities of these agencies and institutions. The following is a description of the characteristics of Governmental bodies concerned:

- i) The Smaller Enterprise Agency (SEA), External Bureau of Ministry of International Trade and Industry (MITI), was established in 1948 as the nucleus governmental body in charge of administration for small and medium enterprises.
- ii) The Smaller Enterprise Section of the Regional Bureau of MITI administrates at the regional level for promotion of SMI in the region. There are eight Regional Bureaus; namely in Sapporo, Sendai, Tokyo, Nagoya, Osaka, Hiroshima, Shikoku, and Fukuoka.
- iii) Governments of the Metropolis/Prefecture have a Commerce and Industry Section or a smaller enterprise section which are taking practical administrative measures while acting as a counterpart office for smaller enterprises. They also have their research institutes and laboratories conducting technical guidance on operation of small and medium enterprises.

13. At the semi-governmental level a number of organizations are functioning to support and develop SMI in Japan. The description is as follows:<sup>1/</sup>

- i) The National Federation of Small Business Associations has an established administrative organization in each prefectural government and provides legal guidance to each association concerned such as Smaller Enterprise Co-operative Associations, Commerce and Industrial Trade Associations. This is an established scheme at the national level while the Metropolitan/Prefectural Federation of Small Enterprise Co-operative Associations consists of local associations in each metropolis/prefecture. These central Federations, while providing guidance materials and lectures, receive subsidies either from national or prefectural government to support their substantial activities.

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1/ Some explanation is an abstract of only one of their functions and activities heavily associated with SMI's development.

- ii) The Chamber of Commerce and Industry strengthens the operational and managerial capacities of their member enterprises. The specific activities are to carry out general research on commerce and industry, to provide qualification tests on various techniques, consultations guidance on commerce and industry. In particular it conducts consultations on financial, taxation and management problems on both an extension and on-the-spot basis. The number of its establishments as of October 1981 is 478 and the Japan Chamber of Commerce and Industry functions as its upper organization.
- iii) The Regional Society of Commerce and Industry functions in small towns and villages whereas the Chamber of Commerce covers only cities. The functions, therefore, are almost identical. Special emphasis is given to the promotion of small scale industries,
- iv) The Small Business Corporation finances smaller enterprises to promote their co-operation and provide guidance and consultation for managerial and technological development with a view to structural improvement of the small and medium business sectors. In detail, about 50 professionals registered in the Corporation carry out specific research at the factory level upon the request of public R & D institutes. The Corporation also dispatches "transfer of technology specialist(s)" to investigate in depth, the problems stemming from acceptance of new technology which may be introduced to the respective firm. At the same time, this team will provide direct consultation in the field of management, specific production techniques, etc. Whenever the introduced technology is agreed to be accepted by the firm, the specialist will assess the total costs and other required input for the possible transfer. In addition, the activities related to mutual aid insurance system which can be utilized in the case of the close-down of small and medium enterprises or retirement of the entrepreneurs were recently entrusted to this Corporation.
- v) The Small Business General Guidance Centre in each prefectural government provides diagnostic services. The certified small business diagnosticians, upon the request of small business entrepreneurs, carry out consulting services on the overall operation, specific technical problems, etc. The national government subsidizes part of the necessary personnel costs and operational expenses. For instance, the government allocated a budget of ¥2,816 million (US \$12.5 million) for the fiscal year 1980/81 to subsidize (a) operational expenses of diagnostic service (¥999 million), (b) personnel cost of consultation (¥1,625 million) and (c) operational expenses for modernization promotion (¥198 million).

#### B Public Research and Development Institutions

14. The functions of public Research and Development Institutions are two fold: (1) technical service which includes provision of technical advisory service, technical training, supply of technical information, etc., (2) basic

research and development activity. There are almost 180 such institutions in Japan and the total number of professional staff altogether is more than 4,000. The activities of each institution differ from the indigenous industries' requirements. The urgent task presently envisaged is to identify the local needs and match as many of their future activities to them. The basic needs identified recently are as follows:<sup>1/</sup> (1) laboratory tests required, (2) technical training at the R & D institution, (3) open laboratory, (4) extension technical service, (5) technical advisory service, (6) R & D, (7) technical training, (8) technical information dissemination, (9) introduction of technology newly developed by other industries/firms.

15. The last need (#9) has recently increased and the survey conducted by the Smaller Enterprise Agency (SEA) reveals that the local industry expects the R & D institutes to carry out more and more intermediary functions to introduce the firm which pertains a special technology to the potential users in the local industry. This type of service goes beyond the simple information dissemination service and the R & D institution would have to be ready to play such a "match-maker" role.

#### C Inter/Intro Industry Transfer of Technology System

16. The activity called "PLAZA For Exchange of Technology" initiated in 1981 to promote the smooth transfer of technology not only in the same industry but with different industries. The monthly meeting is held among leaders of industries (entrepreneurs), experts, scholars, at the prefectural level. The members are appointed by the Governor of the prefecture. The main purpose of the meeting is to exchange views on R & D on specific subjects, new ideas for improving the existing operation. It is expected that this will enable the industry as a whole to enhance the level of technology within a framework of self-reliance development effort. This new activity is being supported by the Small Business Corporation and each prefectural government. It should be noted, however, that the rationale behind this is to strengthen the operational capacity particularly through technological improvement with the initiative of enterprises themselves.

#### D Vocational Training System

17. The vocational training system in Japan consists of two major activities (1) Vocational Training and (2) Trade Skill Tests. The nature of the training programmes can be classified into three categories, (i) basic

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<sup>1/</sup> The White Paper, p. 210 (original in Japanese)

training, (2) upgrading training and (3) occasional capacity re-development training. Those which are conducted in the public vocational training facilities are called statutory vocational training of which training standards are specified by the Labor Ministry Ordinance.

