

DIRECTORATE GENERAL OF HIGHWAYS
MINISTRY OF PUBLIC WORKS
THE REPUBLIC OF INDONESIA

ARTERIAL ROAD SYSTEM DEVELOPMENT STUDY IN JAKARTA METROPOLITAN AREA

FINAL REPORT
MAIN REPORT

September, 1987

JAPAN INTERNATIONAL COOPERATION AGENCY

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国際協力事業団

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PREFACE

It is with great pleasure that I present this report entitled the Arterial Road System Development Study in Jakarta Metropolitan Area to the Government of the Republic of Indonesia.

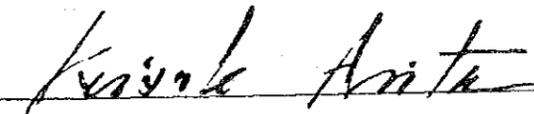
This report embodies the result of a transportation masterplan study which was carried out in the Jakarta Metropolitan Area from November 11, 1984 to July 19, 1987 by a Japanese study team commissioned by the Japan International Cooperation Agency following the request of the Government of Indonesia to the Government of Japan.

The study team headed by Mr. Nobuwaka Yamakawa, Pacific Consultants International Co., Ltd. had a series of close discussions with the officials concerned of the Government of Indonesia and conducted a wide scope of field survey.

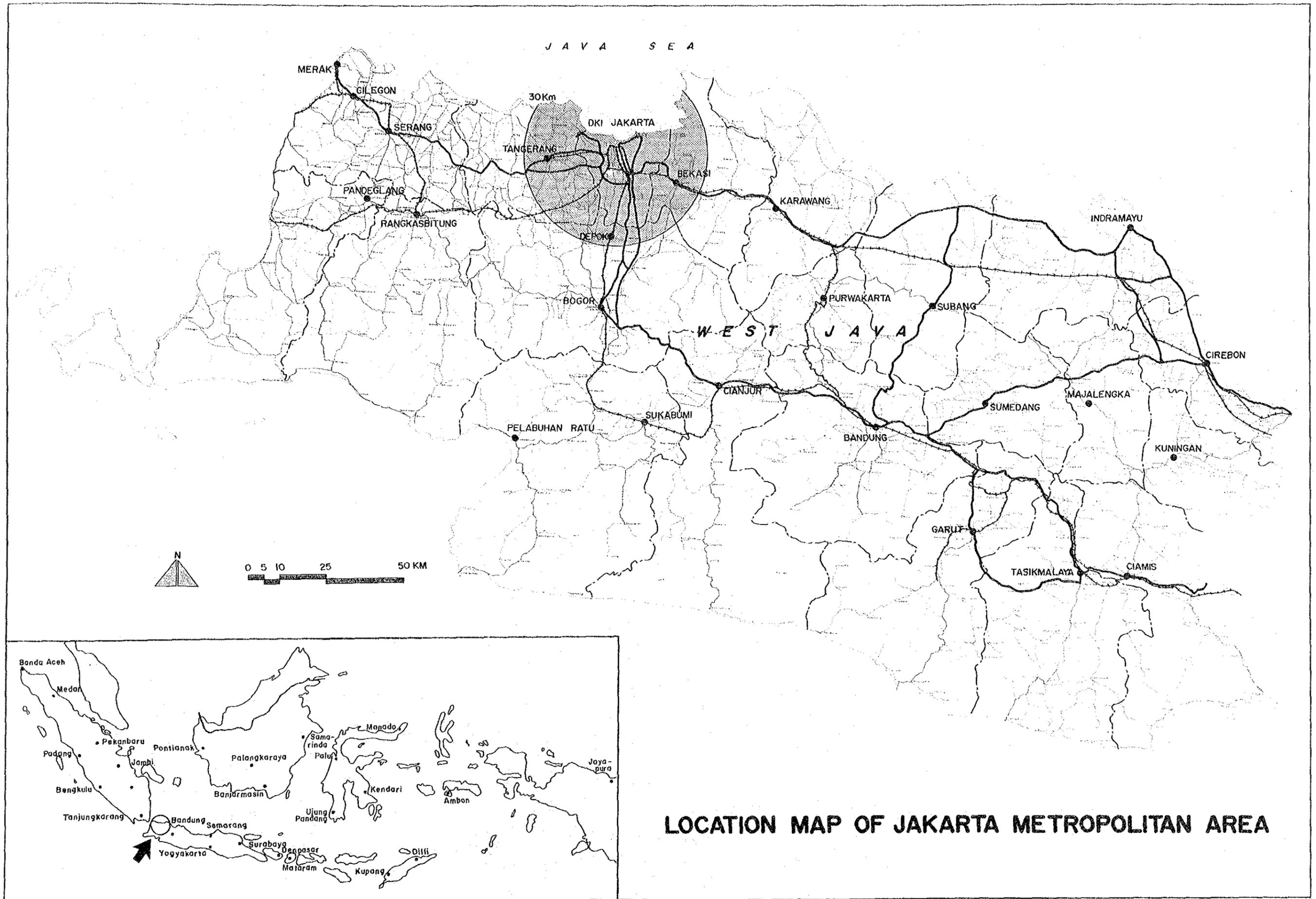
I hope that this report will be useful as a basic reference for the development of the road system.

I wish to express my deep appreciation to the officials concerned of the Government of Indonesia for their close cooperation extended to the Japanese team.

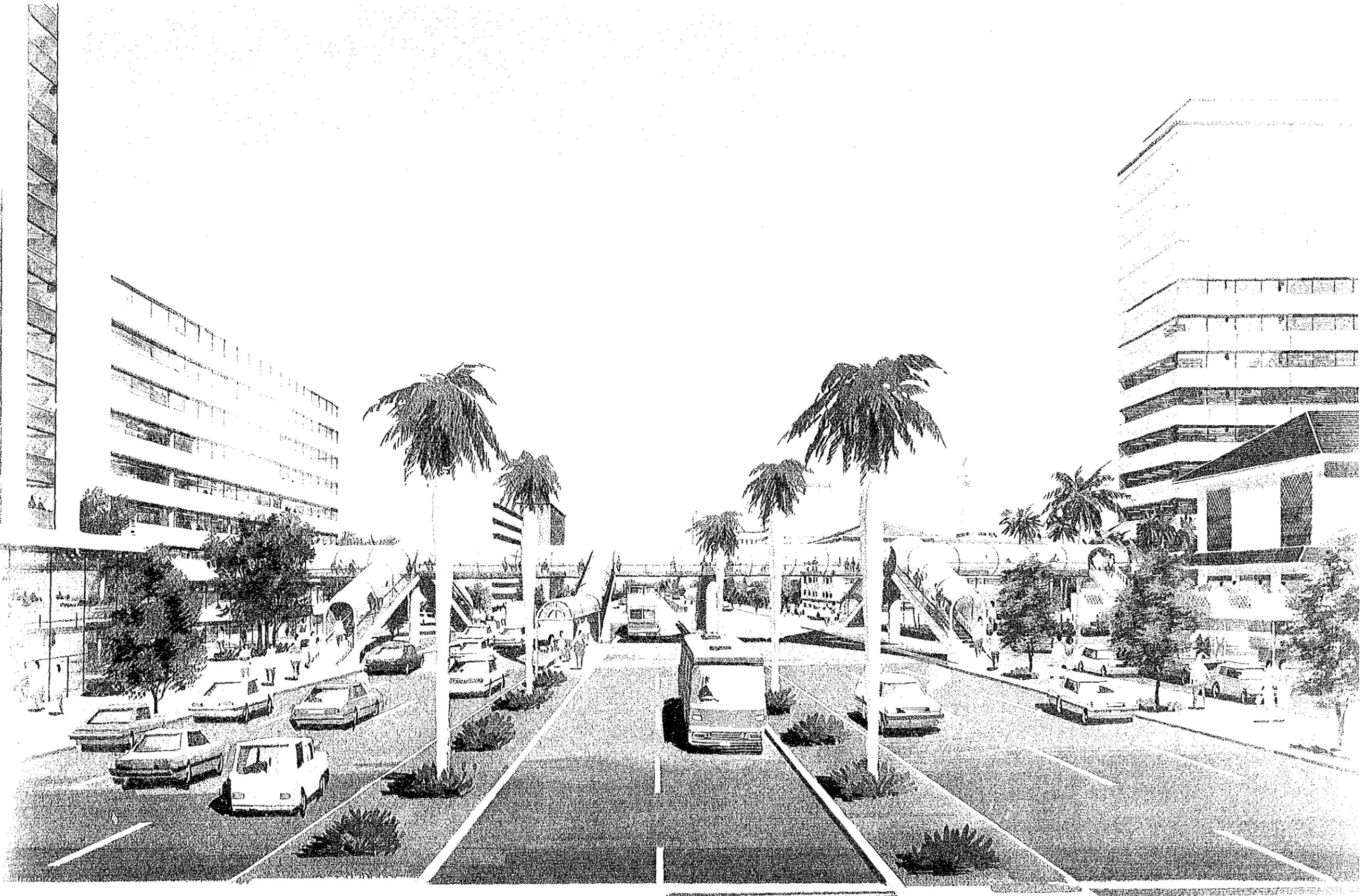
September 1987



Keisuke Arita
President
Japan International Cooperation Agency



LOCATION MAP OF JAKARTA METROPOLITAN AREA



PERSPECTIVE VIEW OF MEDIUM/MASS TRANSPORTATION CORRIDOR
(Joint Right-of-Way of Busway and Arterial Street)

JAKARTA METROPOLITAN AREA

The Jakarta Metropolitan Area that was covered by the Arterial Road System Development Study (ARSDS) is the area within a 30 km radius from Monas. This area includes Jakarta and the four sub-regional centers of Tangerang/Batu Ceper, Bekasi/Tambun, Serpong and Depok.

The Jakarta Metropolitan Area is characterized by remarkable urban growth and the close connection of mutual activities within an area of one day's trip length. In DKI Jakarta, the capital city of Indonesia, and also in the surrounding areas, the concentration of population and economic activities have been increasing, resulting in traffic problems which cannot be solved by only looking at DKI Jakarta. In consideration of inter-regional traffic and intra-regional traffic in the Jakarta Metropolitan Area, the situation makes it necessary to establish a Metropolitan Transportation System.

BACKGROUND

Directions for the Jabotabek Region's long term development have been shaped through the various development planning studies on this region since 1967. Among the other planning studies, the Jabotabek Metropolitan Development Plan (JMDP) played the most crucial role in establishing the existing development objectives. The JMDP study was undertaken in accordance with Presidential Instruction No. 13, 1976, which calls for the related agencies to adjust and coordinate their development planning throughout the Jabotabek Region.

The authorized DKI Jakarta Structure Plan 2005 and the current Jabotabek Development Plan 2005 have been established with some revision in line with the JMDP study. These documents suggest principles to guide regional/urban development and transportation development. The Arterial Road System Development Study in the Jakarta Metropolitan Area (ARSDS) was undertaken in coordination with the existing development objectives and transportation sector guidelines.

On the other hand, the transportation development planning studies on railways, tollways, arterial roads, bus systems, etc., have been independently carried out. Moreover these transportation studies were not well coordinated with the regional and urban development studies.

Short term traffic management and road transport development studies for DKI Jakarta were conducted by the Jakarta Urban Transport Project and other short term projects.

In this context, the Arterial Road System Development Study in the Jakarta Metropolitan Area (ARSDS) was undertaken to prepare a strategic long term arterial road and street system development plan from both a comprehensive transportation planning viewpoint and a regional/urban development viewpoint.

STUDY OBJECTIVES

The Main objective of the ARSDS is to establish an Arterial Road and Street Development Plan and strategies to achieve the existing development objectives by strengthening the existing DKI Structure Plan 2005 and the current Jabotabek Development Plan 2005.

In more specific terms, the objectives of the ARSDS are as follows:

1. To strengthen the traffic and transportation data base for different transportation planning programs by conducting a full scale person trip survey.
2. To establish an arterial road and street network in 2005 in coordination with the preferred urban system in the Jakarta Metropolitan Area by strengthening the existing development plans.
3. To formulate an integrated transportation development strategy to coordinate each transportation system development within an integrated transportation system and to coordinate transportation development with urban development.
4. To formulate an implementation program of the priority projects for arterial road and street development according to the recommended transportation development strategy.
5. To identify other important development projects related to arterial road and street development.

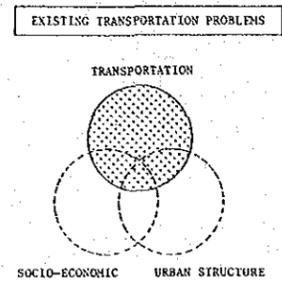
STUDY APPROACH

The approach of the ARSDS is characterized by the following four principles.

