THE REPUBLIC OF THE PHILIPPINES

REPORT
ON

THE FIRST PHASE STUDY FOR PROGRAMMING REGIONAL MEDIUM AND SMALL-SCALE INDUSTRY DEVELOPMENT

NOVEMBER 1975

JAPAN
INTERNATIONAL
COOPERATION AGENCY

THE REPUBLIC OF THE PHILIPPINES

REPORT
ON

THE FIRST PHASE STUDY FOR PROGRAMMING REGIONAL MEDIUM AND SMALL-SCALE INDUSTRY DEVELOPMENT

NOVEMBER 1975

JAPAN
INTERNATIONAL
COOPERATION AGENCY

Preface

The Government of Japan, upon request of the Government of the Republic of the Philippines, decided to undertake a prefeasibility study for programming the regional medium and small-scale industry development in the Philippines.

Accordingly, Japan International Cooperation Agency, commissioned by the Government of Japan, organized a study team of eight members, headed by Mr. Kunio Miyamura, senior consultant of Japan Management Association, and sent them to the Philippines on the 11th March, 1975.

During their twenty day study work, the team visited National Economic and Development Authority, Institute of Small-Scale Industries in the University of the Philippines, Development Bank of the Philippines and a number of other public and private institutions and organizations concerned. The team also conducted a field survey at Cagayan de Oro City, Iligan City and their vicinities in Region X, in Mindanao area, as a sample region, so as to achieve the team's objectives. Many public facilities, as well as many kinds of factories, were visited and interviewed by the team.

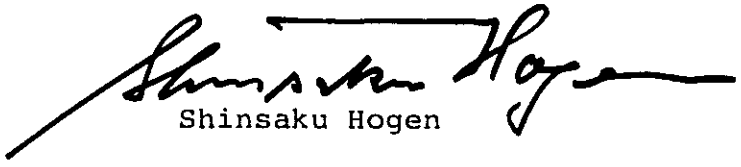
After getting back to Japan, the team scrutinized the data collected both in the Philippines and in Japan, discussed upon the financial situations in the

Philippines, medium and small-scale industries' environments there, possible projects for encouraging such industries and so forth, the results of which are to be summarised here in this report. In short, emphasis is placed upon the importance of selection of localities and types of industries to be intensively encourged for medium and small-scale industry development.

Nothing whould be more gratifying to us than that this report could be of any help for the regional development of medium and small-scale industries in the Philippines, and could contribute to the promotion of the friendship between the two countries.

Finally, let me take this opportunity to express my hearty gratitude to the Government of the Republic of the Philippines and other authorities conderned for their kind cooperations and assistance extended to the team, without which the study work could not be so successfully carried out.

November, 1975



Shinsaku Hogen

President

Japan International
Cooperation Agency

Tokyo, Japan

Letter of Transmittal

Mr. Shinsaku Hogen

President
Japan International
Cooperation Agency

Dear Sir;

I am pleased to submit you the draft final report entitled "Report on the First Phase Study for Programming Regional Medium and Small-Scale Industry Development in the Republic of the Philippines." This report represents the outcomes of the study work undertaken by eight expert team headed by Kunio Miyamura of Japan Management Association, who stayed in the Philippines for three weeks from March 11th through 30th, 1975.

In the Philippines, the team visited National Economic and Development Authority, Institute of Small-Scale Industries in University of the Philippines, Development Bank of the Philippines and a number of other public and private institutions and organizations concerned. The team also conducted a field survey at Cagayan de Oro City, Iligan City and their vicinities in Region X in northern Mindanao, as a sample region, so as to achieve the team's objectives. Many public facilities, as well as many kinds of factories, were visited and interviewed by the team.

After getting back to Japan, the team scrutinized the data collected both on the spot and in Japan, discussed upon the socio-economic situations in the Philippines, the medium and small-scale industries' environments, possible projects for regional development of such industries and so forth, the results of which are summarized here in this report.

The industries in the Philippines, in short, are rather traditional-industry-oriented, having some modern industries still in premature stage. In order to successfully implement effective measures for industrial development under so many restrictive conditions in the Philippines, it seems to be highly necessary, after analyzing the characteristics of the medium and small-scale industries in the Philippines, to clarify a priority policy for selecting preferential industries and their localities, into which quite a concentrated effort should be made.

The first phase of the study was devoted to collecting and analyzing data pertinent to selection of preferential industries and their localities. The second phase study is expected to draft some practical ideas and schemes for developing and encouraging the selected industries in the selected candidate areas.

We are thankful to the Government of the Republic of the Philippines and other authorities concerned for their kind cooperation and assistance extended

to us. We are also indebted to a number of persons in the Embassy of Japan, Japan International Cooperation Agency and other facilities in the Philippines in carrying out our task.

It is our sincere hope that this report will be of great help in accelerating the regional medium and small-scale industry development in the Republic of the Philippines, which has been an urgent and high priority project of the Government of the Philippines.

November, 1975

Kunio Miyamura

Head

Japanese First Phase
Study Team for
Programming Regional
Medium and Small-Scale
Industry Development
in the Republic
of the Philippines

MAP OF THE PHILIPPINES

REGIONAL MAP OF THE PHILIPPINES

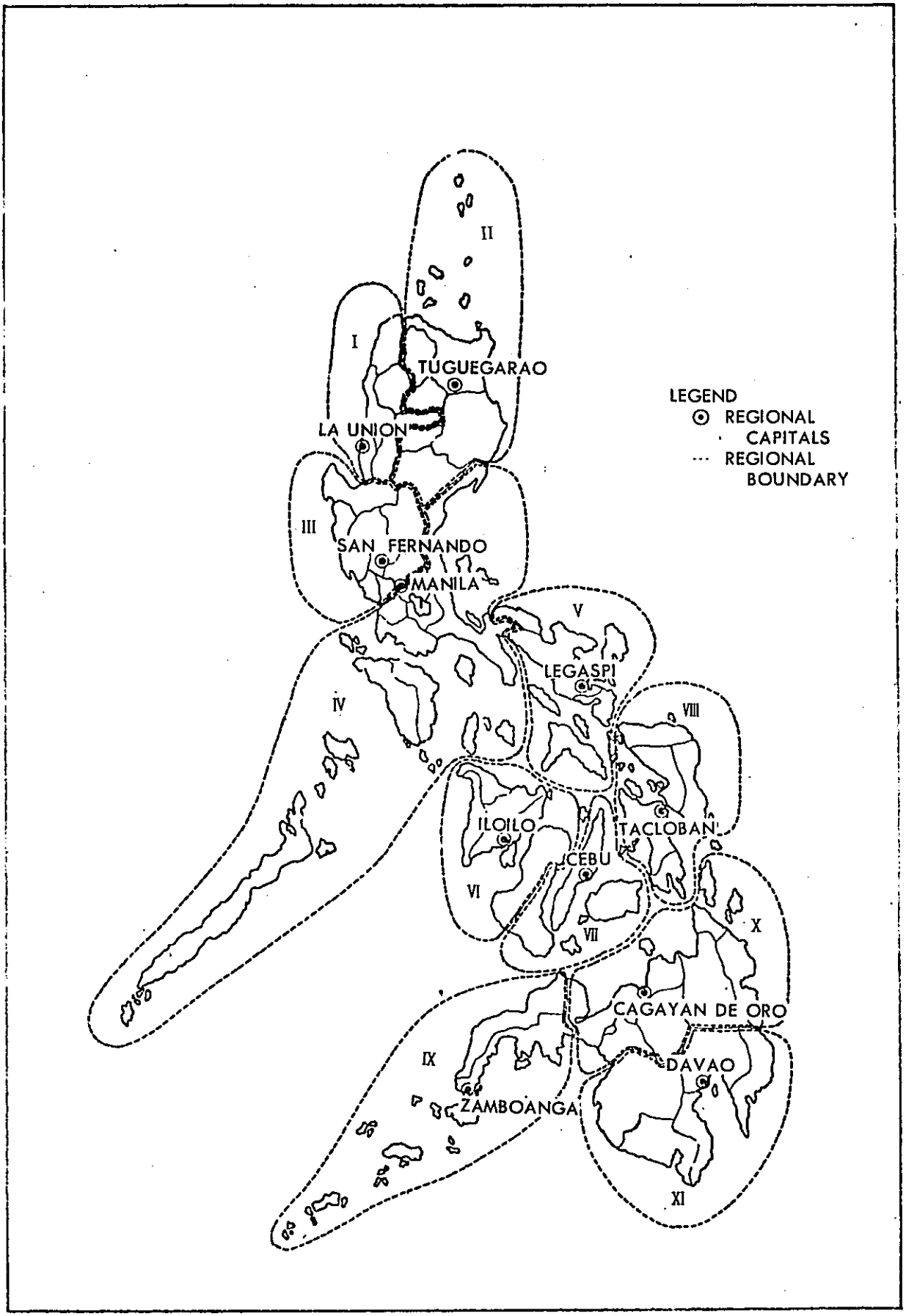


TABLE OF CONTENTS

CHAPTER I

INTRODUCTION

CHAPTER I INTRODUCTION

1-1. THE PURPOSE OF THE STUDY:

This study, for programming the regional medium and small-scale industry development in the Republic of the Philippines, ultimately aims at the below-listed two points, namely;

(1) To identify the existing and/or arising problems in the course of development of the regional medium and small-scale industries.

(2) To recommend the Government of the Philippines regarding what actions to be taken by the central government and the regional authorities to prepare workable development programs in the regional level.

This study is the first one of the two phase study, and was spent mostly for;

(1) collection and analysis of data on the national and regional socio-economic situations,

(2) survey and analysis on the actual activities of the various organizations concerned,

(3) collection and analysis of data on the actual situations and environments of such industries, and

(4) preparation of a draft schedule for the second phase study, based upon the findings and experiences of the first phase study.

1-2. THE TEAM'S ACTIVITIES:

The team's activities during their three week sojourn in the Philippines are as shown below:

Mar. 11 (Tue) Tokyo - Manila	At hotel, met Mr. Morikiyo, the second secretary of the Japanese Embassy, and Mr. Yoshida, the chief of JICA's Manila Office.
Mar. 12 (Wed) at Manila	Visited Minister Tsutsumi of the Japanese Embassy, and in the afternoon, met Mr. Quebral, Assistant Director of NEDA, and Mr. Viloria, Deputy Director of UP-ISSI.
Mar. 13 (Thu) at Manila	Visited NACIDA's Tachnical Training Center. In the afternoon, met the representatives from NEDA, DOI and UP-ISSI, when Cagayan de Oro City was selected as the central spot for the field survey.
Mar. 14 (Fri) at Manila	Visited and interviewed at DBP, DOL, DOI, MIRDC, BOI and MASICAP.
Mar. 15 (Sat) at Manila	Visited automobile modification and repair shops.
Mar. 16 (Sun) at Manila	Held an intra-team meeting.
Mar. 17 (Mon) at Manila	Visited and interviewed at NACIDA, PCBSI, JETRO and EPZA.