18. Public training facilities are used by national prefectural and local municipal governmental bodies, as well as by the Employment Promotion Project Corporation. There are three types of facilities at the national level; Vocational Training Centres, Colleges of Vocational Training, and Skill Development Centres.

19. These public facilities are spread all over the country. In addition to this, municipal governmental bodies (city, town, village) also established vocational training centres with the permission of the Labor Ministry and are conducting the training. The total number of its establishment is 411 and the number of training courses carried out in 1978 was 2650.<sup>1/</sup> The total number of persons trained in this entire training scheme was approximately 235,000 in 1978.<sup>2/</sup>

#### E Organization of SMI into Co-operatives<sup>3/</sup>

20. Due to the typical nature of small industry - small size of operation, lack of creditability, low level of technology - small industries in Japan have suffered from a weak competitive position in the domestic market. Thus, forming a strong organization based on the mutual coalition and a strong sense of solidarity among themselves has been a crucial issue. Various types of organization systems are already established among small business enterprises with a view to increase productivity, to yield higher added value, to obtain stronger bargaining power, etc. Along this line, the government is encouraging them to go into their "joint operation" and "grouping" and enforced the Law concerning Organization of Small Business Co-operatives.

21. Common Facility Co-operative is the most common among the co-operatives. Concerning works undertaken by small and medium scale enterprise operators who are members of the co-operatives, it strives to rationalize management and to improve their operational conditions by performing the following activities:

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1/ Data source: Survey by the Vocational Training Bureau of Labor Ministry

2/ ibbid

3/ Summary of course material prepared by Mr. I. Katayama, Commerce and Industry Financing Section, Aichi Prefecture Government for Seminar on Smaller Enterprise Development, Nagoya International Training Centre.

- (a) guidance and educational service
- (b) joint undertakings such as joint production, purchase, sales, transportation, and storage
- (c) establishment of welfare facilities for the benefit of association members.

22. There are other co-operatives established with different purpose Mutual Fire Insurance Co-operative, Credit Co-operative, Federation of Co-operation, Joint Enterprise Co-operative, Consolidated Co-operative, Trade Association. These co-operatives are helpful to strengthen SMIs in terms of scale of economy.

#### F Financial Assistance

23. As described below, the government coped with various economic problems stemming from rapid industrialization in the 1950's and early 60's and business environmental changes in the late 60's and 70's. A number of governmental financial institutions were established as a vehicle to maintain the SMI's stable and develop them on a sound basis. Financial institutions established and special privilege loans made available during these periods are also listed thereafter.

##### Historical Review<sup>1/</sup>

- (a) The major target of the financial policy was set at the modernization and mechanization of production and distributing facilities and process in the period of rapid economic growth (1955-60). The main stream of this policy was incorporated into the Small Business Basic Law (enacted in 1963). A substantial amount of funds mostly from the Ministry of Finance was channeled to governmental financial institutions and distributed to SMI sectors to implement such policy.
- (b) However, around 1965, when modernization of major SMIs was esteemed to be through, there began to be observed excessive capacities of production in several fields of industry. The policy called the Structural Improvement was put forward to reduce the excessive domestic competition and strengthen the respective industry in terms of international competition. The implementation also required a huge amount of funds. The Small Business Promotion Corporation was established in 1967. The provision of supporting funds for its implementation was executed mainly through this Corporation.
- (c) At the same time, industrial pollution became a serious problem. In order to reduce the corporate costs incurred from resolving such diseconomy, specific privileges such as subsidies and extra depreciation, as well as very advantageous loan terms were availed to those SMIs which installed prevention facilities.

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1/ Summary of the text used in the Seminar on Smaller Enterprises Development 1981 - Nagoya International Training Centre

- (d) The first energy crisis in 1973 caused the unexpected hike of energy costs and raw materials, accompanied by serious depression which persisted nearly up to 1977. One of the main streams of government financial policies was to ease various frictions caused by such drastic changes in the business environment. Several emergency loans were made to those export-oriented SMIs which suffered from less active export activities due to the wild fluctuation of exchange rates. Many more working funds were provided to individual SMIs and clusters of SSIs in the locality to help tide them over the depression.

Institutions

National Finance Corporation (1949)  
Mutual Loan and Savings Banks (1951)  
Credit Association (1951)  
Central Bank for Commercial and Industrial Co-operatives (1951)  
Credit Guarantee Association (1953)  
Small Business Credit Industrial Corporation (1958)  
Small Business Investment Corporation (1963)  
Small Business Promotion Corporation (1963)

Special Loans Provided

Modernization Loans  
Export Promotion Loans  
Structural Improvement Loans  
Anti Pollution Loans  
Energy Loans  
Anti Bankruptcy Loans  
Business Conversion Loans  
Energy Saving Loans  
Overseas Investment Loans  
Management Improvement Loans

24. In addition to the provision of the above loans, the government has implemented the Credit Guarantee Scheme to support small and medium scale enterprises in obtaining loans without mortgages. Furthermore, a different type of financial assistance has been extended to those who intend to make direct foreign investment.

25. The national government provides a number of agencies, corporations and prefectural governments with subsidies to support development activities for SMI. Such financial support will be extended specifically to the small and medium scale firms which intend to carry out R & D activities to improve technology of SMI and to small enterprises which are engaged in indigenous industries.

III In-depth Study: The Operation of Small Business General Guidance Centre of Aichi Prefecture.<sup>1/</sup>

26. The case study of Aichi Prefecture was selected in order to explain more clearly the mechanism of Technical/Managerial Guidance System in Japan. Aichi Prefecture may reveal one of the typical Japanese industrial development patterns, (1) small enterprises subcontracting with a large scale manufacturer, e.g., Toyota Automobile in Toyota City, (2) indigenous industries, e.g., ceramic industry in Tajimi City. It may be a good example to introduce the actual guidance system on a practical basis.