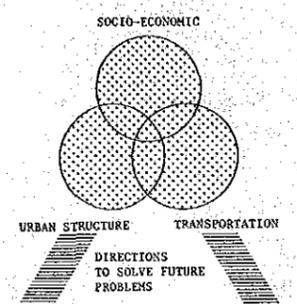
1. The Study is based on the analyses of the present conditions, not only of transportation but also of socio-economics and urban structure, in the Jakarta Metropolitan Area.
2. The present traffic and transportation analyses are based on the full scale person trip survey 1985, which allows a comprehensive approach to the whole transportation system, in addition to the traffic counting survey, travel speed survey and inventory of transportation facilities.
3. The Study is designed to deal with transportation development within the urban development context, because transportation development cannot be separated from urban development, especially in a metropolitan area where the urban structure is to be changed.
4. The strategies recommended by the ARSDS delineate the measures to be taken in the process by which change is to be achieved. The strategies should be action oriented.

The study approach described above is shown in the following figure.

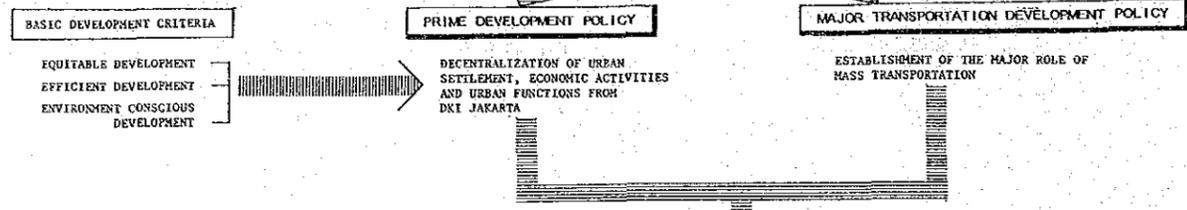
A. ANALYSIS OF URBAN PROBLEMS



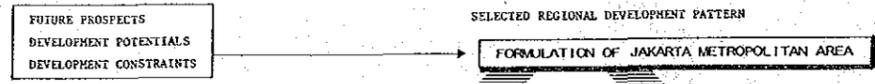
EXISTING URBAN PROBLEMS



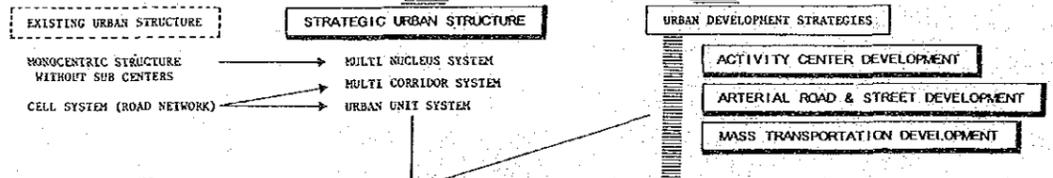
B. REVIEW OF EXISTING DEVELOPMENT PLANS



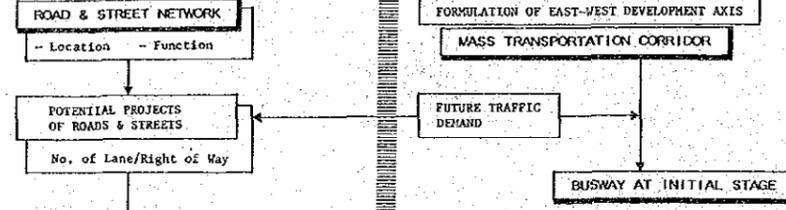
C. FUTURE PROSPECT AND REGIONAL DEVELOPMENT PATTERN



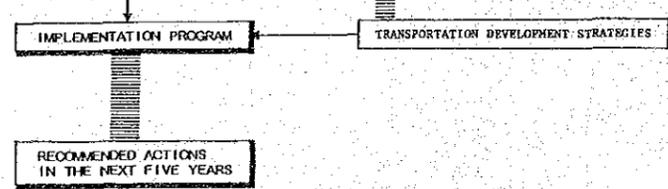
D. PLANNING STUDY



E. NETWORK PLANNING



F. IMPLEMENTATION PROGRAM



COMPOSITION OF REPORT

The reports presented in this study are composed of a Executive Summary, Main Report and Supporting Reports.

The Supporting Reports are:

- No. 1 : Socio-Economic and Financial Analyses
- No. 2 : Urban Structure
- No. 3 : Traffic Survey and Analyses
- No. 4 : Transportation Facilities and Analyses
- No. 5 : Future Traffic Demand
- No. 6 : Transportation Policy and Planning

WORK FLOW CHART AND KEY WORD INDEX

RECOMMENDATION

One of the policy solutions for the urban transportation problems of a megalopolis, from an urban planning point of view, is to change the urban structure from one which allows almost all of the traffic to concentrate to one central area, to one which disperses traffic to centers of the multi nucleus pattern. Moreover, another solution reinforcing the solution by the multi nucleus system, is to establish Medium/Mass Transportation Corridors connecting centers so as to convert the urban structure from one which depends on individual transport modes, to one which depends on medium/mass transport modes.

The following are the major recommendations of the ARSDS.

- 1) The east-west urban axis should be established, in addition to the existing strong north-south axis, historically in order to achieve the development objectives.
- 2) A large scale transportation infrastructure is required to establish the east-west urban axis, which would induce the east and west area development.
- 3) The transportation to establish the east-west urban axis should have a high transport speed service, which is relatively competitive to existing transportation systems.
- 4) The transportation to establish the east-west urban axis should be a medium/mass transportation system, in consideration of transport efficiency, energy consumption and air pollution. The axis should be a rapid bus system operated on an exclusive busway at the initial stage, because of the investment efficiency in the east and west growing areas. A joint busway and arterial street right-of-way is suitable to induce development along the corridor. The corridor should be designed to be convertible into another guideway system with a larger transport capacity and higher speed.
- 5) The north-south axis, which is congested with excessive traffic demand, should be undertaken to increase the transportation capacity by examining measures such as a arterial street, tollway, medium/mass transit system.
- 6) The direct access to the existing Central Area from activity centers (including sub-centers and secondary centers) in the suburban areas should be secured to induce development outwards from the Central Area. This is a key to encourage sub centers (East, West, Tangerang and Bekasi) and secondary centers.
- 7) Basic transportation network to form the megalopolis such as Jakarta Metropolitan Area should be provided with the progress of suburban housing development, which should be developed to form an urban unit. The basic network should be a guideline for collector and local streets in Urban Units.

RECOMMENDED ACTIONS IN THE NEXT FIVE-YEAR PERIOD

Based on the ARSDS it is highly recommended that full advantage be taken of the chance to review the existing DKI Structure Plan, which is supposed to be done every five years, in order to strengthen its transportation sector plan and to take following actions without delay in the next five-year period:

- 1) Feasibility Study of the whole medium/mass transportation corridor development program in order to decide the alignment, and to start the development control to secure the right-of-way.
- 2) Feasibility Study on the north-south corridor (Blok-M -- Kota) development and parking facility development in the Central Area. The reinforcing facility to be examined are arterial road, tollroad, busway, medium/mass transportation mode, etc.
- 3) Central Area Development Planning Study including activity center development/redevelopment, parking plan, station plaza plan, traffic management plan, arterial road plan, etc., which are essential for the provision of direct access to the Central Area from activity centers in the sub-urban area.
- 4) Feasibility Study for the present traffic problem oriented program such as existing arterial roads in the Central Area.
- 5) Feasibility Study for the major arterial streets and primary roads in order to establish the multi-nucleus system.
- 6) Budgetary Study of transport sector.

IMPLEMENTATION PROGRAM

The implementation programs recommended in the study are selected from the viewpoint of future urban formation and transportation development strategies. They are classified into 7 programs by program nature and each implementation schedule are shown in the following table.

COST OF PROGRAMS

PROGRAM	ESTIMATED PROJECT COST (x 10 ⁶ Rp)				
	PELITA IV	PELITA V	PELITA VI	PELITA VII	TOTAL
1 Mass Transportation Corridor Development Program	—	159,471	226,352	209,737	595,560
2 Major Arterial Street Development Program	63,342	—	44,827	132,788	240,957
3 Arterial Street Development Program in the Newly Urbanizing Area	113,855	94,486	110,073	—	318,414
4 Present Traffic Problem Oriented Program	37,959	274,307	42,188	—	354,454
5 East—West Connection Improvement Program	—	—	38,363	—	38,363
6 North—South Axis Strengthening Program	—	—	—	40,685	40,685
7 Freeway Development Program	164,500	1,500,589	—	—	1,665,089
Total	215,876 (380,376)	528,264 (2,028,853)	461,803 (461,803)	383,210 (383,210)	1,588,433 (3,253,522)

Note: Figures in () show total costs and without () for those of exclusive freeway

The details of each program are shown by the 5 year development period in the following tables and a figure.

1 PROJECT LIST OF MEDIUM/MASS TRANSPORTATION CORRIDOR DEVELOPMENT PROGRAM

No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
A1	Ex-Kemayoran – West Center	6	13.9	V	88,910
A2	Tn. Abang – West Center	6	16.0	V	70,561
A3	West Center – Tangerang Ring	6	30.3	VI	110,571
A4	East Center – Bekasi Ring	6	26.3	VI	115,781
A5	Tangerang South – Tanah Abang	6	19.3	VII	98,464
A6	Bekasi South – Ex-Kemayoran	6	27.0	VII	111,273
Total					595,560

2 PROJECT LIST OF MAJOR ARTERIAL STREET DEVELOPMENT PROGRAM

No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
B1	Pesing – Kebayoran Baru	6	9.6	IV	63,342
B2	Tangerang MTC Supplemental Link	4	9.4	VI	21,200
B3	Bekasi MTC Supplemental Link	4	7.1	VI	23,627
B4	Ancol – Cilincing	6	10.3	VII	53,097
B5	Cilincing – Pulo Gadung Lor	4	6.4	VII	23,707
B6	Pondok Gede – Fatmawati	4	15.9	VII	40,659
B7	Blok M – Cilandak	6	5.4	VII	15,325
Total					240,957

3 PROJECT LIST OF ARTERIAL STREET DEVELOPMENT PROGRAM IN THE NEWLY URBANIZING AREA

No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
C1	East Center Related Street (Kembangan – Kupuh 1)	4	6.7	IV	9,177
C2	East Center Related Street (Meruya Udik – Rawatiga Suku)	4	3.7	IV	9,867
C3	West Center Related Street (Pulo Gadung – Rawadomba)	4	7.2	IV	25,750
C4	West Center Related Street (Rawa Terate – Ujung Kranjang 1)	4	3.0	IV	33,555
C5	West Center Related Street (Klender – Bojong)	4	5.8	IV	23,289
C6	West Center Related Street (Gedung 2 – Cilungu 2)	4	2.3	IV	12,217
C7	Bugel 1 – Legok	4	6.5	V	12,207
C8	Jakarta – Kampung Kelapa 1	2	7.8	V	10,655
C9	Kontrakan – Donkel 2	2	9.7	V	11,811
C10	Bekasi – Tambun	2	7.0	V	11,151
C11	Rawapajang – Rawa Banteng	2	8.6	V	9,400
C12	Teluk Betung – Ps. Bondo	4	9.9	V	27,351
C13	Tambun – Tambun South	2	4.9	V	11,921
C14	Ciledug – Meruya Udik	2	5.9	VI	16,844
C15	Pondok Aren – Juraganan	2	6.3	VI	13,001
C16	Cipondoh – Cipadu	2	6.3	VI	8,595
C17	Kebaren – Bantenan	2	6.4	VI	8,529
C18	Kali Malang – Kp. Asem	4	7.3	VI	16,412
C19	Malaka 3 – Pondok Meloh	2	8.4	VI	12,695
C20	Kp. Gunung – Kebantenan 1	2	3.0	VI	12,073
C21	Rangkalanwsmgin – Pekayon 2	2	7.0	VI	13,941
C22	Pondok Gede – Pondok Bend	2	4.1	VI	7,983
Total					318,424

4 PROJECT LIST OF PRESENT TRAFFIC PROBLEM ORIENTED PROGRAM

No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
D1	Pondok Pinang – Pejompongan	4	5.2	IV	8,960
D2	Ragunan – Buncit Raya	6	4.6	IV	2,923
D3	Ps. Minggu – Depok	4-6	20.4	IV	23,291
D4	Kali Malang	4	4.7	IV	2,785
D5	Kota – Jembatan Dua	6	2.3	V	13,642
D6	Ex-Kemayoran – Cikini	4-6	14.6	V	14,988
D7	Pejajaran – Pondok Baru	6	1.6	V	77,446
D8	Rawatingasuku – Tanah Abang	4	5.1	V	34,352
D9	Pejompongan – Karet Kubur	4	1.7	V	5,489
D10	Blok M – Kota	8	13.5	V	128,390
D11	Cikini – Menteng Palbatu	6	3.4	VI	18,198
D12	Outer Ring Road – Senayan C.C	4	7.0	VI	23,990
Total					354,454