Mar. 18 (Tue)	Manila - Cagayan de Oro City	Briefing at NACIDA's regional office on the socio-economic situations in the Region X. In the evening, talked with staff members of PNB, NACIDA and MASICAP.
Mar. 19 (Wed)	Cagayan de Oro City - Iligan City	On way to Iligan City, dropped in a woodcraft factory, a weaving factory and a feedmill, then at Initao Municipality Office. In the afternoon, met Mayor of Iligan City, and visited IIT (Iligan Institute of Technology).
Mar. 20 (Thu)	Iligan City - Cagayan de Oro City	Visited a forging factory, a charcoal factory, DBP Iligan City Branch Office and MASICAP. In the afternoon, visited Mabuhai Vinyl Corp.'s factory. On way back to Cagayan de Oro City, also visited Maria Cristina Power Plant and Philippine National Steel Corp.'s works.
Mar. 21 (Fri)	Cagayan de Oro City	Visited an activated carbon factory, Kawasaki Sintering Plant site, Laboratory of Bureau of Plant Industries in Claveria and Resins Inc.'s shipyard at Jasaan.
Mar. 22 (Sat)	ditto	Visited woodcraft workshops, an automobile repair shop, furniture factories, port facilities, MASICAP, Del Monte Pineapple Plantation and DBP Cagayan de Oro Branch.
Mar. 23 (Sun)	Cagayan de Oro City - Manila	Visited Vocational Training Center of National Manpower and Youth Council (NMYC), Cagayan de Oro City Credit Cooperatives, and College of Agriculture, Xavier University on way to the airport.

Mar. 24 (Mon) at Manila	Visited and collected data at NEDA and UP-ISSI. In the afternoon, visited DAP and Bureau of Census.
Mar. 25 (Tue) at Manila	Visited DLGCD, DBP and Department of Education. In the evening through mid-night, prepared Interim Report.
Mar. 26 (Wed) at Manila	Visited Embassy of Japan in the morning. In the afternoon at NEDA's office, talked with the representatives from NEDA, DOI and UP-ISSI.
Mar. 27 (Thu) at Manila	Intra-team meeting.
Mar. 28 (Fri) at Manila	Took a short trip to Batangas Industrial Area.
Mar. 29 (Sat) at Manila	Intra-team meeting.
Mar. 30 (Sun)	Flew back to Japan.

1-3. MEMBERS OF THE STUDY TEAM:

The team was composed of the following personnel, whose specialities and organizations are as listed below:

1. Mr. Kunio Miyamura ... Head,
   Senior Management Consultant and
   Mechanical Engineer,
   Japan Management Association,

2. Mr. Tomokuni Handa ... Administration expert in Policies
   for Medium and Small-Scale Industry
   Development,
   Agency for Medium and Small-Scale
   Industries,
   Ministry of International Trade
   and Industry,

3. Mr. Tadashi Nara ..... Regional Development Expert,
   Japan Management Association,

4. Mr. Yoshikuni Eto .... Development Economist,
   Japan Management Association,

5. Mr. Shuji Ohashi ..... Taxation and Financing Expert,
   Japan Management Association,

6. Mr. Harukazu Nishio .. Marketing Expert and Mechanical
   Engineer,
   Japan Management Association,

7. Mr. Yukio Abe ..... Agri-business Expert,
Japan Management Association, and

8. Mr. Ken Fujimura .... Coordinator,
Development Economist,
Japan International Cooperation
Agency.

CHAPTER II

SUMMARY AND SUGGESTIONS.

CHAPTER II SUMMARY AND SUGGESTIONS

2-1. SUMMARY:

The contents of this report are summarised as follows:

(1) INTRODUCTION:

Among all kinds of industries in the Philippines, the manufacturing industry shows the steadiest growth rates both in the amount of products and emolyment opportunities. It has a bi-polar structure of cottage industries and large scale industries. The medium and small-scale manufacturing industries occupy, at the moment, 7 per cent in the number of enterprises, 19 per cent in the number of employees and 13 per cent in the amount of products of the whole manufacturing industries. Apparently, the share of medium and small-scale industries is not so high, but their rate of growth is the highest among the three categories.

The Government of the Philippines has been emphasiizing the regional medium and small-scale industry development with an expectation that such industry development will help to brake a growing tendency of heavy concentration of population into major cities, when her annual rate of increase in population is over 3 per cent and that of labor is over 3.5 per cent.

Generally speaking, the medium and small-scale industries, in comparison with the large scale ones, are rather labor-intensive with more employment opportunities, and can be established in the regions with less infrastructures, and with less capital investment. Such are the reasons why the Government of the Philippines lays so much expectation upon the regional medium and small-scale industry development.

(2) CURRENT SITUATIONS OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN THE PHILIPPINES:

The manufacturing industries in the Philippines, as a whole, are mostly for simple processing of the natural resources, being very weak in the metal-working industries which are considered the most vital and fundamental field in a nation's industrialization. Such a tendency is much more clear among the medium and small-scale industries.

The geographical distribution of the manufacturing establishments in the Philippines shows a typical centrifugal characteristic, with about 70 per cent of the establishments concentrated in the central part of Luzon. Some regions are strong in processing local natural resources, while others in the metal-working industries. In any region, most of the establishments are found in the chartered cities.

Some people say that the entrepreneurs of the medium and small-scale industries in the Philippines are, in average, weak in their entrepreneurship. However, the team has conceived that it might not be too difficult to find out some entrepreneurs of high spirit, although the team has no intention to generalize its poor experiences in the Philippines.

In one field of industry, or taking one kind of product, when the ratio of the number of the employees in the medium and small-scale establishments against the total number of the employees of the whole establishments of the same line in one country exceeds 50 per cent, then that field or product might well be called "medium and small-scale establishment oriented." Likewise, we can define "large-scale establishment oriented" products and "cottage industry oriented" fields. Now, the team has found that such industries as defined medium and small-scale establishment oriented ones in Japan are, here in the Philippines, almost evenly scattered among the three categories of the large-scale industries, the medium and small-scale industries and the cottage industries, only to reveal the fact that the industrial structure of the Philippines is infant and has not been differentiated so clearly yet as in Japan.

(3) THE GOVERNMENTAL POLICIES AND ACTIVITIES FOR REGIONAL MEDIUM AND SMALL-SCALE INDUSTRY DEVELOPMENT

There are as many as 25 governmental organizations for encouraging and accelerating industy development in the Philippines, rendering almost every kind of services. Although the first phase study team failed in fully grasping those organizations' activities, there seems to be some duplications in their functions. Their publicity activities might have been insufficient, since the team has met some entrepreneurs with no knowledge of such organizations. Others complain of complicated procedures for enjoying such services.

While there are so many measures and systems for encouraging and accelerating industry development in the Philippines, few of them are exclusively for the medium and small-scale industries. The team is of an opinion that some preferential measures are necessary.

2-2. SUGGESTIONS:

(1) SELECTION OF CANDIDATE INDUSTRIES AND AREAS

Since the number of the medium and small-scale industries, including some cottage industries which are latent reserves for the small-scale industry, is so huge, some preferential policies and measures are needed because

of limitations in human and monetary resources. Furthermore, the Government of the Philippines expressed their request that the team will draft such a concrete project as will be quickly implemented with strong demonstration effects. Then, the team, with consent of the Government of the Philippines, has decided upon its fundamental strategy for the regional medium and small-scale industry development, as shown below:

(1) To try to firstly secceed in some demonstrative projects for developing selected types of industries in some selected areas.

(2) To draft some systems for publicity of the above-said projects' success.

(3) To review the current policies and systems on the basis of the afore-said experiences.

As a result, it was agreed upon that the first phase study is to be concentrated in selecting candidate types of industries and candidate areas.

The criteria for selecting candidate types of industries are;

(1) Dominancy of the medium and small-scale industries per product.

(2) Demerit marks to the major city oriented ones.

Thus, 25 candidates have been selected, which then have been grouped into the following 13 types, taking their mutual linkage effects into consideration.

1) vegetable sauces and salad dressings
2) processed fish and other sea foods
3) candied fruits, nuts and seeds
4) leaf tobacco
5) tanned and finished leather

6) sawmill and planing mill products
7) textiles, dyeing, finishing and knitting
8) wood carving and crafting
9) foundry
10) metal-working industries

11) lime
12) Charcoal
13) miscellaneous textiles

Among these 13 candidates, 9) foundry and 10) metal-working industries are the fundamental industries for a nation's industrialization, having very wide linkage effects. However, at the moment, such industries are very weak in the Philippines, showing large imbalance in her export-import accounts of such products. It is thus that the team is of an opinion that the priority should be given to such industries.

In selecting the candidate areas, the criteria were set as follows, in order to secure highest potential of success in the demonstrative projects.

(1) To have many manufacturing establishments within the area, as good customers of such industries.

(2) To have good infrastructures, or good prospect of them thereabouts.

As a result, the bolow-listed 5 areas obtained top marks as candidate areas:

1)	Cebu	200
2)	Cagayan de Oro, Iligan and Butuan	119
3)	Davao	107
4)	Bacolod	78
5)	Iloilo	69

(2) DRAFT SCHEDULE FOR THE SECOND PHASE STUDY

In accordance with the afore-mentioned strategy, the second phase study team is supposed to draft a concrete and workable program for a group of metal-working industries in one selected area. Regarding the rest of the candidate industries, the team is to screen one or two types of industries, for which the same kind of draft program is to be prepared in the same area, for the sake of the program's effectiveness.

The second phase of the study is supposed to be once again divided into two parts;

1) the first part for basic policies in preparing draft programs, and

2) the second part for preparing their details,

upon each of which the team is to fully discuss with the governments of the two countries.

CHAPTER III

CURRENT STATUS OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN THE PHILIPPINES

CHAPTER III. CURRENT STATUS OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN THE PHILIPPINES

3-1. INTRODUCTION.

The Government of the Philippines clarified in their Four-Year Development Plan (FY 1974 - 77) the following principal objectives of the industrial development plan;

1) Promotion of employment,
2) Encouragement of export-oriented industries, utilizing indigeneous raw materials,
3) Promotion of intermediate and capital goods industries, and
4) Industrial dispersal to different regions,

of which the item 4) corresponds with the main theme of this time's study, "the regional medium and small-scale industry development."

In the Philippines, the annual growth rate of population is about 3 per cent (about 1.2 million per annum) and that of labor force is about 3.5 per cent (roughly 470 thousand per annum), of whom about 70 per cent are in the rural districts. To this problem, the regional medium and small-scale industry development is one solution, since the medium and small-scale industries are, in comparison with the large scale industries, rather labor-intensive with more employment opportunities, and can be established with less capital investment in the regions of lower infrastructural level.

The Government of the Philippines has obtained many suggestions from foreign experts on her economic and industry development schemes, very few of which have been implemented. It is thus that they requested that this study team would present such concrete programs as can be quickly implemented with stron demonstrative effects.

Prior to discussing upon the regional medium and small-scale industry development, it might be useful to re-adjust some concepts regarding such industries. Firstly, the team understands that "the medium and small-scale industries" are such industries as come between "the traditional cottage industries" and "the modern large-scale industries." There are some fields of industries where very little possibilities exist for the large-scale industries to come out, mostly due to little scale-merit because of restrictions in production technologies. However, with innovations in such technologies, development of infrastructures and so forth, the border-lines of the three categories of the industries often change from time to time. Therefore, although the team's review is naturally focused upon the current medium and small-scale industries, the large-scale industries and the cottage ones will be studied as deemed necessary.

Secondly, the team understands that in the developing countries, the modern medium and small-scale industries find many difficulties to emerge. In the developing countries, the income levels are low, and domestic markets for the

industrial products are unripe. Besides, their capability of investment is weak, and technological level is low. It is thus that some limited number of consumer goods industries, thanks to the exports of surplus natural resources, can be established, to make bi-polar structure of industries, together with the traditional cottage industries. In other words, establishment of the medium and small-scale industries is a little behind in general. Then come some intermediate and capital goods industries, to imitate imported goods of the same kinds, and with the development of these industries, some number of the medium and small-scale industries are established, mostly as repair and service shops. This is an established theory at the moment on the history of a nation's industrial development. The current status of the Philippines' industries seems to be around at this stage.