27. The annual budget allocated to the above Centre for the JFY 1981/82<sup>2/</sup> is ¥362 million (US \$1.6 million) compared to the budget of Commerce and Industry Division, ¥56,166 million (US \$250 million) and ¥998,110 million (US \$4,436 million). The staffing and the organization of the Centre is shown in Annex VI.

28. The Centre provides various types of service. As shown in Annex VII the major operational components are a provision of (1) General diagnosis service, (2) "Kodaka" diagnosis service, (3) Training, (4) Research and Development, (5) Information dissemination.

29. The general diagnosis service can be requested at the counter of the Centre or 18 Chambers of Commerce and Industry and 79 commercial and industrial associations in Aichi Prefecture. Upon approval by the Chamber of Commerce and Industry of the respective association, the team comprising of diagnosticians of the Centre and staff of the public research institutes will visit enterprises in over 11 villages, 47 towns, and 30 cities to carry out management and technical consultancy services. Presently there are 8,580 business diagnosticians in Japan and 485 in Aichi Prefecture; 60% of which are in commercial fields and the rest in the industrial field.

30. The "Kodaka" diagnosis service is primarily a preliminary step to obtain the governmental loan extended to a proposed operation (factories, commercial shops, etc.) i.e. application to the KODAKA loan. Usually, plan formulation diagnosis takes place at the first place to assess the operational plans on a projection basis prior to the application for the

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1/ The information and description about the Centre was obtained through individual interviews and the course materials prepared by Mr. Teranishi, Director of Aichi Prefectural Government for the Seminar on Smaller Enterprise Development 1981, Nagoya International Training Centre.

2/ Japanese Fiscal Year (JFY) starts from April and end in March

KODAKA loan. The procedure to make a request is identical to the requirements for application of general diagnosis service.

31. The Centre facilitates information dissemination functions. Its main activities are (1) publication of monthly magazines and quarterly newsletters, (2) compilation of statistical data, e.g., financial ratio of 2,500 enterprises over 56 industrial categories, (3) provision of audio-video rental service for in-plant or in-shop training and (4) exhibition of products of small businesses.

32. The Centre provides training opportunities for the local managers and technical engineers. The more detailed description is as follows;

Management Training: It consists of three different curriculum; functional management training, young business leaders seminars, seminars on international economics.

For those who wish to attend night classes, the Centre carries out a number of night classes mainly for long-term courses. The duration of the courses are either 95 hours (long-term) or 36 hours (short-term). The former offers 30 different courses and the latter 170 courses.

Technical Training: This programme provides various types of training depending on period and subject of study. The subjects covered in this programme are as follows:

- |                             |                          |
|-----------------------------|--------------------------|
| - machine engineering       | - electrical engineering |
| - metallurgical engineering | - electronic engineering |
| - industrial chemistry      | - dyeing                 |
| - weaving engineering       | - paper manufacturing    |

The duration varies from 380 hours (night class of one year comprising of 260 hours for lecture and 120 hours for practical training) to 36 hours (both for lecture and practice). This technical training is commissioned to CHUBU SCIENTIFIC AND ENGINEERING CENTRE in Aichi Prefecture.



Conclusions and Recommendations

33. Study of the Japanese development scheme for small and medium scale industries (SMI) reveals that Japanese SMI have been one of the cores of Japanese economic development in the past and will continue to be the most crucial industrial sector to support the Japanese stable economic growth. The scheme has been carefully elaborated and implemented by the Government. The Government emphasizes the importance of investigation on the needs of small and medium scale enterprises to elaborate the scheme on an inter-disciplinary framework. Thus each component described in paragraph (1) should be carefully examined in respect both to the social and corporate needs.

34. There must be a co-ordinating body at the national level such as the Small Business Advisory Centre (in the case of the Philippines), Small Business Corporation (Japan). In addition to the co-ordination function, this type of organization may be given similar functions as those of regional centres which offer R & D, information dissemination, extension service, training. For instance, the research and development subjects carried out by the regional institute should be different from those at the national level. The transfer of highly technical know-how may be more effectively implemented through the national R & D institute together with the national co-ordinating body than through the local one, due to the complicated nature of the task.

35. Accessibility to local enterprises is one of the crucial factors to elaborate an extension service scheme on a practical basis. In the case of Japan, local Chambers of Commerce and Industry are acting as counterparts for the enterprises which request such service. The request should be processed promptly to the regional government agency, which then provide the extension service without unnecessary delay. This type of routine service cannot be provided at the national level due to inaccessibility to the local industry on a daily basis.

36. The curriculum of training institutes as well as vocational training centres should reflect the local needs. Occasionally reviewing the course materials and instruction methodology is imperative. The recent study in Japan suggests that training of successors of indigenous industry is one of the urgent subjects - their technical skills as well as the managerial know-how should be enhanced to develop the indigenous industry on a sound basis.

37. Maintaining qualified consultants and relevant R & D equipment at the local level is a key to provide effective extension service both in technical and managerial fields. The national co-ordination body should be given the function of providing "brush up" training courses for consultants (diagnosticians) and examining technical suitability of laboratory equipment installed at the local R & D institute. It should be noted that the needs for extension service may shift from one to the other over the years reflecting the change of business environment. For instance, the subject of energy conservation recently became one of the most interesting subjects among not only large scale but small and medium scale Japanese enterprises. The government initiated the programme which provides specific diagnosis at the factory level by sending a team of experts and a specially-equipped automobile - so called "energy diagnosis bus".