5 PROJECT LIST OF EAST-WEST CONNECTION IMPROVEMENT PROGRAM

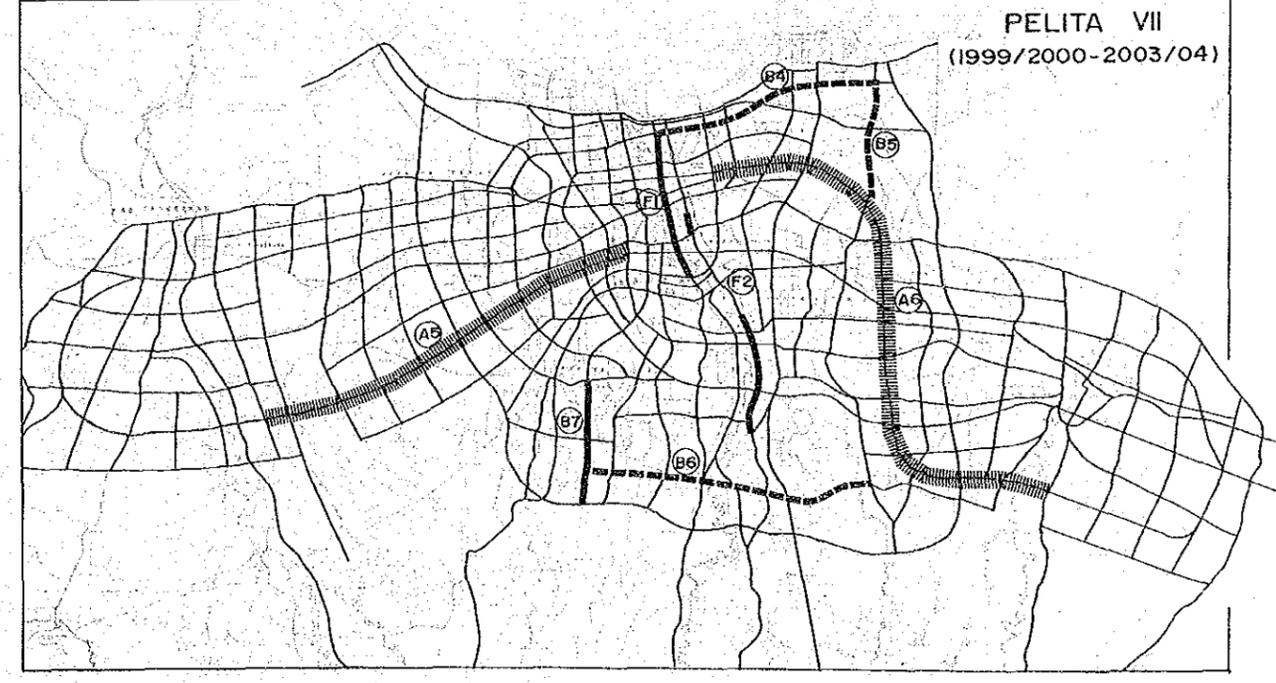
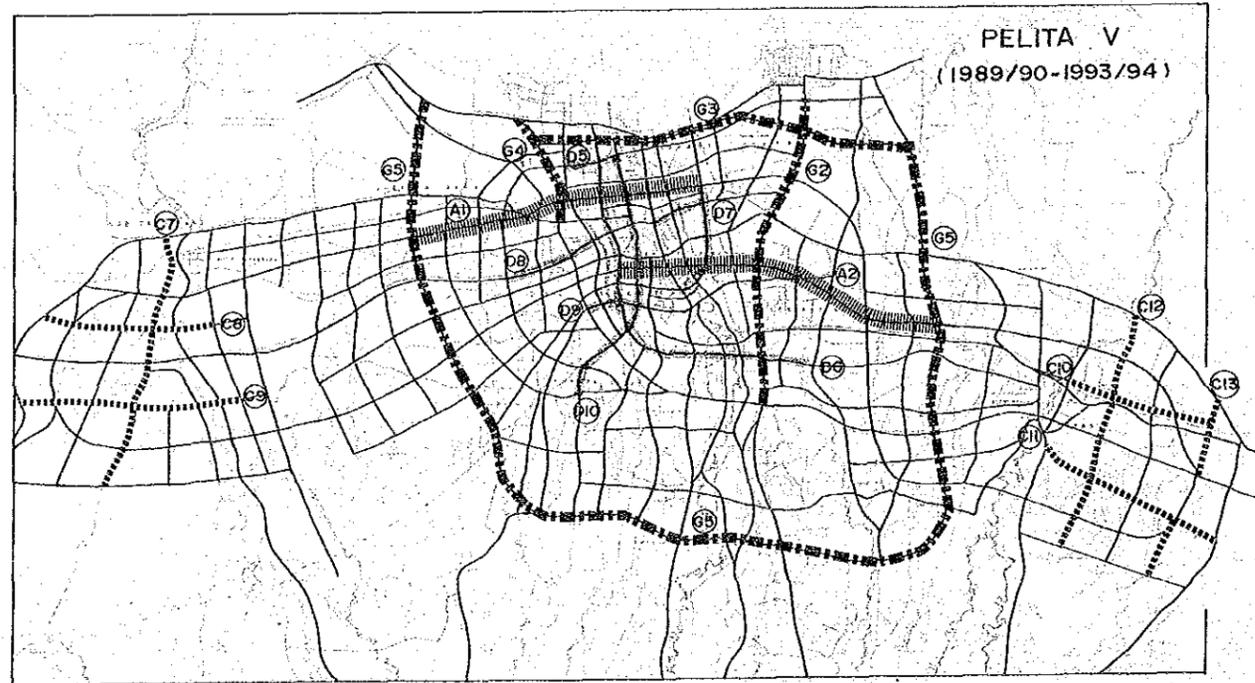
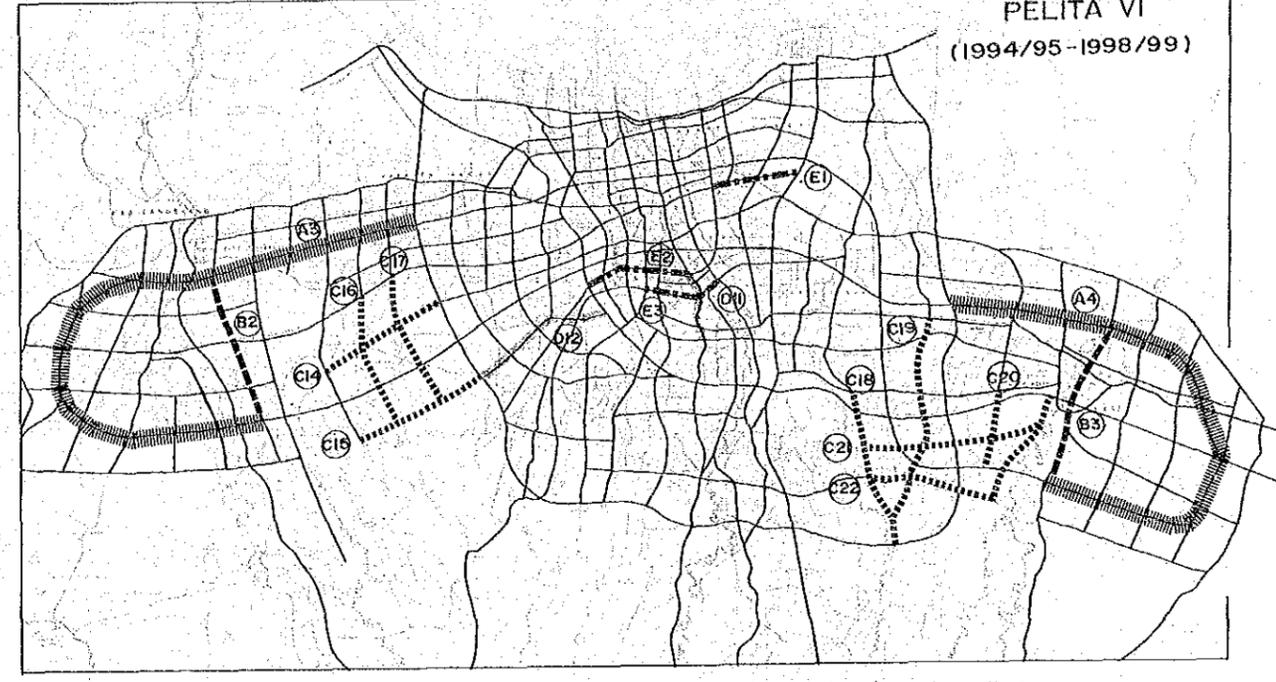
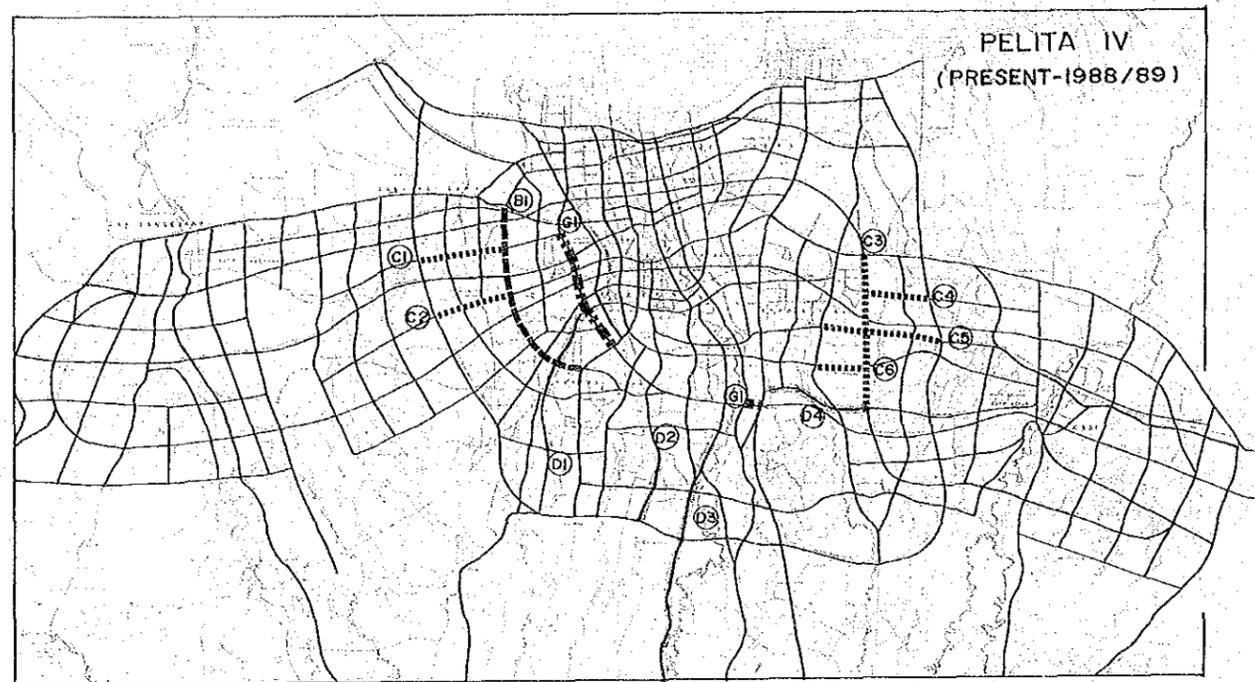
No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
E1	Ex-Kemayoran – J.I.U.T. N-S Link	4	4.1	VI	14,636
E2	Cikini – Slipi	4-6	4.8	VI	23,727
Total					38,363

6 PROJECT LIST OF NORTH-SOUTH AXIS STRENGTHENING PROGRAM

No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
F1	Cikini – Kampung Bandan	4	4.6	VII	25,612
F2	Senen – Jatinegara – Cililitan	6-8	6.9	VII	15,073
Total					40,685

7 PROJECT LIST OF FREEWAY DEVELOPMENT PROGRAM

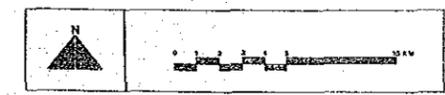
No	Name/Location	No. of Lane	Length (Km)	Implementation Period (Pelita)	Construction Cost (x 10 ⁶ Rp)
G1	J.I.U.T. S-W Arc (Jakarta I.C. – Sec. 13)	6+6/8	7.0	IV	164,500
G2	J.I.U.T. N-S Link (Tg. Priok I.C. – Jakarta I.C.)	6+8	13.0	V	420,600
G3	Jakarta Harbour Road	4	19.0	V	539,900
G4	Northern Extention of S-W Arc	6	4.3	V	85,000
G5	Jakarta Outer Ring Road	4+4	59.4	V	455,089
Total					1,665,089



LEGEND :

- MASS TRANSPORTATION CORRIDOR DEVELOPMENT PROGRAM
- MAJOR ARTERIAL STREET DEVELOPMENT PROGRAM
- ARTERIAL STREET DEVELOPMENT PROGRAM IN THE NEWLY URBANIZING AREA
- PRESENT TRAFFIC PROBLEM ORIENTED PROGRAM

- EAST-WEST CONNECTION IMPROVEMENT PROGRAM IN THE CENTRAL AREA
- NORTH-SOUTH AXIS STRENGTHENING PROGRAM IN THE CENTRAL AREA
- FREEWAY DEVELOPMENT PROGRAM