Thirdly, the team understands that the given theme is "the regional medium and small-scale industry development," while the team is of an opinion that it might be much easier and much more effective to have the same kinds of projects in the major cities having higher level of infrastructures and much wider markets thereabouts, if the theme were just "medium and small-scale industry development." Of course, the team has fully understood that "the region" here means some other places than Manila and other over-populated areas. Still, the team will fall in a dilemma to choose either some kernel cities in the regions for effective implementation of the programs or some rural towns for absorbing surplus labor forces. On this matter, some financial and/or high-level judgement might be

necessary at the starting point of the second phase study.

The number of the medium and small-scale industries in the Philippines is not so large at the moment, but taking some types of cottage industries into consideration as latent reserve forces for the small-scale industries, their number becomes quite huge. On the contrary, there are strong restraints in human and monetary resources for such programs. Therefore, very strict preferential policies are needed for drafting successful programs.

The medium and small-scale industries are an aggregation of different lines and interests, with a lot of variety in their environments, also. Therefore, such industries' development programs should contain a well-balanced mixture of;

1) general policies and countermeasures to the problems common to such industries,
2) some intermediate policies and countermeasures to the problems per typr of industry, per region, per scale and so forth, and
3) direct guidances to the individual enterprise.

The team is convinced that in the Philippines, as far as the first category concerns, the governmental organizations have been well prepared, whereas little considerations have been paid to the second category, only with fruitless results.

The first phase study team, with the following four steps in mind, concentrated its efforts to pick up the cand-

idate areas and candidate types of industries for the item 1). The second phase study is expected to draft some concrete development programs for selected types of industries in the selected areas, through which the details for items 2) and 3) will be presented.

1) Demonstrative implementation of industry development programs for the selected types of industries in the selected areas,
2) Rearrangement of the linkage effect systems,
3) Readjustment of policies and measures of such industry development, and
4) Publicity and difusion activities of such programs in nation-wide scale.

3-2. DEFINITION OF THE MEDIUM AND SMALL-SCALE INDUSTRIES, AND THE TEAM'S SCOPE OF WORK

The medium and small-scale industries are such industries as located between the large-scale industries and the cottage industries, and the criteria for these three categories are different by nation and by time. At present, the Government of the Philippines has classified her industries into the following four categories on the basis of the total amounts of assets of the establishments, from which the medium and small-scale industries are automatically defined:

1)	Large-scale industries	...	with total assets in excess of 4 million pesos,
2)	Medium-scale industries	...	with total assets ranging from 1 to 4 million pesos,
3)	Small-scale industries	...	with total assets under 1 million pesos, except
4)	Cottage industries	...	with total assets less than 15,000 pesos.

The Government of the Philippines has the following administrative organizations;

1) BOI (Board of Investment), belonging to NEDA (National Economic and Development Authority), in charge of the large-scale industries.
2) CSMI (Commission on Small and Medium-Scale Industry), belonging to DOI (Department of Industry), in charge of the medium and small-scale industries.
3) NACIDA (National Cottage Industry Development Authority), belonging to DOT (Department of Trade), in charge of the cottage industries.

With regard to the scope of work, the study team talked and reached the mutual agreement with the Government of the Philippines as follows:

1) The study should be focused upon such medium and small-scale industries as defined above, and the large-scale industries and the cottage industries might also be studied as deemed necessary.

2) The concept of "region" used in the term of "the regional medium and small-scale industries" does not mean the rural districts as opposed to the urban cities, but the regional areas as opposed to the central area, or more specifically, refers such over-populated zones as Manila.

3-3. SIGNIFICANCE OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN THE PHILIPPINES' ECONOMY

According to the Philippines' statistics in 1971, the share of the manufacturing industry in DNP (domestic net product) is 20 per cent, ranking the third following the agriculture's 37 per cent and service industry's 21 per cent. Regarding the number of the employees, the manufacturing industry has 12 per cent, being the fourth after the agriculture's 50 per cent, service industry's 17 per cent and trade and commerce's 13 per cent. Besides, the growth rates of both DNP and the number of the employees in six years from 1965 through 1971 of the manufacturing industry are above the average, showing its significance in the Philippines' economy. (cf. Annexed Table 1)

The breakdown of the manufacturing industry reveals that, in 1971, the large-scale industry has 72 percent of the manufacturing industry's total DNP and 57 per cent of the total number of the employees, while the medium and small-scale industry occupies 13 per cent and 19 per cent, and the cottage industry does 15 per cent and 24 per cent respectively. Therefore, in the national economy, the medium and

small-scale industry, even including the cottahe inustry, occupies only 6 per cent in DNP and 5 per cent in the number of the employees.

However, the large-scale industries, in general, need strong infrastructures of port facilities and power supply, plus huge amounts of capitals and high level of technologies, and as a result, are established in some limited urban areas, mostly with help of foreign capitals, whereas the medium-scale, small-scale and cottage industries can be established throughout the country, with more employment opportunities, braking over-population of major cities. For these reasons, development of the medium and small-scale industries is more important and effective for stable socio-economic development of the Philippines than that of the large-scale industries.

Most of the medium and small-scale industries, except those for processing local natural resources, prefer the major cities and the regional kernel cities to the rural districts and small towns, since the former have such many advantages as wider markets, aggregation of correlated industries, better infrastructures, more stimuli and information for better management, and so forth. Therefore, in preparing the development projects for the regional medium and small-scale industries, it might be of the top importance to fully discuss upon the most suitable area for the projects' implementation.

3-4. CHARACTERISTICS OF THE PHILIPPINES' MANUFACTURING INDUSTRIES BY THE EXTENT OF PROCESSING

The characteristics of the manufacturing industries in the developing countries, in comparison with those of the developed countries, are summarized to the fact that their dominant sectors are such industries as for the extent of simple processing of the natural resources, for consumers' goods and light industries.

The current status of the Philippines' manufacturing industries by their raw materials and their extent of processing is tabulated as shown in Table 1.

Regarding the number of the establishments, the Table 1 reveals that 70 per cent of them are engaged in the processing of the natural resources, or 47 per cent of them for the extent of simple processing. On the other hand, in the field of metal-working industries, the most fundamental sector in a nation's industry, the assembly shops occupy 8 per cent, only one-sixth of the afore-said establishments of simple processing of the natural resources. Besides, the repair shops have 6 per cent, probably attributable to repairing of automobiles and imported machineries.

Then, switching to the foreign trade statistics, the metal-working industry occupy 57 per cent of the total

import amount, while the natural resources' simple processing field has 88 per cent of the export accounts.

With these data in mind, the team might as well be able to say that;

1) The processing industries of the natural resources, to simple extent, seem to be competitive in the world market, while those to complexed extent are not.
2) Metal-working and chemical industries are not ripened yet enough to compete in the world market, and they should try to decrease imports for the moment, especially in the field of fabrication of the parts and preparation of raw materials.

After all, it might not be too bold to conclude that encouragement and development of the metal-working industries is the most desirable and effective for the development of the Philippines' industry, since they are the most fundamental production technology and have the largest linkage effects, plus highest pissibility of decreasing her import accounts.

TABLE 1. DISTRIBUTION OF ESTABLISHMENTS
BY MATERIALS AND EXTENT OF PROCESSING

extent of processing	fabrication simple	fabrication complex	assemble	repair	total
natural resources					
nos. of establishments	2,580 47 %	1,214 23 %	-	4 -	3,798 70 %
import	267 23 %	16 1 %	-	-	283 24 %
export	325 88 %	22 6 %	-	-	347 94 %
metal					
nos. of establishments	99 2 %	314 6 %	433 8 %	303 6 %	1,149 22 %
import	150 13 %	48 4 %	469 40 % * 191 *16 %	-	667 57 %
export	4 1 %	2 1 %	4 1 %	-	10 3 %
chemicals					
nos. of establishments	49 1 %	383 7 %	-	28 1 %	460 9 %
import	218 19 %		-	-	218 19 %
export	2 1 %	8 2 %	-	-	10 3 %
total					
nos. of establishments	2,728 50 %	1,911 36 %	433 8 %	335 7 %	5,407 100 %
import	699 60 %		469 40 % * 191 *16 %	-	1,168 100 %
export	331 90 %	32 9 %	4 1 %	-	367 100 %

Sources: Directory of Large Establishments, 1972
Trade Statistics, 1973

Remarks: The amounts of imports and exports are in a million U.S. dollars, f. o. b.

Notes:

1. Regarding "extent of processing,"

   a. simple; those establishments engaged in manufacturing basic materials to be used by other industrial sectors, such as sawmills, p-lp, spinning, basic chemical industries and so forth.

   b. complex; those industries producing final products using the materials supplied by the above-said group, such as furnitures, garments, metallic mechanical parts, fertilizers, plastic products, etc.,

   c. assemble; those factories for assembling final products like machines, automobiles and the like.

2. Those figures with * marks in "imports" are those for the imports of mechanical parts.

3-5. GEOGRAPHICAL DISTRIBUTION OF THE PHILIPPINES' INDUSTRY

1) REGIONAL CHARACTERISTICS

From data of the Census of Large Establishments (1972), the geographical distribution of the establishments with more than 10 employees shows that 59 per cent of the establishments are located in the Region IV, including Manila, or 69 per cent when those in the Region III are added. In other words, almost 70 per cent of the establishments are in the central part of Luzon.

At the same time, some regional characteristics by types of industries can be seen. Roughly speaking, the Regions II, V, VI, VIII, IX and XI look strong in such industries as utilizing indigeneous natural resources, while the Regions I, III, IV and VII do so in metal-working industries.

2) CONCENTRATION OF ESTABLISHMENTS IN MAJOR CITIES

The tendency of establishments' concentration in major cities can be seen in the regions and provinces, too. The table 2 shows the numbers of the establishments in the leading chartered cities and thrie surrounding provinces. The degree of concentratin naturally varies from province to province, but in the nation-wide total, the figures are 2,714 vs. 5,337, or 51 per cent.

TABLE 2. CONCENTRATION OF ESTABLIHSMENTS IN MAJOR CITIES

Provinces Repesentative Cities	Rizal Manila	Cebu Cebu	Davao del Sur Davao	Negros Occ. Bacolod	Pampanga San Fernando	Iloilo Iloilo	Misamis Or. Cagayan de Oro	Nat'l Total
Nos. of estab'ts in provinces	2,967	306	125	126	111	74	53	—
Cumulative	2,967	3,273	3,398	3,524	3,635	3,709	3,762	5,337
Percentages	56	61	64	66	68	69	70	100
Nos. of estab'ts in cities	1,685	252	119	96	44	53	44	2,714
Share of cities in percentage	57	82	95	76	40	72	83	51

Notes: 1) The numbers of the establishments in the provinces include those in the cities surrounded by the provinces.

2) The above-shown names of the cities are just representative ones.

3) The definition of the establishments in this table is those having more than ten employees, including repairshops in service industry, and consequently the figures differ from thos in the Census of Large Establishments.

3-6. THE SHARE OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN THE PHILIPPINES

1) BI-POLAR STRUCTURE

For analyzing the industrial structures in the Philippines, it might be better to use the classification of industries by their total assets as defined before. However, without pertinent data, classification of establishments has been herein done by the number of the employees as shown below:

Classification	number of employees
1) cottage industry	1 - 9
2) medium and small-scale industry	10 - 99
3) large-scale industry	100 -

The Table 3 shows the composition of the Philppines' industry. Although the figures might not be fully reliable, the percentages mgiht be acceptable, which disclose that the cottage industries in the Philippines share as high as 91 per cent of the total number of establishments (73 per cent in Japan), while the medium and small-scale industries have only 7 percent of the total number of establishments and 19 per cent in the number of employees (24 per cent and 35 per cent in Japan).

In short, the Philippines' industry has a bi-polar structure of cottage industry and large-scale industry. In other words, development of the medium and small-scale industies is very important.