38. Organizing a group of small and medium scale enterprises into a form of co-operative can facilitate a practical means to pursue advantages of scale of economy. A recent trend among common facility co-operatives reveals some scale merits to carry out their own R & D activities among the workers. Transfer/exchange of technology among members of the co-operative would be smoother and easier.

39. Provision of loan, credit guarantee and subsidy are the three major financial assistance components to develop SMI. As shown in paragraph 23, the Japanese Government approved and provided different types of loans and subsidy to cope with problems stemming from business environmental changes and to implement the respective government policies. It is essential that this financial scheme be considered as a high priority area for elaboration of overall SMI development plan.

40. In the past, direct foreign investment in Japan, e.g., a form of joint venture between a local Japanese small and medium scale enterprise and foreign company, seldom took place and had a very small impact in the field of technological development. On the other hand, a large Japanese firm which had a licencing or joint venture agreement with a foreign company played a catalytic role in diffusion of technology obtained from abroad to SMI in Japan. The conventional industrial structures composed of "subcontracting system" made the diffusion process easier. This aspect

of transfer of technology should be paid careful attention in terms of TSDS development. It may be justified to suggest that appropriate technology absorption systems be developed and implemented in the country where a sub-contracting industrial structure is not so common, or joint venture and licencing agreement are to be made directly with a local small and medium scale enterprises. The better technology introduced from abroad will be fed back to the institutionalized centre through these system. This centre therefore will be able to accumulate such technology for further diffusion to the respective industries. Furthermore, the counterpart body to promote direct foreign investment in the local industry should be strengthened. In fact, it has been proven that transfer of technology through direct investment is one of the most effective means to improve local technical skills, e.g., design, packaging, production processing techniques.

41. The "PLAZA for Exchange of Technology" programme initiated from this year to support self-reliance development efforts among small and medium scale enterprises. The monthly meetings have been held at the prefectural level and the activity already has expanded to the joint meeting at the interprefectural level. The recent news paper introduced that the PLAZA in Akita prefecture which lacks electronics technology in the local industry approached Yokohama industrial groups which are specialized in the field of electronics and in the related industries. It is expected that this activity will make an impact on technological development and supplement what each local industry lacks. It may be worth suggesting to carry out such a joint meeting within the framework of the TSDS in the Philippines.

APPENDIX STATISTICS TABLES

Number of Enterprise Establishments by Industry and by Enterprise Scale (privately-run establishments)

| Industry                                | Year | Small and medium enterprise establishments |                          | Large enterprise establishments |                          | Total                    |                          |
|---|------|--|--------------------------|---------------------------------|--------------------------|--------------------------|--------------------------|
|   |      | Number of establishments                   | Percentage component (%) | Number of establishments        | Percentage component (%) | Number of establishments | Percentage component (%) |
| Mining                                  | 1969 | 9,239                                      | 98.8                     | 116                             | 1.2                      | 9,355                    | 100.0                    |
|   | 1972 | 8,305                                      | 99.1                     | 71                              | 0.9                      | 8,376                    | 100.0                    |
|   | 1975 | 7,157                                      | 99.4                     | 42                              | 0.6                      | 7,239                    | 100.0                    |
|   | 1978 | 6,782                                      | 99.5                     | 35                              | 0.5                      | 6,817                    | 100.0                    |
| Construction                            | 1969 | 345,205                                    | 99.8                     | 623                             | 0.2                      | 345,828                  | 100.0                    |
|   | 1972 | 400,520                                    | 99.8                     | 683                             | 0.2                      | 410,203                  | 100.0                    |
|   | 1975 | 446,516                                    | 99.9                     | 520                             | 0.1                      | 447,036                  | 100.0                    |
|   | 1978 | 494,889                                    | 99.9                     | 451                             | 0.1                      | 495,340                  | 100.0                    |
| Manufacturing                           | 1969 | 733,337                                    | 99.4                     | 4,504                           | 0.6                      | 737,841                  | 100.0                    |
|   | 1972 | 788,619                                    | 99.4                     | 4,763                           | 0.6                      | 793,382                  | 100.0                    |
|   | 1975 | 809,309                                    | 99.5                     | 4,324                           | 0.5                      | 813,633                  | 100.0                    |
|   | 1978 | 837,893                                    | 99.5                     | 4,839                           | 0.5                      | 842,732                  | 100.0                    |
| Wholesaling and retailing               | 1969 | 2,286,900                                  | 99.6                     | 9,120                           | 0.4                      | 2,296,020                | 100.0                    |
|   | 1972 | 2,506,642                                  | 99.6                     | 10,768                          | 0.4                      | 2,517,410                | 100.0                    |
|   | 1975 | 2,622,635                                  | 99.6                     | 11,857                          | 0.4                      | 2,634,492                | 100.0                    |
|   | 1978 | 2,853,436                                  | 99.6                     | 12,160                          | 0.4                      | 2,865,596                | 100.0                    |
| Finance and insurance                   | 1969 | 58,827                                     | 99.4                     | 328                             | 0.6                      | 59,155                   | 100.0                    |
|   | 1972 | 61,468                                     | 99.4                     | 366                             | 0.6                      | 61,834                   | 100.0                    |
|   | 1975 | 65,877                                     | 99.4                     | 383                             | 0.6                      | 66,260                   | 100.0                    |
|   | 1978 | 74,861                                     | 99.5                     | 480                             | 0.5                      | 75,341                   | 100.0                    |
| Realty                                  | 1969 | 127,298                                    | 100.0                    | 31                              | 0.0                      | 127,329                  | 100.0                    |
|   | 1972 | 153,953                                    | 100.0                    | 35                              | 0.0                      | 153,988                  | 100.0                    |
|   | 1975 | 176,565                                    | 100.0                    | 23                              | 0.0                      | 176,588                  | 100.0                    |
|   | 1978 | 213,310                                    | 100.0                    | 21                              | 0.0                      | 213,331                  | 100.0                    |
| Transportation and communication        | 1969 | 83,393                                     | 99.3                     | 638                             | 0.7                      | 84,031                   | 100.0                    |
|   | 1972 | 94,631                                     | 99.4                     | 577                             | 0.6                      | 95,208                   | 100.0                    |
|   | 1975 | 104,627                                    | 99.5                     | 506                             | 0.5                      | 105,133                  | 100.0                    |
|   | 1978 | 114,566                                    | 99.5                     | 528                             | 0.5                      | 115,094                  | 100.0                    |
| Electricity, gas and piped water supply | 1969 | 7,686                                      | 98.6                     | 113                             | 1.4                      | 7,799                    | 100.0                    |
|   | 1972 | 6,262                                      | 98.2                     | 116                             | 1.8                      | 6,378                    | 100.0                    |
|   | 1975 | 5,570                                      | 98.0                     | 113                             | 2.0                      | 5,683                    | 100.0                    |
|   | 1978 | 4,511                                      | 97.5                     | 124                             | 2.5                      | 4,635                    | 100.0                    |
| Services                                | 1969 | 573,064                                    | 98.5                     | 10,203                          | 1.7                      | 583,267                  | 100.0                    |
|   | 1972 | 1,053,880                                  | 98.5                     | 13,074                          | 1.2                      | 1,066,954                | 100.0                    |
|   | 1975 | 1,119,716                                  | 98.7                     | 14,320                          | 1.3                      | 1,134,036                | 100.0                    |
|   | 1978 | 1,215,032                                  | 98.6                     | 16,676                          | 1.4                      | 1,231,708                | 100.0                    |
| Non-primary industries, total           | 1969 | 4,624,429                                  | 99.4                     | 26,044                          | 0.6                      | 4,650,473                | 100.0                    |
|   | 1972 | 5,083,270                                  | 99.4                     | 30,453                          | 0.6                      | 5,113,723                | 100.0                    |
|   | 1975 | 5,358,812                                  | 99.4                     | 31,288                          | 0.6                      | 5,389,100                | 100.0                    |
|   | 1978 | 5,814,882                                  | 99.4                     | 34,439                          | 0.6                      | 5,849,321                | 100.0                    |