RECOMMENDED IMPLEMENTATION PROGRAM

**ARTERIAL ROAD SYSTEM DEVELOPMENT STUDY
IN THE JAKARTA METROPOLITAN AREA**

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ABBREVIATION

BAPPEDA	Provincial and Local Planning Office
BKSP Jabotabek	Jabotabek Development Coordination Board
BPS	Central Bureau of Statistics
BTN	National Saving Bank
CBD	Central Business District
GRDP	Gross Regional Domestic Product
Ha	Hectare
J.I.U.T	Jakarta Intra Urban Tollway
JMATS	Jakarta Metropolitan Area Transportation Study
JMDP	Jabotabek Metropolitan Development Plan
Jl.	Road, street
Kab.	Kabupaten
Kdy.	Kotamadya
Kec.	Kecamatan
Kotif.	Kota Administratif
Km	Kilometer
Km ²	Square kilometer
KIP	Kampung Improvement Program
M	Meter
P.C.U	Passenger Car Unit
p.a	per annum
PPD	Public Bus Company of DKI Jakarta
Perumnas	National Housing / Urban Development Cooperation
Rp.	Rupiah
RBWK	Local Plan
Repelita	Five Year Development Plan
SUSENAS	National Social Economic Survey
T.S.Z	Traffic Sectoral Zone
%	Percentage

CHAPTER

1

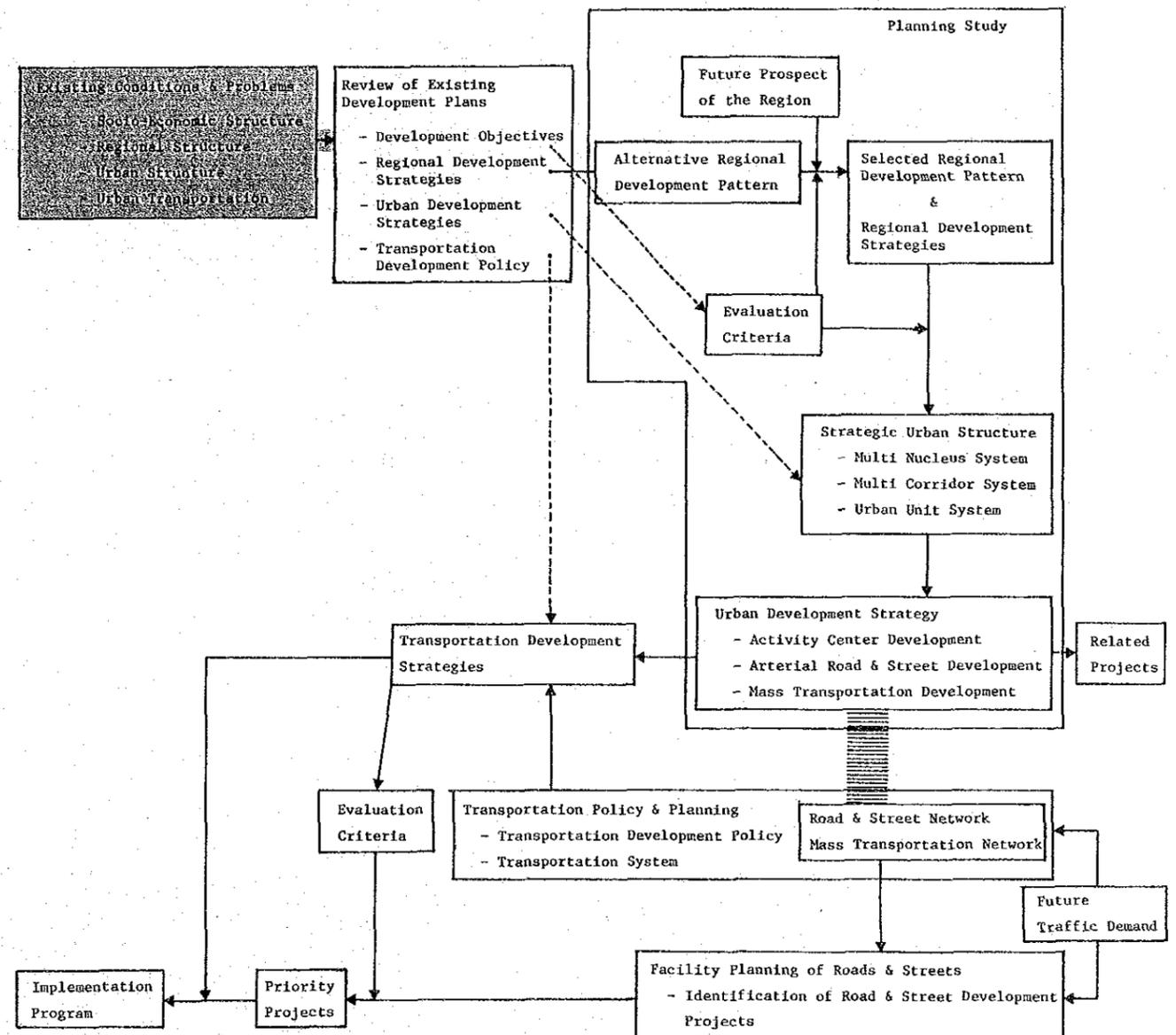
**PRESENT CONDITIONS
AND PROBLEMS**



In this chapter the present characteristics of the Jakarta Metropolitan Area will be overviewed and the existing urban problems will be identified from the three aspects of socio-economic structure, urban structure and urban transportation.

The analysis of urban problems proves it is impossible to provide enough transportation facilities in the Jakarta Metropolitan Area, with an adequate level of service to meet traffic demand, by transportation sector planning alone. Therefore, the transportation development plan should be made in consideration of urban development to achieve the regional and urban development objectives.

Based on the result of this chapter, the existing regional and urban development plans will be reviewed in Chapter 2, and regional and urban development strategies will be discussed in Chapter 3.



1.2 GENERAL CONDITION OF THE STUDY AREA

1.2.1 PHYSICAL CONDITIONS

LOCATION

DKI Jakarta (Special District of Capital City of Jakarta) is located in northwest Java. The Indonesian archipelago is composed of five large islands (Kalimantan, Sumatra, Irian Jaya, Sulawesi and Java) and thousands of small islands. DKI Jakarta is located at about 6° South latitude and about 106° East longitude. The Indonesian archipelago stretches along the Equator between 94°45' and 141°05' East longitude and from 6° North latitude to 11°15' South latitude.

TOPOGRAPHICAL CONDITIONS

The Jakarta Metropolitan Area predominantly lies on an alluvial plain formed by the rivers originating in the mountains south of Jakarta. The major rivers are the Ciliwung River, the Cisadane River and the Bekasi River, which are running from south to north. Gentle hilly areas spread from the southern parts of DKI Jakarta, Kabupaten (Kab.) Tangerang and Kab. Bekasi to Kab. Bogor. The southern part of Kab. Bogor is a mountainous area.

CLIMATE

The average yearly rainfall is about 2,000 mm near the coast and about 4,000 mm in the southern mountains. One year is classified into the rainy season (from November to April) and the dry season (from May to October). Although most of the rainfall occurs in the rainy season, the dry season has monthly rainfall ranging from 50 mm to 100 mm.

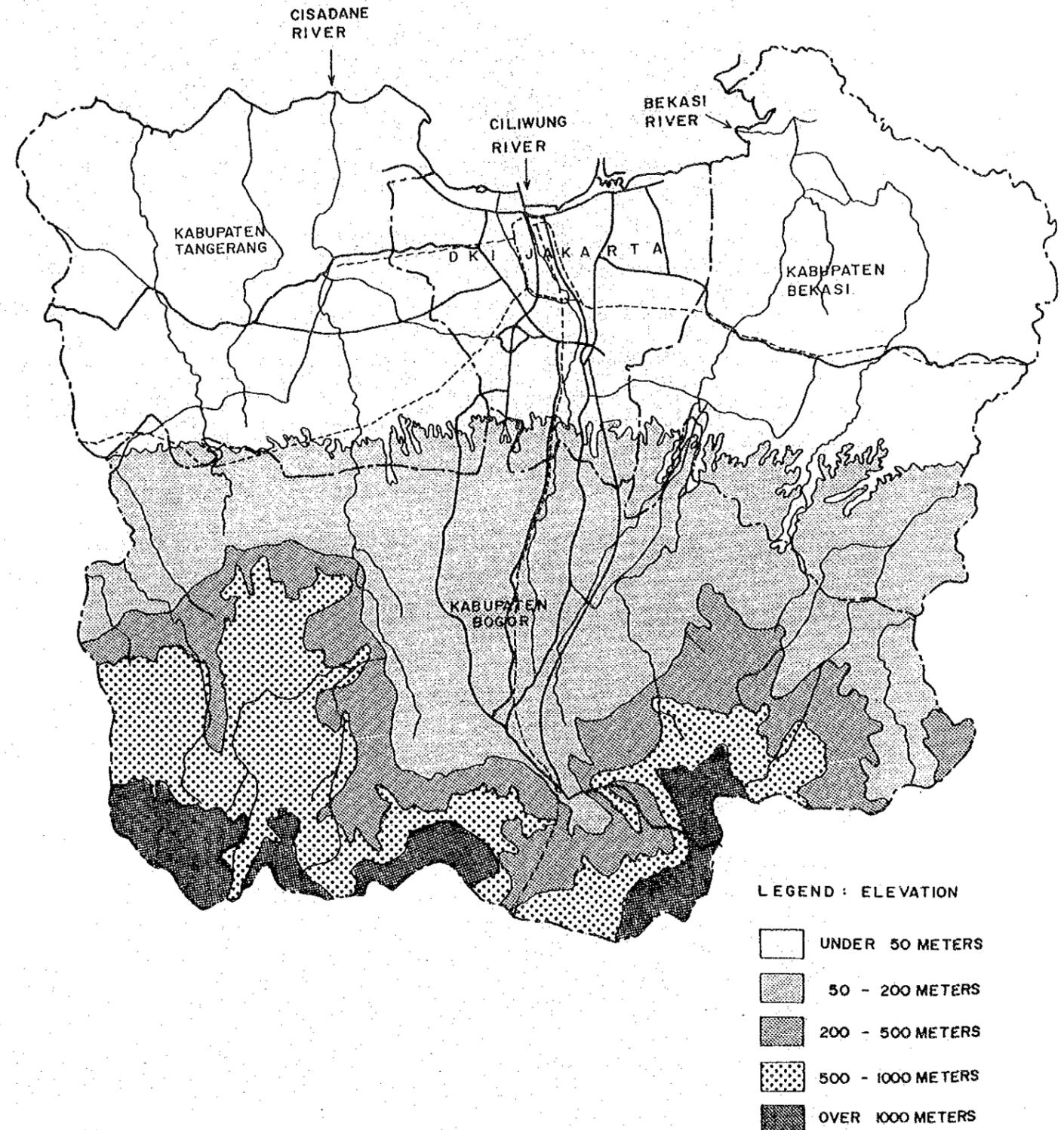


Fig. 1.2.1 TOPOGRAPHICAL CONDITION IN JABOTABEK REGION

1.2.2 REGIONAL TRANSPORTATION

Jakarta is the focal point for international and domestic land, sea and air transportation for both goods and passenger movement.

Jakarta is equipped with the Soekarno-Hatta International/Domestic Airport, the Tanjung Priok Port (international and interinsular) and the Sunda Kelapa Port (interinsular). Both the Soekarno-Hatta Airport and the Tanjung Priok Port have the heaviest traffic in Indonesia.

The Jakarta Kota Railway Station is the central station of the four inter-city railway lines, which carry passengers and cargo throughout Java. The Bekasi Railway Line connects to Banyuwangi on the east coast of Java via Cirebon and Surabaya. The Merak Railway Line runs to Merak on the west coast of Java via Serpong and Serang. The Tangerang Railway Line stretches to Tangerang, and the Bogor Railway Line runs to Sukabumi via Bogor.

Jakarta is the major focal point of the national roads connecting the major cities of Java as shown in Fig. 1.2.2. Inter-city buses from Jakarta to Java, Sumatra and Bali operate at the four inter-city bus terminals shown in Fig. 1.2.3.