TABLE 3. BREAKDOWN OF INDUSTRIES BY SIZE

			Cottage	Medium and Small	Large	Total
THE PHILIPPINES	Nos.of establish't	(1)	41,018 (91%)	3,327 (7%)	662 (2%)	45,007 (100%)
		(2)	114,270 (91%)	8,790 (7%)	2,510 (2%)	125,570 (100%)
	Nos.of employees	(3)	125 (24%)	99 (19%)	294 (57%)	519 (100%)
		(4)	348 (24%)	276 (19%)	826 (57%)	1,450 (100%)
	Aver.	(5)	3	30	444	12
		(6)	3	31	329	12
JAPAN	Nos.of est'ts	(7)	479,376 (73%)	157,768 (24%)	15,787 (2%)	652,931 (100%)
	Nos.of emp's	(8)	1,910 (16%)	4,113 (35%)	5,657 (48%)	11,680 (100%)
	Aver.	(9)	4	26	358	18

Sources: for (1) and (3), Census of Establishments, 1967

for (2) and (4), Four-Year Development Plan, FY 1974 - 77.

for (7) and (8), Industrial Statistics, Japan, 1970.

Note: The figures in (4) are about 2.8 times as large as those in (3), while those in (4) well match with such data as population, employments etc. Thus, the total number for (2) was obtained by multiplying the total number for (1) by 2.8. The total number for (4) is from the Four-Year Development Plan, which was then allocated to each sector, utilizing the percentages in (3).

2) TYPES OF INDUSTRIES BY NUMBER OF ESTABLISHMENTS

According to the data from the Economic Census of the Philippines, 1967, there are 218 types of industries in the category of the medium and small-scale industries, defined as those having 10 to 99 employees, among whom only 26 types have more than 25 establishments as shown below:

TABLE 4. TYPES OF INDUSTRIES GROUPED ACCORDING TO THEIR NUMBERS OF ESTABLISHMENTS

Nos. of establishments	Types of industries	Nos. of types
more than 100	rice mills, bakery products, shoes, commercial and job printing products, custom tailoring shops, motor vehicles and motorcycle repair shops	6
75 - 99	rough lumber, wood furniture, structural concrete product	3
50 - 74	manufactured ice, men's and boys' garment factories, machine shops	4
25 - 49	corn mills, candy and chewing gum factories, macaroni and spaghetti, food products, women's and girls' garment factories, wood carving, paper and paperboard boxes, drugs and medicines, foundries, fabricated structural metal products, bolts and nuts, motor vehicle engines and parts, buttons	13
1 - 24	other types	192

Source: Economic Census of the Philippines, 1967

3) COMPOSITION OF THE PHILIPPINES' MEDIUM AND SMALL-SCALE INDUSTRIES, BY TYPES AND NUMBER OF ESTABLISHMENTS, IN COMPARISON WITH THOSE OF JAPAN

The afore-said 218 types of industries are re-arranged into 20 groups, to each of which the number of establishments of the same size (10 - 99 employees) in Japan is shown in the Table 5.

The total numbers of the establishments are 3,327 in the Philippines against 157,768 in Japan, or about 47 times as large.

Then, the groups of higher ratios are Various kinds of instruments (461 times), Textile (244 times), Non-ferrous metal industries (138 times), Electrical apparatus (129 times), Machinery (125 times), Iron and steel (103 times) and so forth, pointing out the Philippines' weakness in metal-working industries. On the contrary, those of lower ratios are Food products (16 times), Garments (17 times), Chemicals (20 times) and Transport equipments (24 times).

TABLE 5. COMPOSITION OF THE PHILIPPINES' MEDIUM AND SMALL-SCALE INDUSTRIES, BY TYPES AND NUMBERS OF THE ESTABLISHMENTS, IN COMPARISON WITH THOSE OF JAPAN

	JAPAN, 1970: Nos. of the establishment and their percentages		THE PHILIPPINES, 1967		Ratio
1. Food products	16,641	11%	1,024	31%	16
2. Textiles	16,368	10	67	2	244
3. Garments	8,382	5	467	14	18
4. Wood and wood products	13,451	9	259	8	52
5. Furniture	5,616	4	140	4	40
6. Pulp and paper	5,039	3	56	2	92
7. Printing	8,391	5	204	6	41
8. Chemical	2,710	2	131	4	21
9. Petroleum and coal	361	-	6	-	60
10. Rubber	1,767	1	20	1	88
11. Leather	1,591	1	21	1	76
12. Bricks and tiles	9,176	6	145	4	63
13. Iron and steel	3,922	3	38	1	103
14. Non-ferrous	1,667	1	12	-	138
15. Metal products	16,744	11	193	6	87
16. Machinery	14,756	9	118	4	125
17. Electrical app.	10,376	7	80	2	130
18. Transport equip.	5,474	4	225	7	24
19. Instruments	2,766	2	6	-	461
20. Others	10,210	7	101	3	101
TOTAL	157,768	100	3,327	100	47

Sources: Economic Census of the Philippines, 1967
Industrial Statistics, Japan, 1970

4) THE MEDIUM AND SMALL-SCALE INDUSTRIES' FIELDS BY THEIR PRODUCTS AND NUMBER OF EMPLOYEES, IN COMPARISON WITH JAPAN'S CASE

In one field of industry, or taking one kind of product, when a ratio of the number of the employees in the medium and small-scale establishments against the total number of the employees of the whole establishments of the same line exceeds 50 per cent, then that field might well be called "the medium and small-scale oriented." Likewise, we can define "large-scale oriented field" and "the cottage industry oriented field." Thus, the following Table 6 is obtained.

Upon the Table 6, "the medium and small-scale oriented" products of Japan are superimposed in the following manner:

1) such products as have no matching categories among those in Japan are marked with (x),
2) such products as known as "medium and small-scale oriented" are marked with (a),
3) such products as known as "medium and small-scale semi-oriented" are marked with (b), where "semi" is for over 40 per cent instead of 50, and
4) the rest are marked with (n).

The results are quite suggestive.

The results are tabulated as follows:

	x	a	b	n total	less x)	pctg of a & b
Large	22	14	12	39	87	65	26/65 = 40 %
M and S	22	17	19	19	77	55	36/55 = 65 %
Cottage	23	10	7	14	54	31	17/31 = 55 %

Although Japan's medium and small-scale oriented products well coincide with those of the Philippines, showing highest mark of 65 per cent, 40 per cent of the large-scale group and 55 per cent of the cottage industry group cannot be neglected. It is conceived that the industrial structure of the Philippines are bi-polar, and numbers of medium and small-scale establishments are expected to come in near future.

In that case, some of such products as marked with (a) and (b) will be manufactured in medium and small-scale establishments.

TABLE 6. PRODUCTS CLASSIFIED BY NUMBERS OF EMPLOYEES IN THREE CATEGORIES OF INDUSTRIES

LARGE-SCALE ORIENTED GROUP:

1. slaughtering, preparing and preserving meat (n)
2. evaporated and condensed milk (b)
3. fruit and vegetables, canned and preserved (b)
4. flour mills (b)
5. biscuit and crackers (b)

6. sugar milling and refining (n)
7. cocoa and chocolate (n)
8. desiccated coconut (n)
9. vegetable cooking oil and margarine (n)
10. coffee roasting and grinding (x)

11. prepared feeds (a)
12. starch and its by-products (a)
13. distilling and blending of liquors (b)
14. soft drinks and carbonated water (b)
15. cigars (x)

16. chewing and smoking tobacco (x)
17. leaf tobacco curing and redrying (x)
18. hemp mills (n)
19. cotton textile mills (b)
20. rayon and other man-made textile mills (n)

21. miscellaneous spinning and weaving mills (n)
22. hostery mills (x)
23. fabric knitting mills (x)
24. cordage, rope and twine industry (b)
25. carpets and rugs (a)

26. women's, girls' and babies' garments (a)
27. hats, gloves, handkerchiefs, etc. (a)
28. embroidery contractors (n)
29. household furnishings (x)
30. sawmills with logging operations (a)

31. veneer and plywood plants (n)
32. wood treating and preserving plants (a)
33. rattan furniture (a)
34. pulp, paper and paperboard (n)
35. paper stationaries (b)

36. miscellaneous converted paper products (x)
37. newspapers and periodicals (n)
38. rubber shoes and slippers (n)
39. tires and inner tubes (n)
40. processed natural rubber (x)

41. inorganic acids, alkalies and chlorine (n)
42. fertilizers (n)
43. industrial alcohols (n)
44. coconut oil (x)
45. vegetable and fish oil (n)

46. plastic materials (n)
47. drugs and medicines (n)
48. perfumes and cosmetics (n)
49. soap (n)
50. matches (a)

51. insecticides agricultural chemicals (n)
52. miscellaneous chemical products (x)
53. petroleum refineries (n)
54. clay bricks and hollow tiles (a)
55. clay tiles, except hollow (b)

56. miscellaneous structural clay products (n)
57. glass containers (n)
58. miscellaneous glass products (n)
59. hydraulic cement(n)
60. blast furnaces, steel works (n)

61. smelted and refined non-ferrous metals (n)
62. metal cans (n)
63. fabricated structural iron and steel (x)
64. stamped and enamelled metal products (a)
65. revolvers and pistols (x)

66. needles, pins and fasteners (a)
67. metal and woodworking machinery (b)
68. general industrial machinery (x)
69. typewriters, cash registers, etc (n)
70. misc. elect. industrial machinery (x)

71. telephone and telegram equipments (x)
72. batteries (n)
73. electric lamps and fixtures (x)
74. household cooking, heating and laundry app. (x)
75. refrigerators (n)

76. misc. household electlical appliances (x)
77. shipyards and drydocks (n)
78. motor vehicles, manufactured or assembled (n)
79. eyeglasses and spectacles (b)
80. string instruments (a)

81. pen and pencils (n)
82. other food products (x)
83. polishing preparations (a)
84. cut stone and marble products (x)
85. misc. fabricated structural metal produsts (x)

86. household radio and television receiving sets (n)
87. corn mills (x)

MEDIUM AND SMALL-SCALE ORIENTED GROUP

1. cheese and cheese products (b)
2. vegetable sauces and slald dressings (n)
3. fish and other sea foods, canned (b)
4. fish sauce (a)
5. misc. grain mills products (b)

6. candy and chewing gum (n)
7. salted and candied fruits, nuts and seeds (x)
8. macaroni, spaghetti and noodles (b)
9. manufactured ice (a)
10. misc. leaf tobacco (X)

11. textile dyeing and finishing (b)
12. underwear and outerwear knitting (b)
13. linoleum and other floor covering (n)
14. miscellaneous textiles (x)
15. rough lumber, unworked (a)

16. worked lumber (a)
17. miscellaneous fabricated millwork (x)
18. shoes, except rubber, plastic and wood (b)
19. men's and boys' garments (a)
20. miscellaneous wearing apparel (x)

21. miscellaneous made-up textile goods (x)
22. wooden boxes and containers (b)
23. charcoal (x)
24. wood carving (x)
25. cork products (x)

26. box beds and mattresses (a)
27. household metal furnitures (b)
28. office metal furniture (b)
29. metal blinds and screens (x)
30. plastic and fiberglass furniture, household (n)

31. paper and paperboard containers (a)
32. books and pamphlets (n)
33. commercial and job printing products (a)
34. electrotyping and photograving products (a)
35. tanneries and leather finishing (b)

36. luggages and handbags (b)
37. miscellaneous leather products (x)
38. miscellaneous rubber products (x)
39. paints and related compounds (n)
40. reclaimed petroleum products (x)

41. lime (a)
42. asbestos products (n)
43. iron and steel foundry (a)
44. non-ferrous foundry (b)
45. hand tools (b)