Source: Japanese Prime Minister's Office, "Jigyosho Tokai (Statistics on Business Establishments)"

Note: Business establishments with a work force of less than 300 employees (of less than 100 employees in wholesaling and less than 50 employees in retailing and service trades) are classified as small and medium enterprise establishments.

Employee Populations by Industry and by Business Scale (private sector)

| Industry                                | Year | Small and medium enterprise establishments |                          | Large enterprise establishments |                          | Total                        |                          |
|---|------|--|--------------------------|---------------------------------|--------------------------|------------------------------|--------------------------|
|   |      | Employee population (person)               | Percentage component (%) | Employee population (person)    | Percentage component (%) | Employee population (person) | Percentage component (%) |
| Mining                                  | 1969 | 138,341                                    | 53.6                     | 115,980                         | 46.4                     | 258,321                      | 100.0                    |
|   | 1972 | 118,518                                    | 63.5                     | 67,090                          | 36.5                     | 186,608                      | 100.0                    |
|   | 1975 | 101,449                                    | 69.4                     | 44,149                          | 30.6                     | 146,198                      | 100.0                    |
|   | 1978 | 93,841                                     | 70.4                     | 39,501                          | 29.6                     | 133,342                      | 100.0                    |
| Construction                            | 1969 | 2,930,821                                  | 89.3                     | 350,700                         | 10.7                     | 3,281,526                    | 100.0                    |
|   | 1972 | 3,594,476                                  | 90.3                     | 386,636                         | 9.7                      | 3,981,112                    | 100.0                    |
|   | 1975 | 3,865,989                                  | 92.9                     | 294,738                         | 7.1                      | 4,160,727                    | 100.0                    |
|   | 1978 | 4,349,173                                  | 94.2                     | 267,176                         | 5.8                      | 4,616,349                    | 100.0                    |
| Manufacturing                           | 1969 | 8,679,937                                  | 69.0                     | 3,907,396                       | 31.0                     | 12,587,327                   | 100.0                    |
|   | 1972 | 9,209,146                                  | 69.2                     | 4,088,508                       | 30.8                     | 13,297,654                   | 100.0                    |
|   | 1975 | 8,929,279                                  | 70.5                     | 3,734,632                       | 29.5                     | 12,663,911                   | 100.0                    |
|   | 1978 | 9,194,642                                  | 72.5                     | 3,314,464                       | 26.5                     | 12,509,106                   | 100.0                    |
| Wholesaling and retailing               | 1969 | 9,010,436                                  | 86.3                     | 1,354,527                       | 13.1                     | 10,364,963                   | 100.0                    |
|   | 1972 | 10,056,035                                 | 86.0                     | 1,634,808                       | 14.0                     | 11,690,843                   | 100.0                    |
|   | 1975 | 10,703,352                                 | 86.8                     | 1,625,283                       | 13.2                     | 12,328,635                   | 100.0                    |
|   | 1978 | 11,868,673                                 | 87.6                     | 1,686,972                       | 12.4                     | 13,555,645                   | 100.0                    |
| Finance and insurance                   | 1969 | 1,025,523                                  | 83.4                     | 204,342                         | 16.6                     | 1,229,865                    | 100.0                    |
|   | 1972 | 1,160,649                                  | 83.3                     | 232,318                         | 16.7                     | 1,392,967                    | 100.0                    |
|   | 1975 | 1,238,605                                  | 82.6                     | 260,858                         | 17.4                     | 1,499,463                    | 100.0                    |
|   | 1978 | 1,356,899                                  | 83.6                     | 267,017                         | 16.4                     | 1,623,916                    | 100.0                    |
| Realty                                  | 1969 | 293,680                                    | 95.7                     | 13,044                          | 4.3                      | 306,724                      | 100.0                    |
|   | 1972 | 384,242                                    | 96.0                     | 15,849                          | 4.0                      | 400,091                      | 100.0                    |
|   | 1975 | 483,726                                    | 97.6                     | 11,133                          | 2.4                      | 464,859                      | 100.0                    |
|   | 1978 | 516,843                                    | 98.0                     | 10,517                          | 2.0                      | 527,360                      | 100.0                    |
| Transportation and communication        | 1969 | 1,549,082                                  | 81.9                     | 342,242                         | 18.1                     | 1,891,324                    | 100.0                    |
|   | 1972 | 1,716,437                                  | 83.9                     | 329,055                         | 16.1                     | 2,045,492                    | 100.0                    |
|   | 1975 | 1,750,712                                  | 85.6                     | 293,879                         | 14.4                     | 2,044,591                    | 100.0                    |
|   | 1978 | 1,877,206                                  | 86.5                     | 293,992                         | 13.5                     | 2,170,798                    | 100.0                    |
| Electricity, gas and piped water supply | 1969 | 121,773                                    | 65.4                     | 64,429                          | 34.6                     | 186,202                      | 100.0                    |
|   | 1972 | 121,839                                    | 66.1                     | 62,592                          | 33.9                     | 184,431                      | 100.0                    |
|   | 1975 | 125,433                                    | 63.3                     | 72,864                          | 36.7                     | 198,297                      | 100.0                    |
|   | 1978 | 132,621                                    | 65.9                     | 68,698                          | 34.1                     | 201,319                      | 100.0                    |
| Services                                | 1969 | 3,664,393                                  | 74.5                     | 1,256,602                       | 25.5                     | 4,920,995                    | 100.0                    |
|   | 1972 | 4,039,149                                  | 71.9                     | 1,575,536                       | 28.1                     | 5,614,685                    | 100.0                    |
|   | 1975 | 4,361,494                                  | 71.1                     | 1,773,001                       | 28.9                     | 6,134,495                    | 100.0                    |
|   | 1978 | 4,899,257                                  | 70.4                     | 2,058,351                       | 29.6                     | 6,957,608                    | 100.0                    |
| Non-primary industries, total           | 1969 | 27,413,991                                 | 78.3                     | 7,613,250                       | 21.7                     | 35,027,241                   | 100.0                    |
|   | 1972 | 30,400,491                                 | 78.4                     | 8,393,392                       | 21.6                     | 38,793,883                   | 100.0                    |
|   | 1975 | 31,530,839                                 | 79.5                     | 8,111,137                       | 20.5                     | 39,641,976                   | 100.0                    |
|   | 1978 | 34,289,155                                 | 81.1                     | 8,006,288                       | 18.9                     | 42,295,443                   | 100.0                    |