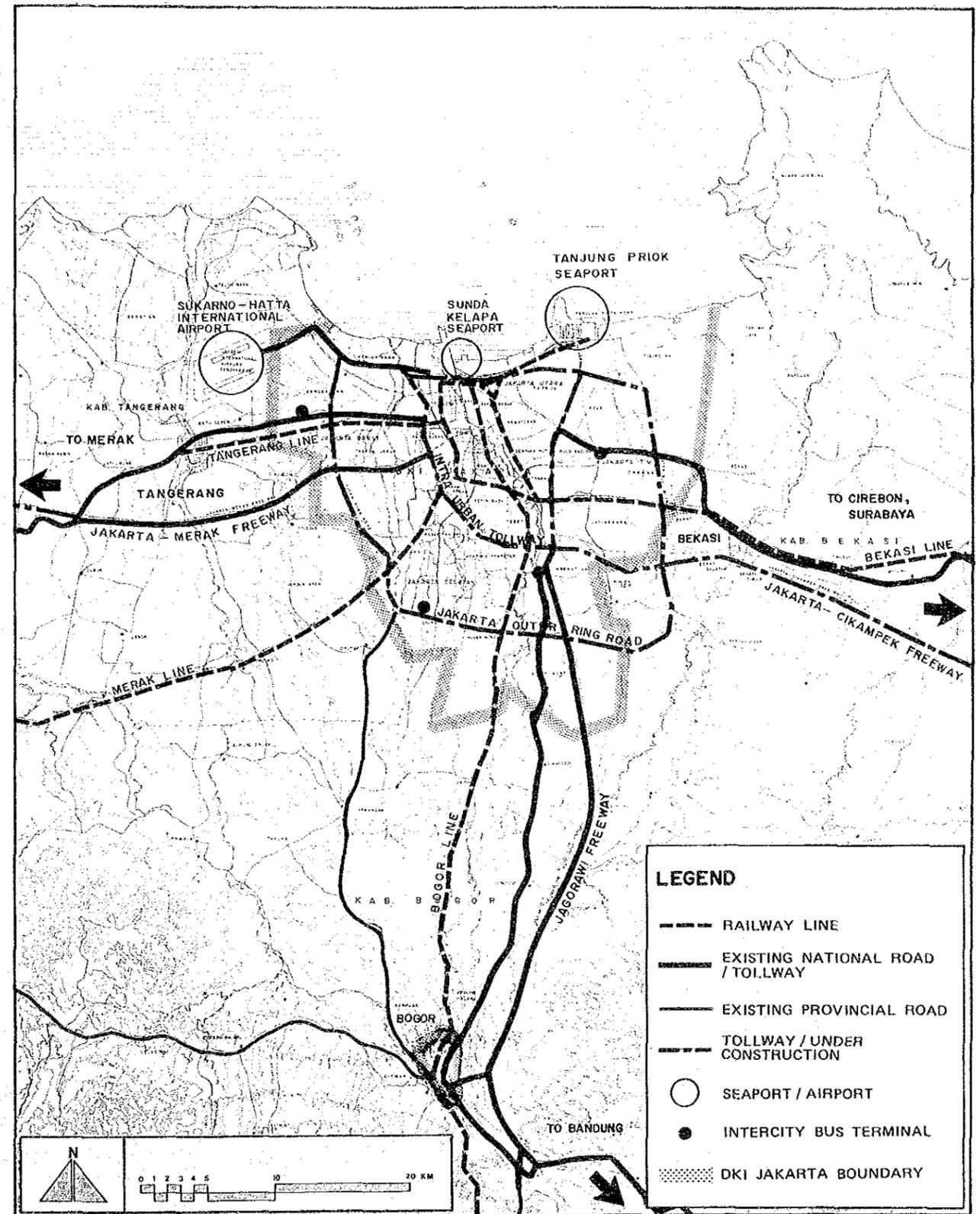


Fig. 1.2.3 EXISTING REGIONAL TRANSPORTATION

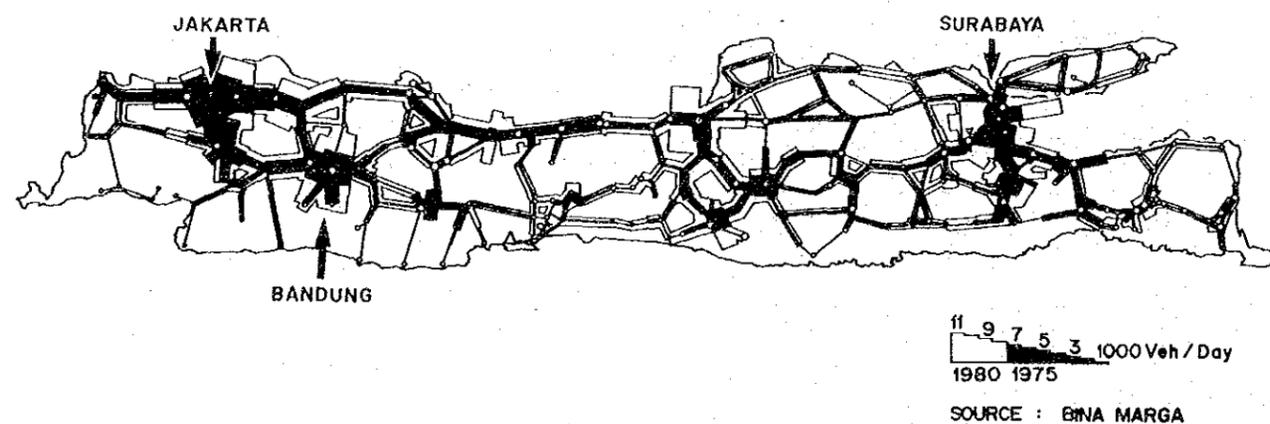


Fig. 1.2.2 REGIONAL TRAFFIC FLOWS IN 1975 AND 1980

1.2.3 NATIONAL AND REGIONAL SETTING

DKI Jakarta is the capital city of the Republic of Indonesia and the predominant city in its scale and diversity of economic activities and population concentration. DKI Jakarta is the national center of government administration, trade, service and business. As the national center of socio-cultural services, it also has high educational and medical functions.

The regional structure adopted by the Fourth Five Year National Development Plan (Repelita IV) divides the country into five Major Development Units (SWP Utama) as shown in Fig. 1.2.4. Each Major development Unit is divided into several Provincial Regional Development Units (SWP Propinsi), which generally correspond to province divisions. Each Provincial Regional Development Unit is divided into several Regional Development Units (SWP).

DKI Jakarta and Botabek are combined into one SWP Propinsi, corresponding to the Jabotabek Region. The remainder of the West Java Province is one Provincial Regional Development Unit, which is composed of six SWPs.

Within this regional structure, Jakarta has the following three center functions:

- National Center
- Center of Major Regional Development Unit
- Center of Provincial Regional Development Unit (Jabotabek Region)

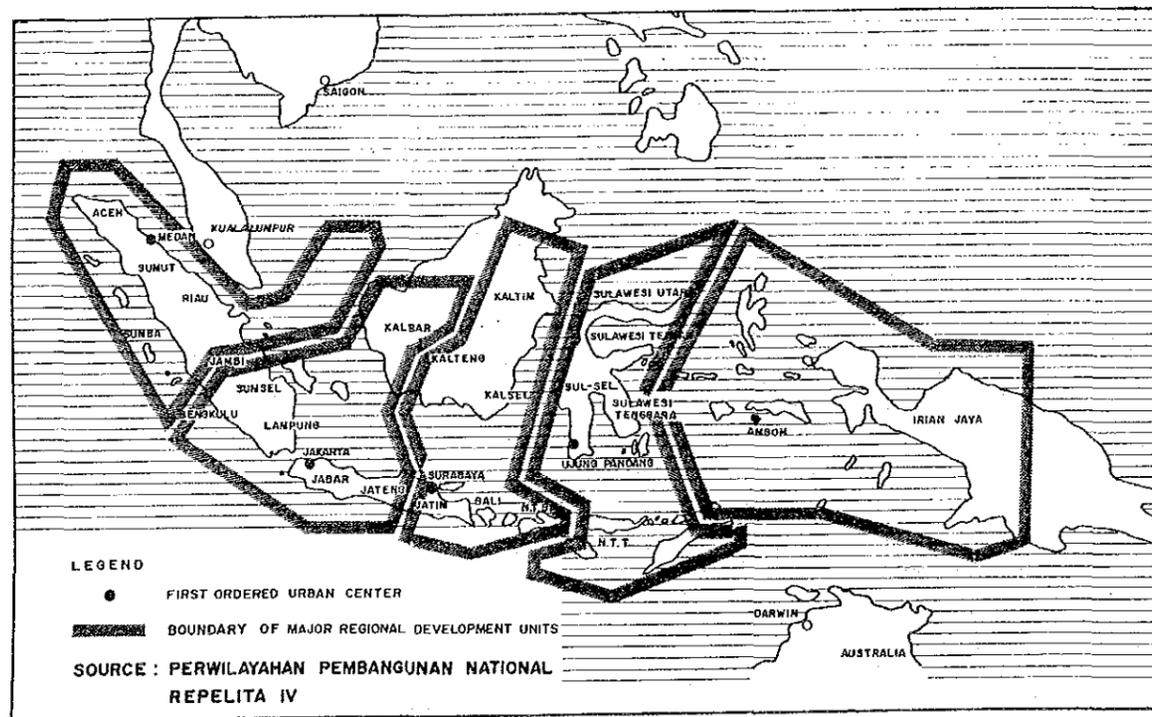


Fig. 1.2.4 MAJOR REGIONAL DEVELOPMENT UNIT (SWP UTAMA)

1.2.4 ADMINISTRATIVE DIVISION

The Jabotabek Region is composed of DKI Jakarta, Kab. Tangerang, Kab. Bekasi, Kab. Bogor and Kotamadya (Kdy.) Bogor. DKI Jakarta is the special capital district and the others are part of the West Java Province. DKI Jakarta has an autonomy level equivalent to that of a province. Kabupaten and kotamadya are the next lower level of autonomy. However, kabupaten and kotamadya have independent planning administrative functions and authority over their territory.

In accordance with Presidential Decree 13 in 1976, the Jabotabek Planning Board (BKSP Jabotabek) was established as a coordinating planning body for the Jabotabek Region with the purpose of promoting equal and balanced development throughout the Jabotabek Region.

Although the capital of Kab. Bogor had been located in Kdy. Bogor for a long time, it was recently changed to Cibinong. Similarly, the capital of Kab. Tangerang is planned to be transferred to another place from Kotif. Tangerang, because Kota Administratif (kotif.) Tangerang is to be promoted to be a kotamadya.

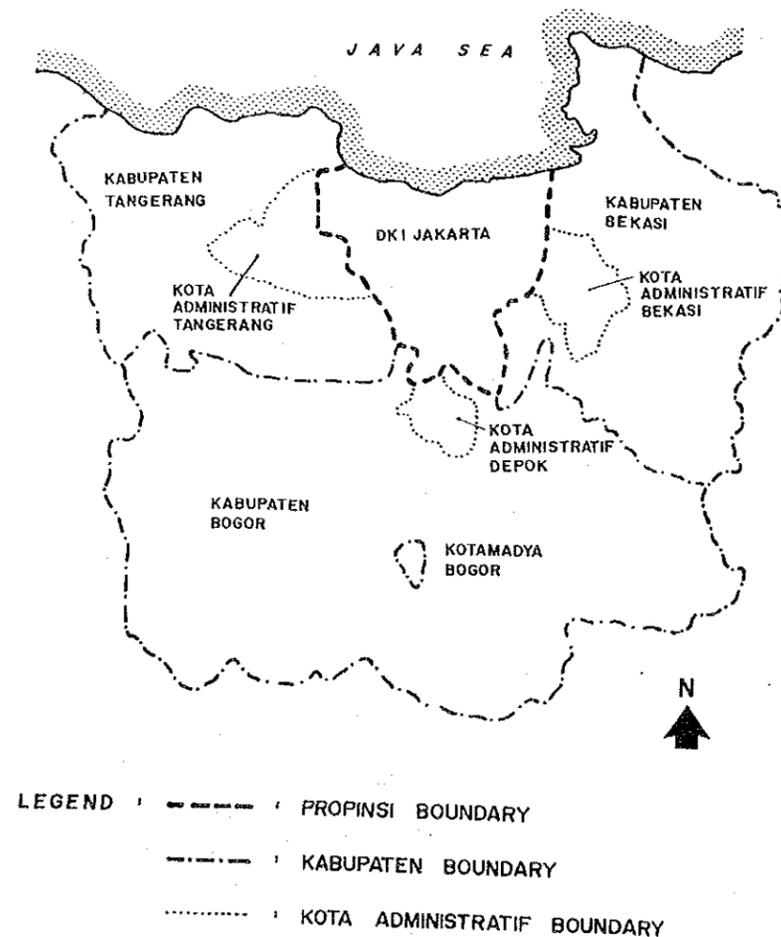


Fig. 1.2.5 ADMINISTRATIVE BOUNDARIES OF JABOTABEK REGION

1.2.5 POPULATION AND ECONOMIC SITUATION

POPULATION

The total population in Indonesia was 164 million in 1985 and 61% of this total was concentrated on the island of Java.

DKI Jakarta, the Capital City of Indonesia, has a population of 7.8 million, which accounts for 4.8% of all of Indonesia or 7.9% of the total population of Java.

The area of DKI Jakarta is 656 km² and this is only 0.03% of the total area of Indonesia or 0.5% of the total area of Java.

Therefore, the population density in DKI Jakarta is outstandingly high at about 12,000 persons per square kilometer. Comparing among the major islands of Indonesia, the population of Java is quite dense at 750 persons per square kilometer, which is far beyond the population density of Sumatra at 70 persons per square kilometer. The average population density in Indonesia was 85 persons per square kilometer in 1985 as shown in Table 1.2.1.