46. boilers and sheet metal works (n)
47. stamped and coated metal products (x)
48. fabricated wire products (a)
49. metal plumbing fixtures and fittings (n)
50. bolts, nuts, screws and springs (b)

51. agricultural machinery and equipment (n)
52. food processing machinery (b)
53. industrial pumps and compressors (n)
54 miscellaneous office machine (x)
55. machine shops (a)

56. service industry machines (n)
57. elect. distribution and control apparatus (a)
58. commercial sound recording equipment (x)
59. miscellaneous communication equipments (x)
60. electric wires and wiring devices (n)

61. electric tubes (x)
62. motor vehicle engines and parts (n)
63. aircraft engines and parts (n)
64. transport equipments (x)
65. medical instruments and supplies (b)

66. optical instruments and lenses (n)
67. phonograph record blanks (x)
68. buttons (b)
69. sporting goods (b)
70. brooms, brushes and fans (b)

71. umbrellas and canes (x)
72. textile bags and canvas products (b)
73. structural concrete products (a)
74. galvanized metal products (a)
75. signs and advertising displays (n)

76. butter (n)
77. miscellaneous manufactured products (x)

COTTAGE-INDUSTRY-ORIENTED

1. fluid milk processing (b)
2. dairy drinks (b)
3. fish paste (b)
4. rice mills (a)
5. cereal and floor blended products (x)

6. bakery products (n)
7. muscavado sugar (x)
8. egg processing (x)
9. wine industries (a)
10. jusi, pina and other native textiles (x)

11. narrow fabrics (b)
12. misc. knitting mills (x)
13. mats and mattings (x)
14. wooden shoes (a)
15. footwear parts (x)

16. repair of footwear (x)
17. custom tailoring shop (n)
18. custom dressmaking shop (n)
19. doors, windows and sashes (x)
20. sawali, nipa and split cane (x)

21. bamboo and rattan baskets (a)
22. wood and cane blinds (a)
23. misc. wood and rattan furnitures (x)
24. furniture and fixtures (x)
25. bookbinding (a)

26. miscellaneous printing (x)
27. tire retreading and repair (n)
28. candles (b)
29. explosives and fireworks (n)
30. miscellaneous chemical products (x)

31. pottery, china and earthenware (n)
32. cutlery (a)
33. general hardware (x)
34. lamps and lighting fixtures (a)
35. clay, stone and glass ind. machinery (x)

36. electrical machinery (x)
37. motor vehicles and motorcycle repairshops (x)
38. motorcycles and bicycles (n)
39. miscellaneous instruments (n)
40. photographic equipments (n)

41. watches and clocks (n)
42. jewellery (b)
43. games, toys and dolls (a)
44. insignias and badges (x)
45. misc. musical instruments (x)

46. marine engines and machinery (n)
47. ice cream (x)
48. embroidery factories (n)
49. wood furniture (a)
50. metal shipping barrels (x)

51. architectural and ornamental metal work (b)
52. misc. special industrial machinery (x)
53. motors and generators (n)
54. boats and small crafts (n)

Sources: Economic Census of the Philippines, 1967
Industrial Statistics, Japan, 1970

3-7. CURRENT STATUS OF THE MEDIUM AND SMALL-SCALE INDUSTRIES IN REGIONS —— A CASE OF REGION X

During its sojourn in the Philippines, the team made a one week trip down to Region X, to visit several factories for getting some ideas about the current status of industries and entrepreneurs in the region, although the team has no intention to generalize its poor experiences there.

1) TYPES OF INDUSTRIES IN REGION X

According to the Census of Large Establishments, 1967, the Region then had 2,180 factories with less than 9 employees, while the Directory of Large Establishments, 1972, says that those having more than 10 employees number 166, of which the top five types are;

	industry	nos. of est'ts	pctg	cumulative
1.	sawmills and planing mills	31	19%	19%
2.	bakery	26	16	35
3.	veneer and plywood plants	17	10	45
4.	rice mills	15	9	53
5.	structural concrete products	8	5	58

Those 166 establishments are grouped into 4, as shown below:

Group A, processing indigeneous natural resources, like canning and preserving fruits and vegetables, coconut oil mills, winery, sawmills and planing mills, veneer and plywood plants, paper and paperboard mills, starch and so forth, to number 74, or 45 per cent of the total.

Group B, for local consumer goods, such as soft drinks, bakeries, biscuits, custom tailoring and dressmaking shops, totaling 40 factories, or 24 per cent.

Group C, producing intermediate goods for local enterprises, like manufactured ice, fertilizer, paper and paperboard boxes and containers, constructural concrete products, in 33 factories, or 20 per cent.

Group D, for chemicals, steel and ships, having wider market outside the Region, to number 19, or 11 per cent.

Among these four, the Groups A and D, or 56 per cent of 166, can sell their products outside the Region, which with such industrial structure looks quite promising, provided that some strong and effective measures are taken for their encouragement and development.

2) THREE MAJOR CITIES

Region X has 10 provinces, 8 chartered cities and 174 municipalities, among which three cities of Cagayan de Oro, Butuan and Iligan are outstanding in industrialization.

There are 40 establishments at Cagayan de Oro, 32 at Butuan and 19 at Iligan, totaling 91, or 57 per cent of 166. Besides, according to the project list of MASICAP of October 1974 through March 1975, 13 projects are at Cagayan de Oro, 5 at Butuan and 6 at Iligan out of the total of 30.

Each of these three cities, however, has its own characteristics in its industrial structure, as shown in the Table 7.

TABLE 7. INDUSTRIAL CHARACTERISTICS OF THE THREE CITIES

	Cagayan de Oro	Butuan	Iligan
1)	bakery 6 (15%)	sawmills 14 (44%)	chemicals 4 (21%)
2)	ricemills 6 (15%)	plywood 6 (19%)	ricemills 3 (16%)
3)	concrete prod. 3 (8%)	bakery 4 (13%)	bakery 3 (16%)
4)	sawmills 3 (8%)	machine shops 2 (6%)	clay products 2 (11%)
altogether	18 (45%)	26 (81%)	12 (63%)
out of cities' total	40	32	19

Cagayan de Oro City, capital of the Region, looks young from the standpoint of its industrialization. The table shows that while the city has 40 establishments, the top four occupy only 45 per cent, disclosing this city's industry has a lot of variety in types and products. At the moment, the city's industry, as a whole, might look consumer-goods-oriented, and some entrepreneurs might have been looking for some attractive industry to start.

On the other hand, Iligan City has 19 factories, least among the three, but its factories are rather of large-scale for producing intermediate goods such as steel, chemicals and cement. Butuan's industry is clearly centered in wood industry.

3) ON-THE-SPOT IMPRESSIONS

a. Some proprietors have high entrepreneurship.

The team visited one sawmill, to find they are using their hand-made wood-working machines run by motor vehicle engines. They have repairshops for trucks and wood-working machines, capable of fabricating some parts, too. The proprietor said that the company was established 7 years ago, for producing wooden boxes and containers, to have grown up with 75 employees now.

A company for repairing motor vehicle engines was established about 10 years ago, and now has one shop each at Cagayan de Oro and Iligan with about 30 employees each, being run by the proprietor and his son. The team visited one in Cagayan de Oro to find that they have many modern machines neatly arranged, that meterials and works are set in order and that they were working very earnestly telling high manegerial level.

A wood carving and crafting shop's owner and a proprietress of a weaving mill are trying to find wider markets, and a proprietor of a boiler shop has made a

test model furnace for continuously treating coconut shells all by himself.

b. Governmental policies and measures have been known very little by the entrepreneurs.

The team met many entrepreneurs who had no knowledge about MASICAP, and most of them seemed to have been very poorly informed of the governmental policies and countermeasures for industrial development. As already mentioned, some of them are trying to find wider markets, not knowing where to ask or where they can get information.

c. Some are very poor in quality consciousness or design consciousness.

Some products of factories the team visited were very poor in quality or in design. Consciousness to quality or design might be cultivated through one's life experience, in addition to his given nature. It might be quite helpful to make them try a trip to see more.

d. There is no foundry.

The repairshops and metal-working shops are buying cast from Cebu across the sea, and these cast are of low quality. The team understands that there is big demand in the region for parts of higher grade, and that it might be of the top necessity here to have one or two foundries and forges for accelerating industrial development.

CHAPTER IV

CURRENT SITUATIONS FOR MEDIUM AND SMALL-SCALE INDUSTRY DEVELOPMENT MEASURES

4-1. ADMINISTRATIVE ORGANIZATIONS FOR MEDIUM AND SMALL-SCALE INDUSTRY DEVELOPMENT AND THEIR MEASURES

1) ORGANIZATIONS

The governmental, plus a few private, organizations and their functions are summarised in the following Table 8. Among these 27 organizations, the last two, namely no. 26, Philippine Chamber of Industry (PCI) and no. 27, Philippine Chamber of Small-scale Business and Industry (PCSBI) are private ones. Furthermore, of these 25 governmental ones, 24 but the last one, no. 25, Province, City Small and Medium-Scale Industry Coordinating Council (PCCC), are under the central government

In short, the initiatives for developing and promoting her industrialization are completely held by and within the central government.

2) MEASURES

Such organizations as shown in Table 8 have been implementing their policies and measures for encouraging and developing the medium and small-scale industries, the outline of which is summarised in the Table 9.

The table puts up 5 elements for encouragement horizontally, and 5 ways of assistances vertically. The 5 elements are higher entrepreneurship, higher skill of labor, improved production technologies, wider markets and security

TABLE 8. FUNCTIONS OF VARIOUS ORGANIZATIONS

Nos.	ORGANIZATIONS	FUNCTIONS	FIELD OF ACTIVITIES										
1.	National Economic and Development Authority (NEDA)	Center of development planning, under the Office of the President	O	-	-	-	-	-	-	-	-	-	-
2.	Board of Investment (BOI)	Highest organization for planning industrial development for NEDA	O	-	-	-	-	-	-	-	-	-	-
* 3.	Department of Industry (DOI)	Central body for developing medium and small-scale industries	O	-	-	-	-	-	-	-	-	-	-
4.	Commission on Small and Medium-Scale Industries (CSMI)	Organized by 12 organizations, belonging to DOI	O	-	-	-	-	-	-	-	-	-	-
* 5.	Dep't of Local Gov't and Community Development (DLGCD)	Leading the local governments for regional development	-	-	-	-	-	-	-	-	-	C	-
* 6.	Bureau of Dimestic Trade (BDT)	Conducting research activities, under Department of Trade	-	-	-	-	M	-	-	-	I	-	-
* 7.	National Cottage Industries Development Authority £NACIDA)	Kernel organ for encouraging the cottage industries	-	-	-	F	M	-	-	V	-	-	-
* 8.	Development Academy of the Philippines (DAP)	Personnel training center for the governmental organizations	-	-	-	-	-	-	-	-	-	-	-
* 9.	National Manpower and Youth Council (NMYC)	Setting technical skill standards under Department of Labor	-	E	-	-	-	-	-	V	-	-	-
* 10.	Industrial Guarantee and Loan Fund (IGLF)	Guarantee organ for city banks' loans for industrial sector	-	-	-	F	-	-	-	-	-	-	-
* 11.	Development Bank of the Philippines (DBP)	Governmental financing body for medium and small-scale industries	-	E	-	F	-	-	-	-	-	-	-
* 12.	Institute of Small-Scale Industries, UP (UP-ISSI)	Management training and consultation for such industries	-	E	G	-	-	-	-	-	I	-	-
* 13.	Philippine International Trade Corporation (PITC)	Helping export of products and import of materials and machineries	-	-	-	-	M	-	-	-	-	-	-
* 14.	Food Terminal Inc. (FTI)	Technical assistances to food manufacturers and marketing	-	-	-	-	M	P	R	-	-	-	-
* 15.	Design Center of the Philippines (DCP)	Designing for such scale industries when requested	-	-	-	-	M	-	-	-	-	-	-
16.	Medium and Small-Scale Industry Coordinated Action Program (MASICAP)	Consultants' group for such industries under CSMI	-	-	G	-	-	-	-	-	-	-	-
17.	Regional Technical Assistance Center (RTAC)	Projected organizations under DOI	-	-	G	-	-	-	-	-	-	-	-
18.	Metal Industry Research and Development Center (MIRDC)	Research and training in casting and machining	-	-	-	-	-	-	R	V	-	-	-
19.	Philippine Veterans Industrial Development Estate Corp. (PHIVIDEC)	Developing industrial estates	-	-	-	-	-	-	-	-	-	-	D
20.	Private Development Corp. of the Philippines (PDCP)	ditto	-	-	-	-	-	-	-	-	-	-	D
21.	Export Processing Zone Authority (EPZA)		O	-	-	-	-	-	-	-	-	-	D
22.	Regional Development Council	Council headed by NEDA's regional office chief	O	-	-	-	-	-	-	-	-	-	-
23.	Local Development Authority	Ten of them are existent, under NEDA	O	-	-	-	-	-	-	-	-	-	-
24.	Social Security System (SSS)	Social security system for labor and loans for collective housing areas	-	-	-	-	-	-	-	-	-	-	D
25.	Province, City Small and Medium-Scale Ind'y Coordinating Council	Projected body under consideration (PCCC)	O	-	-	-	-	-	-	-	-	-	-
26.	Philippine Chamber of Industry (PCI)	Organizing private industries in cooperation with DOI	-	-	-	-	-	-	-	-	I	-	-
27.	Philippine Chamber of Small-Scale Business and Industry (PCSBI)		-	-	-	-	-	-	-	-	I	-	-