Source: Japanese Prime Minister's Office, "Jigyosho Tokai (Statistics on Business Establishments)"

Note: Business establishments with a work force of less than 300 employees (or less than 100 employees in wholesaling and less than 50 employees in retailing and service trades) are classified as small and medium enterprise establishments.

Characteristics by Size of Manufacturing IndustryYear of 1979

| <u>Size of Employee<br/>Population</u> | <u>Number of<br/>Establishment</u> | <u>Employee</u> <sup>1/</sup><br><u>Population</u> | <u>Value of</u> <sup>2/</sup><br><u>Shipment</u> | <u>Added Value of</u> <sup>3/</sup><br><u>Productivity</u> <sup>4/</sup> |
|--|------------------------------------|--|--|--|
| 1 - 9                                  | 563,828                            | 2,159  | 12,938   | 2,962  |
| 10 - 19                                | 83,769                             | 1,152  | 11,982   | 4,262  |
| 20 - 99                                | 77,920                             | 3,013  | 41,631   | 4,873  |
| 100 - 299                              | 10,295                             | 1,659  | 31,492   | 6,470  |
| 300 - 999                              | 2,850                              | 1,426  | 40,606   | 8,852  |
| <u>1000 or more</u>                    | <u>639</u>                         | <u>1,448</u>                                       | <u>45,608</u>                                    | <u>10,508</u>  |
| 1 - 299                                | 735,812                            | 7,983  | 98,043   | 4,600  |
| 300 or more                            | 3,489                              | 2,874  | 86,214   | 9,706  |
| Total                                  | 739,301                            | 10,857   | 184,257  | ---  |

Source: Ministry of International Trade and Industry, Japan  
"Kogyo Tokei Hyo"