Table 1.2.1 POPULATION DISTRIBUTION AND DENSITY IN 1985

	Area		Population		Density
	(km ²)	(%)	(x 1000)	(%)	(Persons/km ²)
Indonesia	1,919,443	100.00	163,876	100.0	85
Java	132,187	6.87	99,502	60.7	753
DKI Jakarta	656	0.03	7,829	4.8	11,934

Source: Statistical Yearbook of Indonesia, 1985, BPS
: Jakarta figures, 1985, Kantor Statistik Propinsi DKI Jakarta

During the intercensal period between 1971 and 1980, the population in Indonesia grew at an average annual rate of 2.4% and during 1980/1985 this declined slightly to 2.1%. This implies that the average natural growth rate of population has been decreasing in recent times.

The population in DKI Jakarta has retained a very high rate of growth at 4.1% p.a. during 1971/1980 and 3.8% p.a. during 1980/1985 as shown in Table 1.2.2.

Table 1.2.2 POPULATION GROWTH

	(x 1000 persons)				
	1971	1971-1980 (% p.a.)	1980	1980-1985 (% p.a.)	1985
Indonesia	119,208	(2.4)	147,490	(2.1)	163,876
Java	76,028	(2.0)	91,217	(1.8)	99,502
DKI Jakarta	4,546	(4.1)	6,503	(3.8)	7,829

Source: Population Census in 1971 and 1980; Intermediate Census in 1985, BPS

The growth of urban population in Indonesia has been accelerating from 3.7% p.a. during 1961/1971 to 5.3% p.a. during 1971/1980 and it accounts for 22% of the total population. Of the total population increase during these periods, 28% was absorbed in the urban area during the former period and 43% was absorbed in the urban area during the latter period.

The population growth in Java was relatively lower than the Indonesian averages in the last quarter century. However, in Java, the population concentration to urban areas became remarkable in the 1970's when 60% of the incremental population during 1971/1980 was absorbed in the urban area where the population grew at a rate of 5.9% p.a. as shown in Table 1.2.3.

Thus urbanization has been taking place throughout the country at an increasing speed and at the present time one-fourth of the total Indonesian population settles in limited urban areas.

Table 1.2.3 URBAN AND RURAL POPULATION GROWTH

Region	Urban			Rural			Total		
	1961	1971	1980	1961	1971	1980	1961	1971	1980
Java (x1000):	9,807	13,674	22,871	53,186	62,354	68,346	62,993	76,028	91,217
- Composition (%)	(15.6)	(18.0)	(25.1)	(84.4)	(82.0)	(74.9)	(100.0)	(100.0)	(100.0)
- Growth Rate (% p.a.)		3.4	5.9		1.6	1.0		1.9	2.0
- Increment (x 1000)	3,867	9,197		9,168	5,992		13,035	15,189	
- Contribution to Total Increment (%)		(29.7)	(60.6)		(70.3)	(39.4)		(100.0)	(100.0)
Indonesia (x1000)	14,358	20,611	32,846	82,660	98,597	113,930	97,019	119,208	147,496
- Composition (%)	(14.8)	(17.3)	(22.3)	(85.2)	(82.7)	(77.7)	(100.0)	(100.0)	(100.0)
- Growth Rate (% p.a.)		3.7	5.3		1.8	1.6		2.1	2.4
- Increment (x1000)	6,253	12,235		15,937	15,333		22,189	28,288	
- Contribution to Total Increment (%)		(28.2)	(43.3)		(71.8)	(54.2)		(100.0)	(100.0)

Source: Population Census in 1961, 1971 and 1980, BPS

ECONOMIC SITUATION

The economic growth in Indonesia showed a steady upward growth at 8.1% p.a. in the 1970's but this declined in the early 1980's to 5.0% p.a. mainly because of the decrease in oil demand in the international market. However, Jakarta's economy was hardly affected by this and maintained a high economic growth rate of 10% p.a.. The share of Jakarta's GRDP eventually occupied 10.5% of the total GDP of Indonesia in 1984.

Jakarta's per capita GRDP in 1984 was Rp. 1,226,000, which was more than double of Indonesia's average of Rp. 532,000. Thus, industries of higher productivity are concentrated in DKI Jakarta and bring about the regional discrepancy in economic growth and income distribution.

Table 1.2.4 COMPARISON OF ECONOMIC GROWTH BETWEEN
DKI JAKARTA AND INDONESIA

Particulars	DKI JAKARTA			INDONESIA		
	1971	1980	1984	1971	1980	1984
(1) G(R)DP (Billion Rp. at 1984 prices)	2,517	6,136	9,043	35,025	70,601	85,914
- Growth Rate (% p.a.)	(7.2)	(8.7)	(10.5)	(100.0)	(100.0)	(100.0)
	10.4	10.2		8.1	5.0	
(2) Per Capita G(R)DP (Thousand Rp. at 1984 prices)	554	944	1,226	294	479	532
- Growth Rate (% p.a.)	(188.4)	(197.1)	(230.5)	(100.0)	(100.0)	(100.0)
	6.1	6.8		5.6	2.7	

Source: Regional Income of Jakarta, 1969-1975, 1980-1984, Kantor Statistik Jakarta
: Statistical Yearbook of Indonesia, 1975-1985, Biro Pusat Statistik (BPS)

In terms of GDP composition, Indonesia's economic structure is primarily composed of the sectors of Agriculture (24.9%), Mining and Quarrying (17.7%) and Trading (15.6%). The Mining and Quarrying sector is mostly petroleum and natural gas production (95%).

The major economic structure of DKI Jakarta is composed of the Manufacturing (17.1%), Trading (22.9%) and Banking (17.8%) sectors as shown in Fig. 1.2.6.

The concentration of population and GRDP in DKI Jakarta was 4.7% and 10.5% of the Indonesian total in 1984, respectively. To see in more detail, in terms of G(R)DP by sector in DKI Jakarta, it should be noted that the Banking sector is quite prominent, occupying 82% of the Indonesia's total.

Economic activities other than the Banking sector still sustain a high level of concentration in this area; that is, Electricity, Gas and Water Sector (35.7%), Transportation Sector (20.3%), Trading Sector (15.5%), Manufacturing Sector (15.0%) and Government and Service Sector (9.9% + 10.8% = 20.7%) as shown in Fig. 1.2.7.

Thus, DKI Jakarta is functioning as a center of financial, commercial, communications, manufacturing and service activities throughout the country.

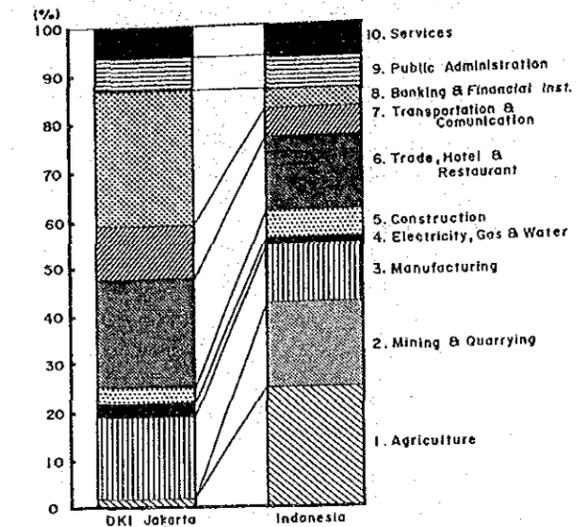


Fig. 1.2.6 % COMPOSITION OF G(R)DP BY INDUSTRIAL SECTOR, 1984

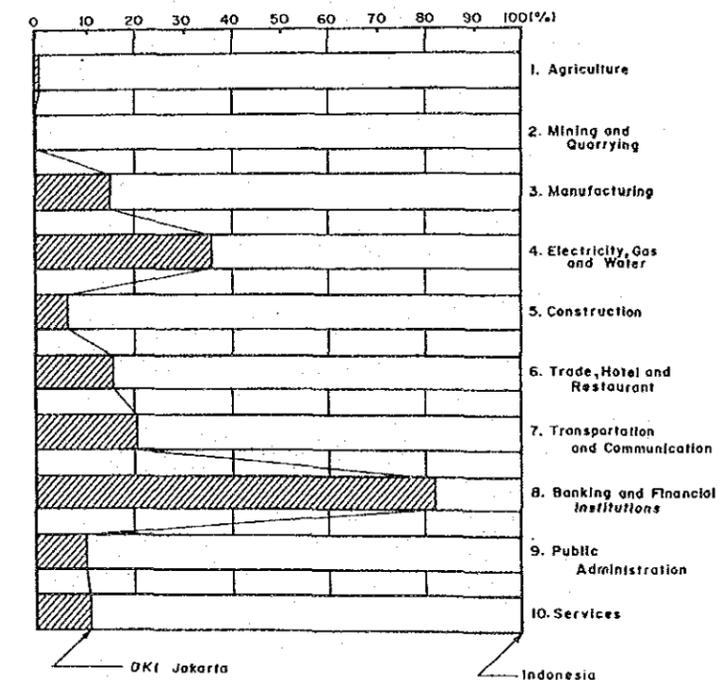


Fig. 1.2.7 CONCENTRATION OF GRDP BY SECTOR INTO DKI JAKARTA, 1984

1.3 PRESENT SOCIO-ECONOMIC PROBLEMS AND POTENTIALS

1.3.1 POPULATION AND URBANIZATION IN JABOTABEK

In 1980 the population in DKI Jakarta was 6.5 million. The Botabek region surrounding DKI Jakarta had a population of 5.4 million, so the total Jabotabek population was nearly 12 million as shown in Table 1.3.1.

The population growth in DKI Jakarta has retained more than a 4% p.a. rate in both the 1960's and 1970's. In the Botabek region, however, it was nearly the same as the Indonesian average of 2.1% p.a. in the 1960's, but this drastically increased to a growth rate of 4.1% p.a. in the 1970's.

The total average growth rate of Botabek's Kecamatan, located in the outskirts of Jakarta, was 5.8% p.a. during 1971/1980 and this was much higher than that of Jakarta at 4.1% p.a..

A decrease in population has been taking place in the Kecamatan of Jakarta's Central Area, but a steep increase in population emerged in the suburban area of DKI Jakarta as shown in Fig. 1.3.1.

The remarkable increase in Botabek's population in the 1970's was brought about by the 18.0% p.a. population growth in urban areas. The urbanization took place equally in the Botabek region as shown in Table 1.3.2. The share of urban population in Jabotabek was 65% in 1980 and that of Botabek reached 24% after rising remarkably from 8% in 1971.

Urbanization rates (= urban population/total population) in Kab. Tangerang and Kab. Bekasi were 15.2% and 16.5% respectively and these are lower than the Indonesian average of 22.4% in 1980. However, the urbanization speeds in these regions were 18.4% p.a. in Tangerang and 17.1% p.a. in Bekasi during 1971/1980, which were much higher than the Indonesian average of 5.3% p.a.. Therefore, it can be conceived that the urbanization of these regions will be continuous.

During 1971/1981 the urban area absorbed 61% of the population increase in Botabek and 39% of this increase was absorbed in the rural area as shown in Table 1.3.3. Particularly in Kdy./Kab. Bogor, 77% of the increased population in this period was concentrated to the urban area. The urbanization in Botabek notably began with Kdy./Kab. Bogor lying to the south of DKI Jakarta in the 1970's.