Legend: O for overall planning, E for entrepreneur seminar, G for guidance to management, F for financing, M for marketing, P for product planning, R for research and testing, V for vocational training, I for information services, C for cooperatives and D for developing industrial estates.

Note: Such organizations with * on their numbers are the 12 member bodies of CSMI.

of material. The five ways of assistances are agential activities, education and information, financing, taxation and regulations.

With five elements and five ways of assistance, the table provides 5 x 5 = 25 spaces, with several blank lots. Roughly speaking, these measures seem to cover the whole industries, including the cottage industries and the large-scale ones all alike. In other words, there seems to be no measures especially designed for the medium and small-scale industries.

The table shows that quite a few measures have been prepared and implemented, but it is quite doubtful that the entrepreneurs of the medium and small-scale industries have been well informed of such measures and making the most of them. As a matter of fact, the team met some entrepreneurs who had no knowledge of MASICAP, or who had no idea about the governmental organizations which might help them in finding new route of products. One of them said that he had no experience of governments' assistance. For financing, some of them told that, they often go to city banks at high interest rate, because the governmental financing bodies are too much collateral oriented, requiring so many papers, to take so much time. Although such complaints are common in any country, more efforts might be necessary for publicity of such governmental activities and measures.

TABLE 9. POLICIES AND MEASURES FOR ENCOURAGING THE MEDIUM AND SMALL-SCALE INDUSTRIES

Ways of Assistance / Elements	Higher Entrepreneurship	Higher Skill of Labor	Improved Prod'n Technologies	Wider Market	Security of Material
Agential activities	Development and preparation of Ind'l estates and exports processing zones	NACIDA's vocational training ctr. Projected training ctrs by NMYC. and other nat'l training ctrs.	PITC's help when buying imported machinery, MIRDC's research and training in machining	FTI's operation of foods market, PITC's help in product export NACIDA's exhibition Governmental purchase system	PITC's help in securing material
Education and Information	UP-ISSI's seminar for management NACIDA's registration system PCI's free registration system	NMYC's preparation tech. skill standards	FTI's assistance in food processing	DCP's help in product designing	
Financing	DBP and IGLF's loan system for such industries, NACIDA's small loan to members		DBP's lease-purchase system of machineries		
Taxation	Five year tax exemption for NACIDA registrants Tax exemption under National Internal Revenue Code Deduction of expenses from taxable income for less than 10 yrs. Accelerated depreciation under IIA and EIA	Deduction of labor training expenses under IIA and EIA	Exemption from tariff duties on impoted machines 100% tax credit on purchase of domestic machines	Deduction from taxable income of direct labor and local raw material in mfg cost of exports within 25% of export amount under IIA and EIA Exemption from export taxes Additional deduction from taxable income of 10% of incremental export	Tax credit equivalent to sales, compensating and specific duties of raw materials in manufacturing export products
Regulations	Progressive Car Mfg Program (PCMP) ans Progressive Motorcycle Mfg Program (PMMP) Prohibitin of export of unworked rough lumber	Employment of foreign nationals within 5 years under IIA and EIA	Right to employ foreign nationals in supervisory technical or advisory position within 5 years under IIA and EIA	Anti-dumping protection Ptotection from government competition	

4-2. SOME REMARKS ON THE CURRENT POLICIES AND MEASURES FOR ENGOURAGING THE MEDIUM AND SMALL-SCALE INDUSTRIES

In the first phase of the study, the team just roughly and partially reviewed the activities of the organizations for encouraging the medium and small-scale industries in the Philippines, and as a result, the remarks mentioned herein are no more than impressions and conjectures. However, those items pointed out herein are to be fully discussed upon in details in the second phase.

a. Concentrated efforts should be made for qualitative enrichment of the current organizations, rather than establishing new ones.

As seen on Table 8, more than 25 organizations have been exerting for encouraging and developing the medium and small-scale industries, covering almost the whole thinkable areas of seminars for entrepreneurs, consultation for management, financing, marketing, product planning, research and testing, vocational training and so forth. However, it is noted that some plural organizations are in charge of one field or one function. Of course, each one might have characteristics in its measures or in its way of implementations, when reviewed minutely, but, from the standpoint of applicants or users, it might be better, with less confusion, to have only one organization to ask.

UNIDO/ILO Report on the same subject in 1972 points out "absence of effective linkage among agencies concerned with small industry development." Although the team has no knowledge what kind of facts or phenomena such remarks are based upon, if linkage among these agencies are not actually effective, a serious situation might take place, because they say, "too many are more unmanagable than too few."

Furthermore, some key persons in the organizations concerned are holding several posts concurrently, and more agencies mean more restraints in human resources, only to invite insufficient activities. Besides, the team has heard that some of these agencies have been confronted with financial destitution.

Industrialization of the Philippines, especially encouragement and development of the medium and small-scale industries is quite a new subject of these few years, and they must have been busy in setting up a structure. From now on, however, concentrated efforts should be made to qualitatively enrich these agencies, and if necessary, to re-adjest these structures and agencies without flinching, for their effectively linked activities on sound financial basis.

b. To strengthen the concern of the local government officers toward industrialization

In the first phase of the study, the team could not fully investigate into the administrative structures and industry development agencies in provinces, chartered cities and municipalities.

Since this country's industrialization is rather a new problem, various policies and measures have been prepared and implemented by the central government so far. The team met several officers of the local governments, to find that they are still strongly agriculture-oriented, with little knowledge of, and concern to, modern industries. As the team indicated in its Interim Report on March 26th, it is of urgent necessity to strengthen the concern of the local government officers toward industrialization, who are supposed to have close contact with the local entrepreneurs, for accelerating the regional industry development.

The afore-said UNIDO/ILO Report also points out the comparatively low priority accorded by national and provincial governments, insufficient attention to the development of a cadre of competent technical officers at the center and at the provinces and municipalities, and so forth.

Concrete measures for improving such situations will be designed after more minute study, it might be an idea to have a subsidy system as mentioned in the Interim

Report. The idea is that the central government makes the local governments prepare and submit some concrete development plans for medium and small-scale industry, then the central government studies and gives subsidies according to their priorities for their implementation.

The most part of the local governments' revenue is subsidies from the central government plus real estate taxes, and it might be useful to review these current systems. It might be interesting to combine some incentive system that promotion of industrialization in a locality invites increment of revenue there.

Another way of heightening industry-consciousness of the local government officers is to prepare some study-trip program to more industrialized regions, which seems to be quite practical.

c. To find a way to reinforce consultants

In developing countries, there are many things for consultants to do in helping the management, as was pointed out in our Interim Report.

In this country, MASICAP has been quite active, as a governmental consulting organization, but, as a matter of fact, they have been kept busy in preparing application documents for bank loans. While the number of members is about 150,

most of them are very young graduates or students of universities, majoring in commerce and economics, consequently with few members of experiences and engineering background. Such a composition of MASICAP members is not favorable for the medium and small-scale industries' development. The same kind of problems is shown in UNIDO/ILO Report, too.

d. To establish information network between the government and private sector

The team understands that the Philippine Chamber of Industry (PCI), in cooperation with the Department of Industry (DOI), has been trying hard to establish information network between the government and the private sector.

However, judging from the team's poor experience in the field survey down in Mindanao, very few entrepreneurs there seemed to have been informed of the governmental policies and activities for them, which suggests another necessity of designing information network between the local governments and local entrepreneurs, and for that purpose, it is advisable to immediately prepare lists of such people and industries.

The afore-said UNIDO/ILO Report stresses the importance of such set-ups, with which the team agrees 100 per cent.

e. To make the personnel in local financing agencies more liberal and positive toward industrial loans

Since 1972, Development Bank of the Philippines (DBP) has been financing the medium and small-scale industries with the total limit of 500 million pesos, taking over the financing function of Social Security System (SSS), but, so far, the actual amount approved to such industries seems to be far below the limit.

Industrial Guarantee and Loan Fund (IGLF), another governmental financing guarantee body, guaranteed a little over 30 cases in 1972.

Such slack must be due to many factors, of course, but judging from the team's impression, the biggest brake seems to be the negative attitude of the personnel in local branch offices. As a matter of fact, with limited number of staff to appraise the increasing application documents, it takes roughly 4 to 6 months to get final approval. Too much complicated procedures and documentations is another reason.

One branch manager of DBP said that he had no experience of dead loan or a bad debt in industrial loans, and some entrepreneurs said that they go to city banks, in spite of higher interest rate, because DBP is too much collateral-oriented. UNIDO/ILO Report also suggests more possitive financial policies.

f. It is desirable to clarify the problems of the medium and small-scale industries per type and per locality, for drafting more concrete measures.

Table 9 shows that various measures have been prepared already, which should be reinforced taking the aforesaid remarks from a) through e) into consideration.

It is another fact that the medium and small-scale industries need more assistance than the current one, but, because of limited human and monetary resources, the new measures should be pin-pointed ones.

In the first phase of study, detailed investigations were not made enough to suggest any practical new measures. It is quite desirable to clarify the problems of these industries per type and per locality, for drafting more concrete and practical measures in near future.

CHAPTER V

SELECTION OF PREFERENTIAL INDUSTRY AND PREFERENTIAL AREA

CHAPTER V. SELECTION OF PREFERENTIAL INDUSTRIES AND PREFERENTIAL AREAS

5-1. SELECTION OF PREFERENTIAL INDUSTRIES FOR PROMOTION.

1) Steps for selecting preferential industries

For selecting preferential industries, two kinds of criteria might be considered, namely;

a. to give priorities to such types of industries as have large number of establishments, out of the current medium and small-scale industries.

b. to give priorities to such types of industries as produce the medium and small-scale industry oriented products.

However, the former a) looks making too much compromise with the current industrial structure of three categories, while the latter b) gives more freedom of choice for further discussion.