1/ Unit - thousands of persons

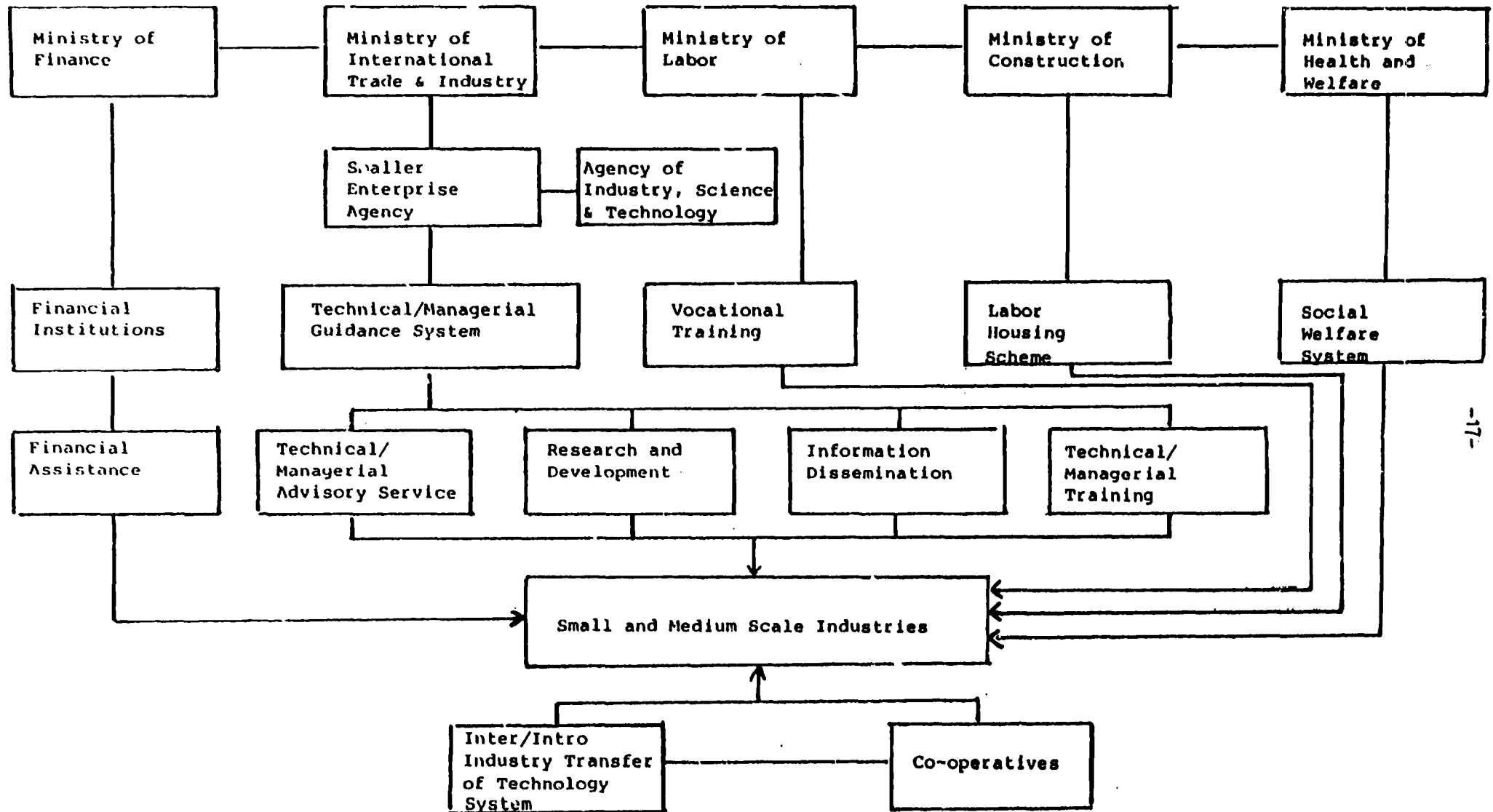
2/ Unit - billions of yen

3/ Unit - thousands of yen

4/ real value (amount of added value per employee per year)