Table 1.3.1 POPULATION TREND AND DISTRIBUTION IN JABOTABEK

Region	Area (km ²)	Population Census (x 1000 persons)			Population Density 1980 (persons/ha)	Average Annual Growth Rate (% p.a.)	
		1961	1971	1980		1961/1971	1971/1980
DKI Jakarta	655.7	2,973	4,546	6,503	99.2	4.3	4.1
Kdy./Kab. Bogor	3,380.7	1,468	1,863	2,741	8.1	2.4	4.4
Kab. Tangerang	1,044.0	850	1,067	1,529	14.6	2.3	4.1
Kab. Bekasi	1,284.2	693	831	1,143	8.9	1.8	3.6
Botabek	5,708.9	3,011	3,761	5,413	9.5	2.2	4.1
Jabotabek	6,364.6	5,984	8,307	11,916	18.7	3.3	4.1

Table 1.3.2 URBAN AND RURAL POPULATION GROWTH IN BOTABEK

Region	Urban Population (x 1000)			Rural Population (x 1000)			Total Population (x 1000)	
	1971	1980	Growth Rate (% p.a.)	1971	1980	Growth Rate (% p.a.)	1971	1980
DKI Jakarta	4,546*	6,503*	4.1	-	-	-	4,546	6,503
Kdy./Kab. Bogor	196	873	18.1	1,668	1,868	1.3	1,863	2,741
Kab. Tangerang	51	233	18.4	1,016	1,296	2.7	1,067	1,529
Kab. Bekasi	46	189	17.1	785	955	2.2	831	1,143
Botabek	293	1,295	18.0	3,469	4,119	1.9	3,761	5,413
Jabotabek	4,839	7,798	5.4	3,469	4,119	1.9	8,308	11,916
Indonesia	20,611	32,846	5.3	98,597	113,930	1.6	119,208	146,776

Note : * Considered a totally urban population

Table 1.3.3 ABSORPTION OF THE INCREASED POPULATION IN URBAN AND RURAL AREAS OF BOTABEK REGION

Region	Increased Total Population		Increase in Urban Population		Increase in Rural Population	
	1971-1980 (x 1000)	% share	1971-1980 (x 1000)	% share	1971-1980 (x 1000)	% share
Kdy./Kab. Bogor	878	100.0	678	77.2	200	22.8
Kab. Tangerang	462	100.0	182	39.4	280	60.6
Kab. Bekasi	312	100.0	142	45.5	170	54.5
Botabek	1,652	100.0	1,002	60.7	650	39.3

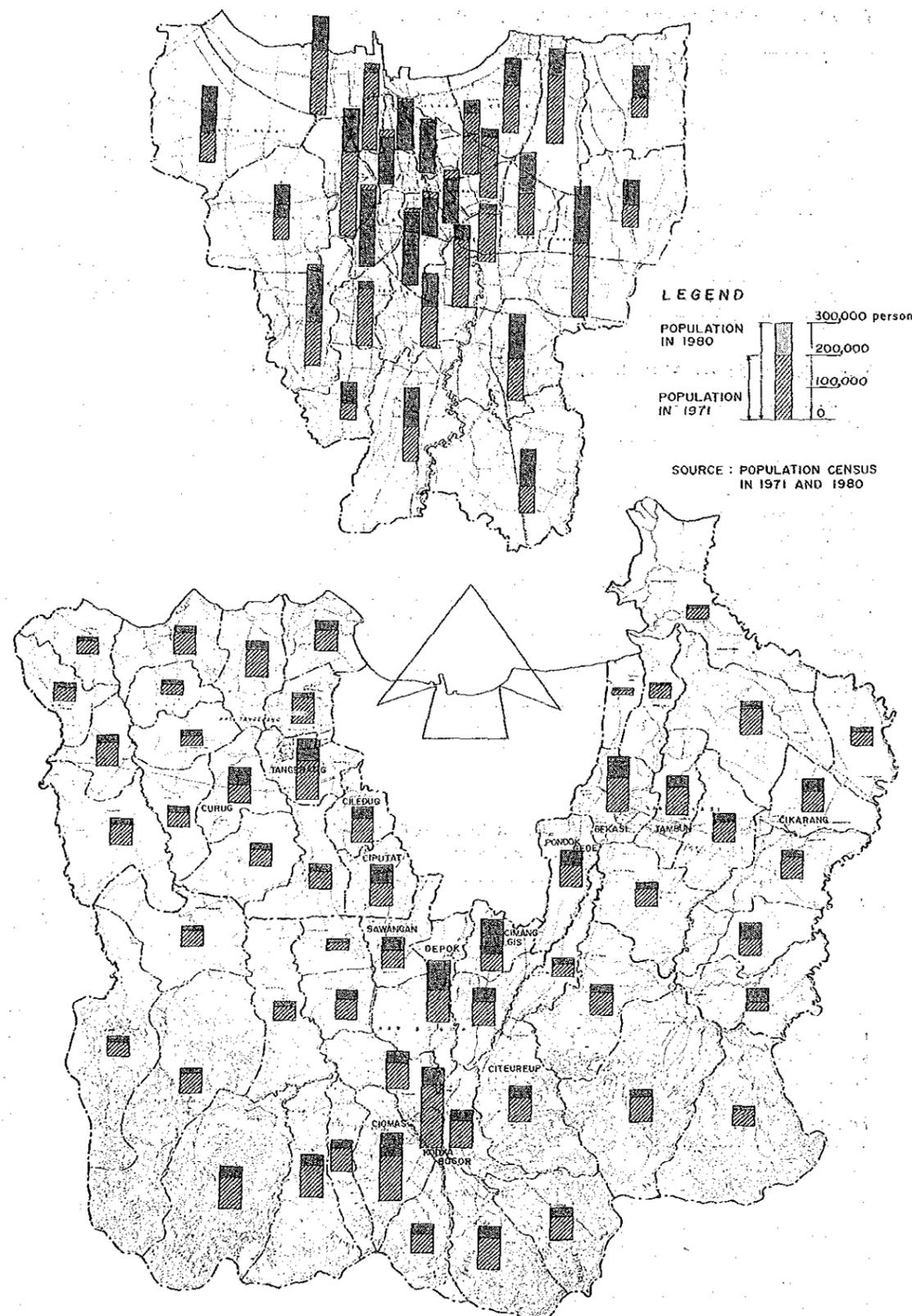


Fig. 1.3.1 POPULATION GROWTH BY KECAMATAN IN JABOTABEK

1.3.2 PRESENT EMPLOYMENT SITUATION

LABOR FORCE SUPPLY

According to the population census in 1971 and 1980, the population aged 10 years and over is divided into the economically active population and the non-economically active population. The former is defined as the labor force and is further divided into the "Employed" and "Unemployed" population. The latter is subdivided into the "Attending School", "House Keeping" and "Others" population.

The employment and other activities situation in 1971 and 1980 are summarized in Table 1.3.4. The labor force participation rates in DKI Jakarta and Botabek were 42.8% and 41.8% in 1980, respectively. These are quite similar, but lower than Indonesia's average of 50.2%. This is because of Jabotabek's smaller rural population composition, which provides a higher labor force participation rate than the urban area, and its higher rate of attending school population.

UNEMPLOYMENT PROBLEM

The unemployment rates in DKI Jakarta and Botabek improved significantly during 1971/1980; the former went from 12.7% to 4.7% and the latter went from 22.6% to 2.0%.

According to the population census, however, the employed population is defined as those who worked at least one hour in the preceding week. Therefore, the 4.7% unemployment rate obtained in the census does not include temporary workers.

Table.1.3.4 SITUATIONS OF EMPLOYMENT AND OTHER ACTIVITIES IN JABOTABEK, 1971 AND 1980

Particulars	DKI Jakarta		Botabek		Jabotabek		Indonesia	
	1971	1980	1971	1980	1971	1980	1971	1980
(a) Population (x 1000)	4,546	6,503	3,761	5,413	8,307	11,916	119,208	147,490
(b) Population aged 10 & over (x1000)	3,126	4,684	2,448	3,622	5,575	8,306	80,507	104,353
(c) Economically Active Population (x1000)	1,351	2,004	985	1,516	2,336	3,520	41,261	52,421
(d) Employed population (x 1000)	1,179	1,910	762	1,486	1,941	3,396	37,628	51,553
(e) Labor Force Participation Rate (%)	43.2	42.8	40.2	41.8	41.9	42.4	51.3	50.2
(f) Unemployment Rate (%)	12.7	4.7	22.6	2.0	16.9	3.5	8.8	1.7
(g) Rate of Attending School (%)	18.7	23.8	11.4	16.9	15.5	20.8	13.9	18.0
(h) Rate of Engaging in "House Keeping" (%)	27.0	23.6	32.0	28.7	29.2	25.8	24.5	21.3
(i) Rate of "Others" (%)	11.1	9.8	16.4	12.6	13.4	11.0	10.3	10.5

Source : Population Census in 1971 and 1980, BPS

Note : (c) = (d) + "Unemployed"
 (e) = (c) x 100/(b)
 (f) = (1-(d)/(c)) x 100
 (g) = "Attending school population aged 10 & over" x 100/(b)
 (h) = "House Keeping population aged 10 & over" x 100/(b)
 (i) = "Other population aged 10 & over" x 100/(b)

The employed population who worked not more than 35 hours in a week accounted for 10.3% of the total employment, and those who worked not more than 45 hours in a week occupied 34.0% of the total employment in DKI Jakarta in 1980. It can be said, therefore, that a relatively large portion of the employment in DKI Jakarta is sustained by the not-permanent workers.

The unemployment structure by age group indicates that the rate is more than 8% in the young age group less than 25 years of age, and that the average rate is 4.7%.

FORMAL AND INFORMAL SECTOR EMPLOYMENT

As proxy of the formal and informal sectors, the census data on the employment status was used by defining that "employer" and "employee" belong to the formal sector and "self-employed" and "family workers" belong to the informal sector. As a result, the composition of the formal and informal sectors in major industrial sectors has changed during 1971-1980 as shown in Table 1.3.5.

During the intercensal period, much of the increase in employment was absorbed in the informal sector of the tertiary sector in particular, despite relatively good economic consequences in the 1970's.

Table 1.3.5 EMPLOYMENT COMPOSITION OF FORMAL AND INFORMAL SECTORS IN DKI JAKARTA

Major Industries	1971 Population Census			1980 Population Census		
	Formal (%)	Informal (%)	Total (%)	Formal (%)	Informal (%)	Total (%)
Primary Industry	43.8 (2.2)	56.2 (7.7)	100.0 (3.7)	39.2 (1.1)	60.8 (3.9)	100.0 (1.9)
Secondary Industry	92.5 (22.8)	7.5 (5.1)	100.0 (18.1)	89.1 (29.2)	10.9 (8.4)	100.0 (23.0)
Tertiary Industry	70.3 (75.0)	29.7 (87.2)	100.0 (78.2)	65.1 (69.7)	34.9 (87.8)	100.0 (75.1)
Total	73.3(100.0)	26.7(100.0)	100.0(100.0)	70.1(100.0)	29.9(100.0)	100.0(100.0)

EMPLOYMENT BY INDUSTRIAL SECTOR

A comparison was made between the employment in Jakarta and Botabek as shown in Table 1.3.6. According to this table, growth rates of population in both regions were nearly the same, but the employment growth rate in Botabek (7.9%) was 2.0% higher than that of Jakarta (5.9%).

The employment increase during 1971-1980 for Botabek was 725,000 persons, of which 21.7% was accounted for in "Manufacturing", 23.4% in "Trade, Hotel and Restaurant" and 25.5% in "Government and Services". As can be seen this increased employment was distributed rather evenly among these three sectors.

In Jakarta, however, the "Government and Services" sector accounted for 40.5% of the total increase of employment during 1971-1980, followed by "Manufacturing" at 22.8%, and "Trade, Hotel, and Restaurant" at 22.3%.

The growth of employment in Jakarta was negative in "Agriculture", but it was remarkably high in both speed (11.1% p.a.) and increased volume in "Manufacturing". The "Transportation and Communication" sector grew at a lower level of 2.2% p.a. but other sectors performed between 4% to 7% p.a..

The "Finance, Banking and Insurance" sector and "Mining and Quarrying" sector in Botabek outstandingly increased their employment at 31.9% p.a., and 24.1% p.a. during 1971-1980. However, their contribution only accounts for 1.9% and 2.2% of the total increase of employment in Botabek. As industrialization and urbanization progresses in this area, the demand for employment will certainly increase in the "Finance, Banking and Insurance" sector.

Except for the "Agricultural" sector, the growth rate of employment in any industrial sector in Botabek was higher than the total sector average growth rate of 7.9% p.a.. The employment growth in the "Agricultural" sector was only 3.0% p.a., but its contribution to the total increase was still high at 13.9%. The weight of this sector was sharply reduced from 43.9% in 1971 to 29.1% in 1980. The "Agricultural" sector will continue this declining tendency in the future as the urbanization extends further in Botabek.

Table 1.3.6 EMPLOYMENT BY INDUSTRY IN DKI JAKARTA AND BOTABEK, 1971 & 1980

MAIN INDUSTRIAL SECTOR	DKI Jakarta				Botabek			
	1971	1980	Increase or Decrease	Growth Rate (% p.a.)	1971	1980	Increase or Decrease	Growth Rate (% p.a.)
1. AGRICULTURE	42,035 (3.7)	36,922 (1.9)	-5,113 (-0.7)	-1.4	326,375 (43.9)	427,398 (29.1)	101,023 (13.9)	3.0
2. MINING AND QUARRING	4,087 (0.4)	14,128 (0.7)	10,041 (1.3)	14.8	2,712 (0.4)	18,979 (1.3)	16,267 (2.2)	24.1
3. MANUFACTURING	110,214 (9.6)	285,228 (14.9)	175,014 (22.8)	11.1	71,527 (9.6)	229,014 (15.6)	157,487 (21.7)	13.8
4. ELECTRICITY, GAS AND WATER	7,470 (0.7)	10,937 (0.6)	3,467 (0.5)	4.3	690 (0.1)	3,379 (0.2)	2,689 (0.4)	19.3
5. CONSTRUCTION	85,217 (7.4)	128,536 (6.7)	43,319 (5.7)	4.7	30,631 (4.1)	72,098 (4.9)	41,467 (5.7)	10.0
6. TRADE, HOTEL AND RESTAURANT	300,258 (26.2)	470,737 (24.6)	170,479 (22.3)	5.1	161,286 (21.7)	331,145 (22.6)	169,859 (23.4)	8.3
7. TRANSPORTATION AND COMMUNICATION	130,687 (11.4)	159,142 (8.3)	28,455 (3.7)	2.2	29,785 (4.0)	66,913 (4.6)	37,128 (5.1)	9.4
8. FINANCE, BANKING AND INSURANCE	34,252 (3.0)	64,283 (3.4)	30,031 (3.9)	7.3	1,258 (0.2)	15,188 (1.0)	13,930 (1.9)	31.9
9. GOVERNMENT/OTHER SERVICES	430,000 (37.6)	740,485 (38.8)	310,485 (40.5)	6.2	118,787 (16.0)	303,756 (20.7)	184,969 (25.5)	11.0
TOTAL	1,144,220 (100.0)	1,910,398 (100.0)	766,178 (100.0)	5.9	743,051 (100.0)	1,467,870 (100.0)	724,819 (100.0)	7.9
POPULATION	4,546,000	6,503,000	1,957,000	4.1	3,761,000	5,413,000	1,652,000	4.1

1.3.3 EXISTING ECONOMIC STRUCTURE IN JABOTABEK

GRDP AND INDUSTRIAL STRUCTURE

In 1983 the GRDPs in DKI Jakarta and Botabek were 7,193 billion Rupiah and 1,667 billion Rupiah at current prices, respectively. Therefore, the scale of economic activities in DKI Jakarta was more than four times larger than that of Botabek.