Then comes the geographical condition. The candidate types of industries (or candidate products) thus selected by criterion b) are grouped into the major city oriented types and others, since the theme of the team is the regional medium and small-scale industry development.

These steps for selecting the preferential industries are shown in the following diagram.

STEP 1	STEP 2	STEP 3
selecting medium and small-scale oriented products	eliminating the major city oriented ones	final screening of candidate types of industries

2) Selecting medium and small-scale industry oriented products

Apart from this country's definition of the three categories according to their total amounts of assets, let us define here the three categories by the numbers of employees as follows:

classification	number of employees
cottage industry	up to 9
medium and small-scale ...	10 - 99
large-scale	100 and over

Then, taking one kind of product, if the number of the employees in the medium and small-scale establishments for that kind of product exceeds 50 per cent the total number of the employees of the whole establishments in the same line, that product might well be called "medium and small-scale establishment oriented" product. In the same way, large-scale oriented and cottage industry oriented products can be defined, the result of which are already shown on Table 6, introducing 77 kinds as "the medium and small-scale establishment oriented" products.

3) Geographical considerations

a. Classification by location of industry

Since the team's theme is "the regional medium and small-scale industry development," it might be useful to check whether or not each of the afore-said 77 products' manufacturing industries geographically fit for the purpose. There might be various criteria for such purpose, and here "the major city oriented" ones are to be eliminated.

First of all, the major cities cited herein are Manila, Davao and Cebu, plus Rizal Province. Secondly, taking one product out of the afore-listed 77, the team figured out its share in the above-said major cities, not in market but in number of the establishments for that product, in the following manner;

Share of product A in major cities
= number of establishments in major cities for A divided by number of total establishments there.

In the same way,

National share of product A
= national total number of the establishments for A divided by nation-wide total number of the establishments altogether.

With such definitions and calculations, those products of which the share in the major cities excees the national shaare are to be called "major city oriented" ones. Of course, even though they are called "major city oritentd products," they are also produced in other areas to some extent, but they find better conditions in many aspects in major cities.

The fundamental data for such calculations were taken from Directory of Large Establishments, 1972, and the products were classified in the following three categories

Major city oriented products:

$$\frac{\text{its share in major cities}}{\text{its national share}} > 1.2$$

Intermediate zone oriented products:

$$0.8 \leq \frac{\text{its share in major cities}}{\text{its national share}} \leq 1.2$$

Province oriented products:

$$\frac{\text{its share in major cities}}{\text{its national share}} < 0.8$$

b. Results of calculations

Through such calculations as mentioned above, the afore-said 77 products are divided into three categories, out of which the major city oriented ones are dropped. The results are shown in the following table.

TABLE 10. CANDIDATE PRODUCTS AFTER GEOGRAPHICAL CONSIDERATIONS

Intermediate zone oriented products (12)	Province oriented products (13)
1. vegetable sauces and salad dressings	1. fish and other sea foods, canned
2. salted and candied fruits, nuts and seeds	2. manufactured ice
3. textile dyeing and finishing	3. miscellaneous leaf tobacco processing
4. miscellaneous fabricated millwork	4. underwear and outerwear knitting
5. wooden boxes and containers	5. rough lumber, unworked
6. box beds and mattresses	6. worked lumber
7. iron and steel foundry products	7. charcoal
8. heating equipments and plumbing fixtures	8. wood carving and crafting
9. food processing machinery	9. cork products
10. machine shops	10. tanneries and leather finishing plants
11. motor vehicle engines, parts and bodies	11. lime
12. transport equipments	12. miscellaneous textile
	13. agricultural machinery and equipments

4) Dropping the major city oriented ones

In picking up candidate industries for the regional medium and small-scale industry development program, the most important thing is that the selected should be such types of industries as will be effectively developed in the selected areas.

The major city oriented products are such ones as are produced in big cities, taking advantage of industrial

predominance in environments like well-developed infrastructure, information and so forth. If such industries should be chosen as candidates, big cities have to be chosen for the program's success, and at the moment, cities suitable for such kinds of industries are only Cebu and Davao, except Manila. If some other cities have been planning to develop their cities enough to match these two, it might be advisable to pick up some of the major city oriented types of industries, not as a part of their industry development program, but in combination with and as a part of their city development plans.

On the other hand, the province oriented products are those utilizing the local natural resources, daily necessities and intermediate goods for local industries. In short, such types of industries are supported by the local natural resources and the local markets.

The industries for the intermediate zone oriented are, in general, located in local cities, to produce middle class consumer goods, machinery for local industries and some products utilizing the local natural resources.

After all, by eliminating the major city oriented products for the above-said reason, 25 candidate types of industries, 12 of the intermediate zone oriented and 13 of the province oriented, are obtained as shown on Table 10.

5-2. GROUPING OF THE CANDIDATE INDUSTRIES

1) Necessity of grouping

So far, after investigations and calculations as mentioned, 25 types of industries are nominated as candidates, among which some have close relations each other. The closely related industries are such industries as have similar technologies, to be able to produce each others' products with their own facilities or by their own technical kno-hows, and/or have similar source of raw materials, similar markets or similar routes of sales. To group these related types of industries means that the types of industries defined for the purpose of statistics are re-arranged for the purpose of programing their development. For, in order to successfully develop a certain type of industry, fixing the environmental conditions such as stable supply of raw materials and stable demand for the products, as well as developing the establishment's abilities in engineering and sales, are very important. Then, the management of the suppliers of the raw materials, and the management of users of the products in case of intermediate goods, have to be sound. Besides, when they are properly grouped, the development program will be more efficiently implemented.

For these reasons, 25 candidates are to be grouped according to the two criteria, namely

a. similarity of industries and

b. industrial correlation.

2) Industrial similarities among the candidates

The fundamental factors for defining industrial similarities are, in general, empirically believed to be similarity in raw materials or similarity in processing, but actually, it is not so easy to define such similarities.

If a factory, mainly producing product A, concurrently produces product B in the same plant, then the industry for A and the industry for B are considered to be similar. This logic is based upon the premise that in case of adding the product B, the management choose such a product as can be produced and sold by fully utilizing his company's potentiality. This premise would be acceptable.

Borrowing Japan's data from Industrial Statistics, per Products, 1970,25 candidates are re-arranged into the following 13 groups.

1. vegetable sauces and salad dressings
2. canned fish and other sea food; manufactured ice
3. salted and candied fruits, nuts and seeds
4. miscellaneous leaf tobacco processing
5. tanneries and leather finishing plants
6. underwear and outerwear knitting; textile dyeing and finishing
7. rough lumber, unworked; worked lumber; wooden boxes and containers; miscellaneous fabricated millwork; box beds and mattresses; cork products
8. wood carving and crafting
9. lime
10. iron and steel foundry products
11. motor vehicle engines, parts and bodies; food processing machinery; agricultural machinery and equipments; heating equipments and plumbing fixtures; machine shops; transport equipments

12. charcoal
13. miscellaneous textile

3) Industrial correlations among the candidates

Mutual relations among the candidates, or more precisely speaking inflow of materials and outflow of products of one industry from and to other industries, can be seen in the industrial correlation tables. While the forms of these correlations in developing countries are various, they are quite similar in developed countries.

Regarding the inflow of materials into one industry from the other, Japan's information is here referred to, because no detailed industrial correlation table of the Philippines is available, and in the Philippines, most of important materials are imported, without showing any industrial correlations of the domestic industries. As to outflow of one industry's product into the others, each country has her own characteristics according to the stage of her industrialization. However, no attempt is made this time for grouping the candidates by outflow of their products, because of shortcoming in relevant data.

The following table shows the inflow of materials into the candidates, extracted from the Industrial Correlation Table of Japan, 1970.

TABLE 11. INFLOW OF MATERIALS INTO CANDIDATES FROM OTHER INDUSTRIES

Candidates	Industrial products flowing in
vegetable sauces and salad dressings	seasonings and flavors soybean oil eggs vegetable oil glass containers acetic acid plastic products
canned fish and other sea foods	pelagic fishery miscellaneous metal products coastal fishery packaging products
salted and candied fruits, nuts and seeds	refined sugar wheat flour miscellaneous foodstuff liquid jelly miscellaneous cooking oil
manufactured ice	industrial power supply heavy electric equipment repairing
misc. leaf tobacco processing	leaf tobacco
tanneries and leather finishing plants	hide furs and skins miscellaneous chemicals
underwear and outerwear knitting	miscellaneous synthetic fibers nylon vinylon spinning yarn ester vinylon
textile dyeing and finishing	synthetic dyes packaging materials miscellaneous inorganic chemicals soap
rough lumber, both worked and unworked	log
wooden boxes and containers; wood carving and crafting; cork products;	sawmill miscellaneous fabricated millwork
box beds and mattresses; miscellaneous fabricated millwork	sawmill veneer synthetic resin products paints

lime	paper bags and containers lime stones industrial electric power supply private power plant crude petroleum
iron and steel foundry products	pig iron scrap iron wooden products
motor vehicle engines, parts and bodies; transport equipments	motor vehicle general mechanical parts blast furnace and foundry products for machinery, ferrous ditto, non-ferrous boilers steel, cold rolling mill product tire and tube
food processing machinery	general mechanical parts food processing machinery blast furnace and foundry products for machinery, ferrous ditto, non-ferrous motor miscellaneous metal products
agricultural machinery and equipments	engines and boilers agricultural machinery misc. light electric apparatus blast furnace and foundry products for machinery, ferrous ditto, non-ferrous general mechanical parts motor
heating equipments and plumbing fixtures	plated steel hot rolling mill product, steel synthetic resins cold rolling mill product, steel copper products, drawn or extruded aluminum products, rolled
machine shops	general mechanical parts ordinary steel, hot rolled special steel, hot rolled steel, cold mill blast furnace and foundry products for machinery, ferrous ditto, non-ferrous
charcoal	n.a.
miscellaneous textile	n.a.

Source: Industrial Correlation Table, Japan, 1970

4) 13 groups of the candidates by two criteria

According to the Table, the metal working industry group and the wood working one seem to have strong correlations among themselves, while the rest do not.

The following 9 industries are independent and separate, and they can be developed separately. They are;

1. vegetable sauces and salad dressings
2. salted and candied fruits, nuts and seeds
3. miscellaneous leaf tobacco processing

4. tanneries and leather finishing plants
5. miscellaneous textiles
6. lime

7. charcoal
8. canned fish and other sea foods; manufactured ice
9. underwear and outerwear knitting; textile dyeing and finishing

On the other hand, the metal working industry group and the wood working one seem to have strong correlations among themselves, but it is quite doubtful that they can be treated as one group each, in case of preparing their development programs. It is true that iron and steel foundry is very important for steadily supplying materials of good quality to the metal working industry group, and that development programs for the medium and small-scale industries along this line can be more effectively implemented when the foundry industry is included. However, it is quite doubtful if all of the cited metal working industries are necessary, in order to successfully develop the iron and steel froundry industry.

Same kinds of question arise regarding the correlation among the wood working group, or correlations between the two groups. For, the latter can be a supplyer of wooden patterns to the former, and the former is to supply wood-working machines to the latter, just within a limited circle. So, some knowledge of the industrial correlations might be necessary in preparing industry development programs, of course, but for the purpose of grouping the candidates as kernel bodies for the development, grouping by their industrial similarities seems to be better.

As a result, we get the following table, with 13 groups of candidates altogether.