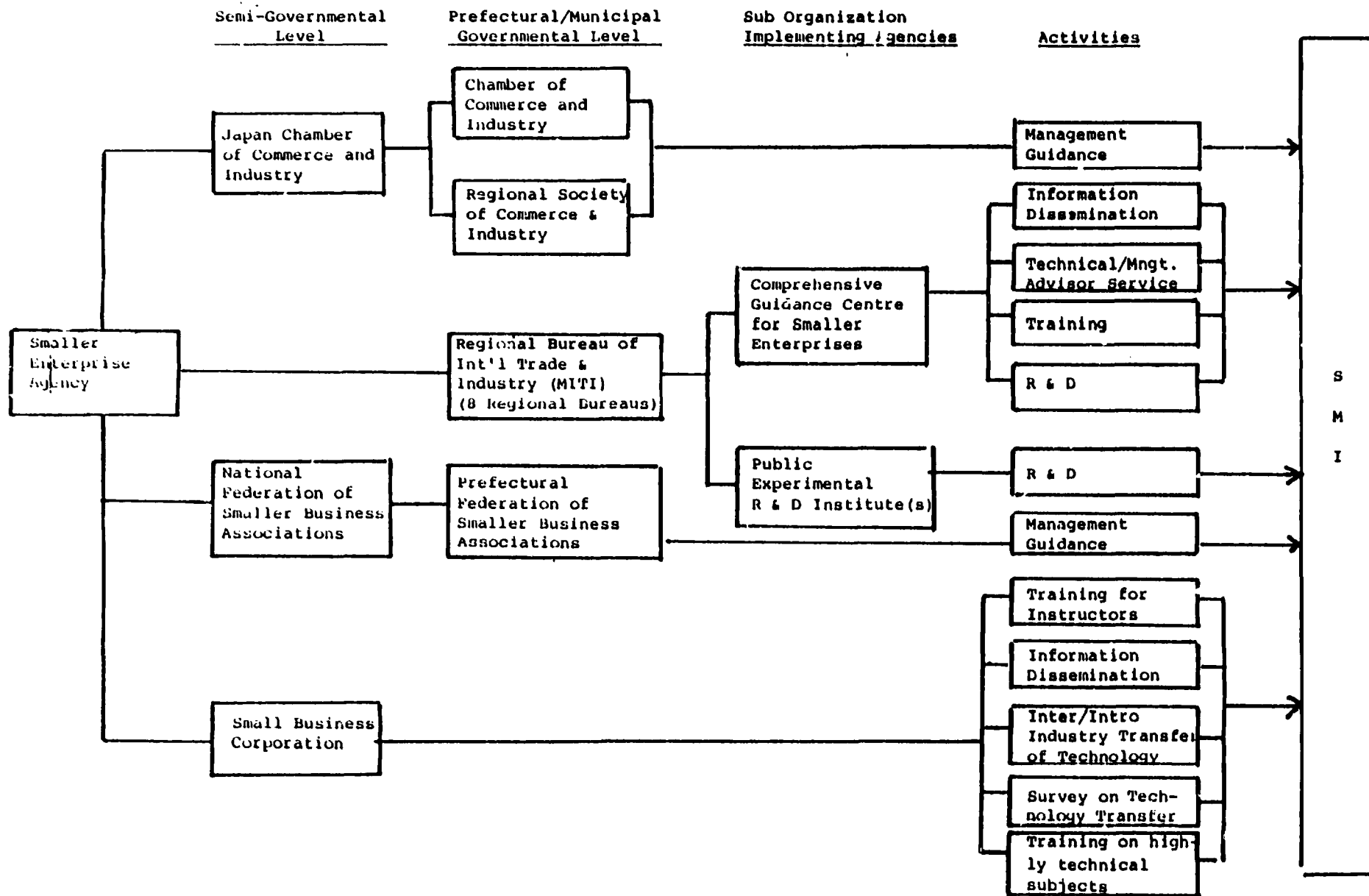
OVERALL JAPANESE SMI DEVELOPMENT SCHEME

ANNEX IV



**PRESENT MECHANISM AND FRAMEWORK OF SMALL ENTERPRISES  
GUIDANCE SYSTEM (SUMMARY)**

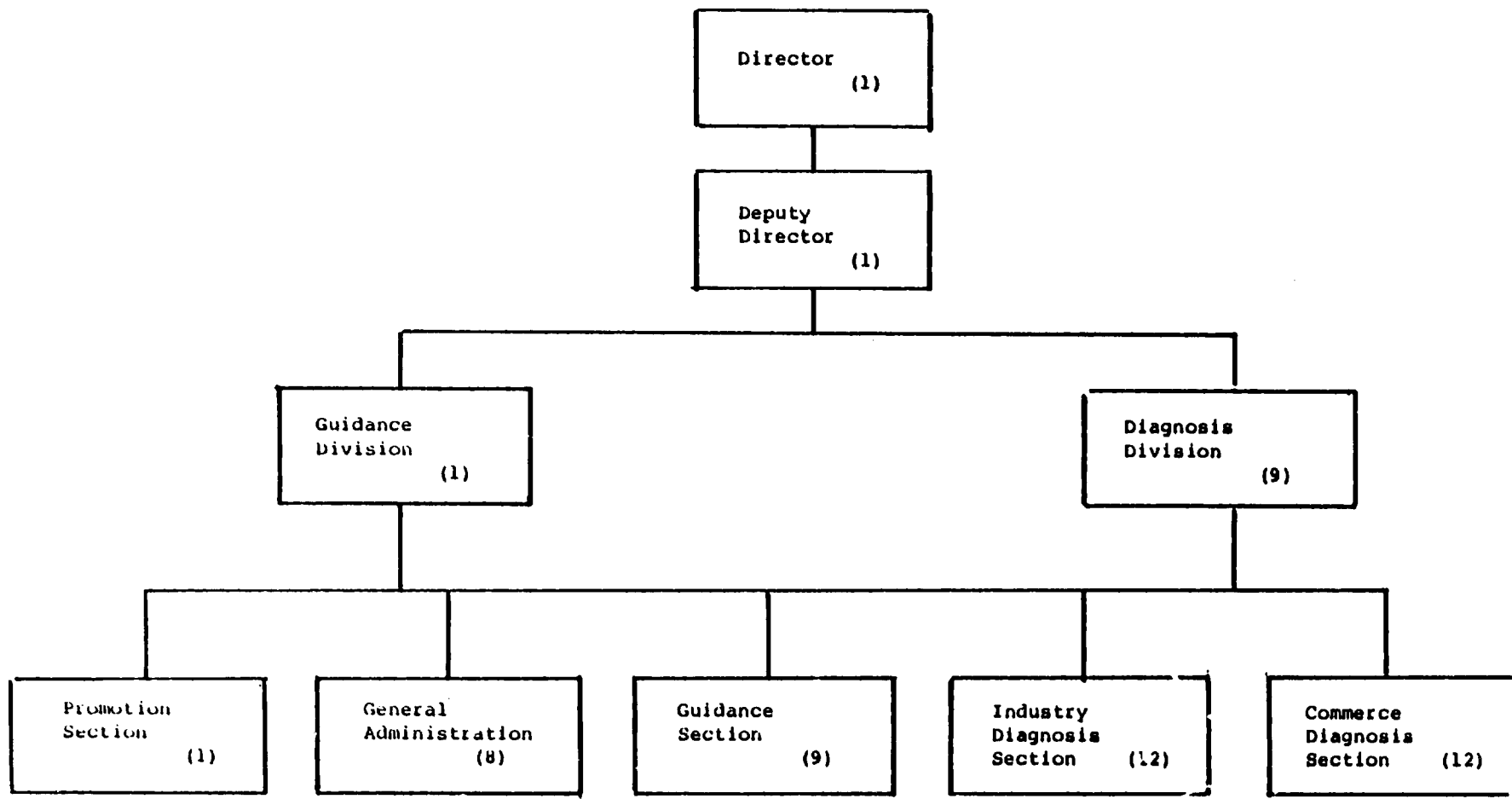
ANNEX V





ORGANIZATIONAL STRUCTURE AND MANNING TABLE OF SMALL BUSINESS  
General Guidance Centre of Aichi Prefecture

ANNEX VI



-19-

General/Professional Staff Members: 52  
Managers and Directors : 4  

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Total 56

FRAMEWORK OF CENTRE'S OPERATION

ANNEX VII