TABLE 12. 13 GROUPS OF THE CANDIDATES AND THEIR CHARACTERISTICS

Groups	Markets fm	dm	a	i	h	m	rm	Nos. of estab'ts	Characteristics
1. sauce and dressing	-	O	-	-	*	-	d	4	developing agro-industries and steadier supply of daily necessities
2. marine products processing									
canned fish and sea foods	-	O	-	-	*	-	d	18	ditto
manufactured ice	-	O	*	*	-	*	d	46	steady supply of fresh foods
3. salted and candied fruits	-	O	-	-	*	-	d	3	utilizing agricultural produsts
4. misc. leaf tobacco processing	-	O	-	-	*	-	d	1	ditto
5. tanneries	-	O	-	*	-	-		10	steady supply of materials for export goods
6. textile group									
under- and outerwear	-	O	-	-	*	-	f	20	steadier supplu of daily necessities and increase in materials' import
dyeing and finishing	-	O	-	*	-	-	f	2	ditto
7. wood working group									
sawmills and planing mills	O	o	-	*	-	-	d	120	utilizing domestic natural resources and export-oriented
wood-working	-	O	*	*	*	-	d	30	utilizing domestic natural resources
8. wood carving and crafting	O	o	-	-	*	*	d	82	utilizing domestic natural resources and export-oriented
9. iron and steel foundry	-	O	-	*	-	-	f	16	steady supply of material to metal-working industries
10. metal-working group									
heating equipments	-	O	-	-	*	*	f	4	import substituting
motor vehicle engines, etc.	-	O	*	*	-	*	f	108	ditto, and promotion of other industries
11. lime	-	O	-	*	-	-	d	8	utilizing domestic natural resources
12. charcoal	O	o	-	*	-	-	d	2	ditto, and export-oriented
13. miscellaneous textiles	-	O	-	-	*	*		3	

Note: O and o shows relative weights of market demands.

The numbers of the establishments are those having more than 10 employees, except those in Manila City and Rizal Province.

Legend: 1) regarding market;
fm for foreign market,
dm for domestic market

among those designated "dm"
a for agricultural sector
i for industrial sector
h for household and
m for miscellaneous

2) "rm" stands for raw materials, and
d for domestic origin
f for foreign origin

5-3. PREFERENTIAL AREAS AND PREFERENTIAL INDUSTRIES THERE

1) Selection of the preferential areas

So far, 13 groups of candidate industries have been obtained, of which those establishments of small number are to be dropped here, since little linkage effect is expected about them. Thus, 6 groups are obtained as the final candidates, namely;

1. marine product processing group, with
   canned fish and other sea foods, and manufactured ice
2. textile group, with
   under- and outerwear knitting, and dyeing and finishing
3. wood-working group, with
   unworked and worked lumber, wooded boxes and containers and other miscellaneous wooden products
4. wood carving and crafting
5. iron and steel foundry
6. metal-working group, with
   motor vehicle engines, parts and bodies, agricultural machinery, food processing machinery, etc.

Among those six groups, the metal-working group is the most important, since they furnish the other groups with the capital goods and their repair parts. Besides, this country is very weak in this field, importing quite a few number of machines and parts. Furthermore, judging from the demand-supply relations, this group is very promissing. With such considerations, the afore-said six groups can be distinguished intwo categories, namely;

a. a group which utilizes local natural resources, (1 - 4) and

b. a group which is related to metal-working, (5 and 6).

It might be better to select such areas as will help, or will be favorable for, developing the metal-working group first, with an expectation that this group will help other industries' developments.

The areas where the metal-working industries can effectively develop should be such areas as have a large potential market for these industries' products, with a large number of establishments plus good prospects for infra-structure. As already mentioned in Chapter 3, the industrial establishments in regions are concentrated in the cities, following the international pattern. Therefore, it would be strategically correct that some regional cities as strong candidates for the industrial development programs are chosen for the next step.

Accordingly, some regional cities are to be evaluated, with the following two criteria;

a. city development index in Four-Year Development Plan (FY 1974 - 77) by NEDA, with Cebu as 100, and

b. ratio of numbers of establishments with more than 10 employees against those in Cebu in percentage, based upon Directory of Large Establishments, 1972, obtaining the following table.

TABLE 13. EVALUATION OF CITIES

cities	a) dev. index	b) nos. of est'ts	c) ratio	a) + c) total
Cebu	100	252	100	200
Davao	60	119	47	107
Iloilo	48	53	21	69
Cagayan de Oro	42	44	16	58
Bacolod	40	96	38	78
Zamboanga	32	43	17	49
Baguio	28	26	10	38
Iligan	20	20	8	28
Lucena	20	19	8	28
Olongapo	18	16	6	24
Butuan	18	37	15	33
Angeles	16	44	17	33
Cotabato	15	14	6	21
Dumaguete	11	26	10	21
Ozamis	12	16	6	18

Sources: a) Four-Year Development Plan, NEDA, 1973
b) Directory of Large Establishments, 1972

Among the above-listed cities, three cities of Cagayan de Oro, Iligan and Butuan are located along the same highway, and can be taken as one zone, like Tokyo-Kawasaki-Yokohama or Osaka-Nishinomiya-Kobe in Japan. Thus, the final candidate areas might be the following five;

1. Cebu 200
2. Cagayan de Oro, Iligan and Butuan 119
3. Davao 107
4. Bacolod 78
5. Iloilo 69

2) Preferential types of industries

in the preferential areas

Regarding these five candidate areas, the numbers of establishments with more than 10 employees per afore-said six groups are tabulated as follows;

TABLE 14. PREFERENTIAL AREAS AND INDUSTRIES THERE

Cities \ Industries	m	t	w	c	f	m	Total
1. Cebu	1	1	4	3	4	13	26
2. Cagayan de Oro ..	2	0	10	0	0	7	19
3. Davao	3	0	8	1	0	11	23
4. Bacolod	5	0	2	0	1	5	13
5. Iloilo	5	0	0	2	1	6	14

Legend: m for marine product industries
t for textile industries
w for wood working industries
c for wood carving and crafting
f for foundry
m for metal working industries

The table clearly discloses tha characteristics of the candidate areas, i.e. the first three are for metal- and wood-working industries, while the remaining two are for marine product industries and metal-working ones. Once the selection of the candidate areas is made, then the candidate industries will be automatically decided. Although the candidate areas are five here, the final decision to choose the place for the second stage is entirely up to the central government of the Philippines.

CHAPTER VI

THE SECOND PHASE STUDY PLAN

CHAPTER VI. THE SECOND PHASE STUDY PLAN

6-1. Policies for the second phase study

In preparing the development programs for the medium and small-scale industries in the Philippines, first of all, a consideration should be paid to severe restrictions in human and monetary resources for implementing programs. Another problem lies in a fact that while quite a few number of measures have been prepared for encouraging and developing these industries, they do not seem to have been so smoothly and effectively working, and some investigations are necessary to find the way for activating them.

With these facts in mind, it seems to be advisable for the development programs of the medium and small-scale industries in the Philippines to be composed of the following four stages, namely;

1) to successfully implement a limited number of practical programs having strong linkage effects and/or demonstrative effects,
2) to prepare detailed mannuals on the above cases, to set up publicity systems on these successful examples and other systems for selecting candidate industries, for training local officers concerned and so forth,
3) to re-arrange those existent various kinds of development measures and projects into the most effective and practical ones, and
4) to spread such measures and projects throughout the country.

Along this line, the second phase study aims at preparing medium and small-scale industry development programs, at a selected area with the highest possibility of success in implementing such practical programs, centering in preferential types of industries, which will be the basic drafts of the development programs for that area and for those type industries there, as well as a good model for drafting other development programs in other areas for other types of industries.

6-2. Scope of work of the second phase study

a. Selection of candidate types of industries

The candidate types of industries to be picked up in the second phase study are divided into the following two categories, namely;

a. those industries which are related to metal, such as
   iron and steel foundry,
   machine shops and other metal-working industries

and b. those industries which utilize local natural resources such as
   marine product processing industries,
   wood-working industries,
   wood carving and crafting industries and
   textile industries.

The metal industry group has strong correlations within itself, but separate programs might be necessary for

material preparing industries, fabricating industries and assembly shops.

On the other hand, the group utilizing local natural resources is a local industrial group, and considerations should be paid to the local characteristics in preparing development programs for them. Furthermore, in order to pin-point the development efforts, it is advisable to pick up the most representative type of industry, for such local industries are very characteristic in raw materials, as well as in processing technologies and markets. To have plural types of such industries at one time in the development program might jeopardize its successful implementation.

b. Selection of candidate areas

The candidate areas for metal industries have to have good infrastructural backgrounds like roads, port facilities, electric power supply and so forth, plus concentration of factories. So far, five candidate areas have been described, namely;

Cebu,
Cagayan de Oro - Iligan - Butuan,
Davao,
Bacolod and
Iloilo.

The Government of the Philippines is hoped to make a dicision of the choice.

For developing the local industries utilizing natural resources, it might not be necessary to limit the areas, however, in view of efficiency of the programs and preferential policies of the measures, it is most preferable to have the same area as one for the metal industry.

In that case, the development program can be made a composite one, covering both the metal industries and the local industries, which seems to be very important for successful implementation of the development programs of the medium and small-scale industries in the Philippines.

6-3. Steps of the study

Preparation of the composite development program is supposed to follow the following ten steps. These steps are once again divided into two phases of establishing the basic policies for the program and preparing the detailed program. It is very important to have thorough discussions with the offices concerned as to the basic policies for preparing more practical and promising program. The ten steps are shown on the following page.

I. Basic policies and drafting a skeleton

1) discussions with NEDA, DOI and UP-ISSI for final selection of the candidate area and candidate types of industries,
2) field survey at the selected area,
3) drafting of, and discussions upon, a skeleton,
4) interim report to the government of the Philippines,
5) ditto to the government of Japan.

II. Preparation of a detailed program

6) preparing a draft detailed program,
7) explanation to, and discussion with, the government of Japan,
8) revising the draft detailed program,
9) explanation to, and discussion with, the government of the Philippines,
10) explanation to the government of Japan.

ANNEX

TABLE 1. DOMESTIC NET PRODUCT AND NUMBERS OF EMPLOYEES PER INDUSTRY

	1965			1971			Ratio 71/65		Annual increm't 65 - 71
	DNP	Nos. of empl's	DNP per head	DNP	Nos. of empl's	DNP per head	DNP	Nos. of empl's	
Agri-fishery	5,659	5,889	960	14,700	6,203	2,310	2.60	1.05	52
	33 %	57 %		37 %	50 %				
Mining	235	26	9,039	924	62	14,903	3.93	2.38	6
	1 %	-		2 %	1 %				
Manufacturing	3,307	1,161	2,848	7,989	1,450	5,510	2.42	1.25	48
	19 %	11 %		20 %	12 %				
cottage ind'y		264		1,198	348	3,443	-	1.32	14
		3 %		3 %	3 %				
medium and small		186		1,040	276	3,768	-	1.48	15
		2 %		3 %	2 %				
large-scale		711		5,751	826	6,962	-	1.16	19
		7 %		14 %	7 %				
Construction	746	297	2,512	1,036	456	2,272	1.39	1.54	27
	4 %	3 %		3 %	4 %				
Transport-commun'n	721	375	1,922	1,388	569	2,439	1.93	1.52	32
	4 %	4 %		3 %	5 %				
Commerce	2,454	1,117	2,197	5,720	1,555	3,679	2.33	1.39	73
	14 %	11 %		14 %	13 %				
Servuce	4,048	1,459	2,774	8,541	2,113	4,042	2.11	1.45	109
	23 %	14 %		21 %	17 %				
Total	17,170	10,324	1,663	40,298	12,408	3,247	2.35	1.20	347
	100 %	100 %		100 %	100 %				

Sources: Four-Year Development Plan, (FY 1974 - 77), NEDA
Those figures in the breakdown of the Manufacturing industry are estimated from Economic Census of the Philippines, 1967 and
technical paper by Leon V. Chico, UP-ISSI.
Classification of the manufacturing industries is based the number of employees.