To compare the GRDP per capita in these regions, DKI Jakarta was 1 million Rupiah and Botabek was 0.3 million Rupiah in 1983. Thus, the regional economic development was still unbalanced to a significant extent between the two regions.

The industrial structures of DKI Jakarta and Botabek, in terms of GRDP by industrial sector, are summarized in Table 1.3.7. The agricultural sector in Botabek is still a major sector but it shows a declining tendency. For DKI Jakarta, however, the agricultural sector is negligibly small.

The manufacturing sector in Botabek expanded its share from 16.3% in 1973 to 24.8% in 1980, but this share contracted back to the 1973 level in 1983.

In DKI Jakarta the trading sector occupied the highest portion of GRDP and was followed by the manufacturing sector. These two sectors were major components before 1980, but the transportation and banking sectors have enlarged their shares rapidly since 1980. The banking sector in Botabek still remains the smallest share of the total GRDP.

GROWTH OF GRDP

While Jakarta showed a balanced economic growth during 1971-1980 between the secondary (11.9% p.a.) and tertiary sectors (10.5% p.a.), Botabek's economic growth was led by the secondary sector as shown in Table 1.3.8.

The average economic growth in Indonesia during 1971-1980 was 8.1% p.a. in total GDP and 12.1% p.a. in the secondary sector and 9.7% in the tertiary sector.

Botabek's growth rate during 1971/1980 in the secondary sector expanded at 20.9% p.a., or about double the tertiary sector's rate of 10.7% p.a.. However, Botabek's total economic growth was almost the same as Jakarta's, because of the agricultural sector's higher weight in the total economy.

While the growth rate of the primary sector recovered in the 1980's, that of the secondary sector declined in Indonesia, DKI Jakarta and Botabek. However, the tertiary sector nearly sustained its 1970's growth rate in both DKI Jakarta and Botabek, and although it failed in Indonesia as a whole, it took a leading role in the early 1980's.

It is observed that the secondary sector is rather sensitive to changes in the country's economic situation, and particularly sensitive is the manufacturing sector and even more so is the Botabek region.

Table 1.3.7 GRDP COMPOSITION BY INDUSTRIAL SECTOR IN JABOTABEK, 1983

Industrial Sector	DKI JAKARTA (%)			BOTABEK (%)		
	1973	1980*	1983	1973	1980	1983
1. Agriculture	2.6	1.4	1.7	35.5	21.2	21.5
2. Mining & Quarrying	-	-	-	0.2	0.6	0.7
3. Manufacturing	12.0	18.4	18.6	16.3	24.8	16.3
4. Electricity, Gas and Water	1.7	1.5	2.4	0.4	0.8	1.3
5. Construction	5.0	4.6	3.8	2.0	7.0	11.0
6. Trade, Hotel And Restaurant	46.0	27.9	25.4	28.1	28.6	26.0
7. Transport and Communication	9.1	8.8	12.2	3.2	4.3	6.8
8. Finance, Banking and Insurance	8.8	12.6	12.5	0.3	0.4	0.7
9. Ownership of Dwelling	3.0	5.0	4.1	2.1	1.6	1.8
10. Government	8.7	8.5	7.3	3.2	5.2	7.5
11. Services	3.2	11.3	9.0	8.6	5.6	6.5
Total GRDP	100.0	100.0	100.0	100.0	100.0	100.0

Source: Regional Income of DKI Jakarta, 1969-1973, 1980-1984, Kantor Statistik Jakarta
: Produk Domestik Regional Bruto Menurut Wilayah Pembangunan Provinsi DI I Jawa Barat, 1973-1979 and 1979-1983

Note: * GRDP estimation method has been changed since 1980 and the % composition above was based on current prices

Table 1.3.8 CHANGES IN GROWTH BY INDUSTRIAL SECTOR

Industrial Sector	Jakarta (% p.a.)		Botabek (% p.a.)		Indonesia (% p.a.)	
	1971-1980	1980-1984	1971-1980	1980-1983	1971-1980	1980-1984
Primary Sector	-1.9	9.4	3.7	7.3	3.8	4.4
Secondary Sector (Manufacturing)	11.9 (10.9)	7.3 (6.2)	20.9 (18.2)	8.4 (-0.5)	12.1 (14.9)	4.4 (7.5)
Tertiary Sector	10.5	11.1	10.7	9.6	9.7	5.9
Total	10.4	10.2	10.9	8.7	8.1	5.0

1.3.4 DISTRIBUTION OF SOCIAL/INCOME GROUPS IN DKI JAKARTA

POPULATION DISTRIBUTION BY EXPENDITURE LEVEL

Direct information on income distribution is not available, so household expenditure data was substituted for income data.

The recent expenditure data was obtained from the National Social Economic Survey (SUSENAS) of 1984. According to this survey, a population in each expenditure class is estimated as shown in Table 1.3.9.

The average per capita monthly expenditures by decile group were calculated from Table 1.3.9 and are presented in Fig. 1.3.2. The overall average monthly expenditure in the total population was 33,354 Rupiah and this expenditure level belongs to the 7th decile group. Therefore, more than 60% of the total population is below this average monthly expenditure level.

Based on the data in Table 1.3.9, a Lorentz curve was drawn as shown in Fig. 1.3.3. According to this curve the Gini coefficient was found to be 0.294 (zero means a complete equal distribution of income among the people), which is considered a relatively lower value than would have been the case if the data was not expenditures but incomes. (Ref.: The Gini coefficient of Japan, in terms of incomes, was 0.266 in 1978).

Furthermore, the distribution of expenditure levels in DKI Jakarta can be compared with that of income/expenditure in other countries as presented in Table 1.3.10.

In order to achieve a more equal distribution of income, efforts should be made to expand the middle income population of the third and fourth quintiles as implied in the above industrialized countries.

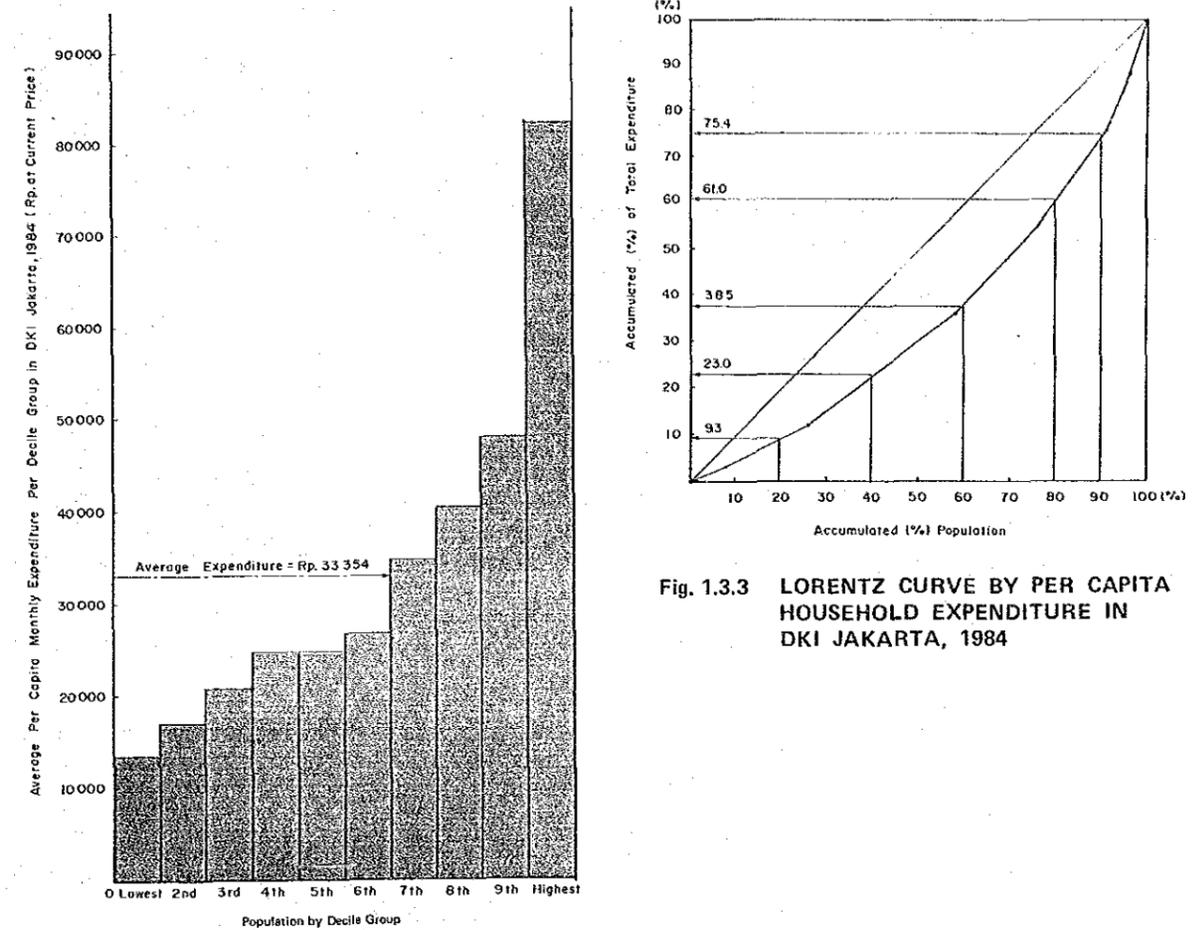


Fig. 1.3.2 AVERAGE PER CAPITA MONTHLY EXPENDITURE PER DECILE GROUP IN DKI JAKARTA, 1984

Table 1.3.9 POPULATION DISTRIBUTION BY EXPENDITURE LEVEL IN DKI JAKARTA, 1984

Classes of per Capita Monthly Expenditure (Rp)	Estimated Population	Accumulated % of Population	Average Expenditure (Rp)	Accumulated % of Total Exp.
6,000 - 7,999	10,672	0.15	6,970	0.03
8,000 - 9,999	18,676	0.41	9,214	0.10
10,000 - 14,999	578,289	8.32	12,971	3.17
15,000 - 19,999	1,264,632	25.61	17,602	12.30
20,000 - 29,999	2,354,510	57.80	24,736	36.18
30,000 - 39,999	1,307,987	75.68	34,641	54.75
40,000 - 59,999	1,085,209	90.52	48,038	76.12
60,000 - 79,999	413,540	96.17	67,442	87.55
80,000 -	280,140	100.00	108,375	100.00
Total	7,313,655	100.00	33,354	100.00

Source: Pengeluaran Untuk Konsumsi Penduduk Indonesia Per Propinsi 1984, BPS

Table 1.3.10 COMPARISON OF EXPENDITURE/INCOME DISTRIBUTION

City/Country	Year	Percentage Share of Household Income by Percentile Groups					
		Lowest 20 percent	Second Quintile	Third Quintile	Fourth Quintile	Highest 20 percent	Highest 10 percent
DKI Jakarta	1984	9.3	13.7	15.5	22.5	39.0	24.6
Philippines	1970-71	5.2	9.0	12.8	19.0	54.0	38.5
Thailand	1975-76	5.6	9.6	13.9	21.1	49.8	34.1
Hongkong	1980	5.4	10.8	15.2	21.6	47.0	31.3
Netherlands	1981	8.3	14.1	18.2	23.2	36.2	21.5
Japan	1979	8.7	13.2	17.5	23.1	37.5	22.4
Germany Fed. Rep.	1978	7.9	12.5	17.0	23.1	39.5	24.0
Denmark	1981	5.4	12.0	18.4	25.6	38.6	22.3
Canada	1981	5.3	11.8	18.0	24.9	40.0	23.8
United States	1980	5.3	11.9	17.9	25.0	39.0	23.3
Switzerland	1978	6.6	13.5	18.5	23.4	38.0	23.7

Source: World Development Report, 1985, The World Bank

INCOME DISTRIBUTION BY HOME INTERVIEW SURVEY 1985

According to the Home Visit Survey conducted by the ARSDS Team in 1985, income/social groups were classified into 4 categories based on house type and their composition was found as shown in Table 1.3.11.

Table 1.3.11 DISTRIBUTION OF INCOME/SOCIAL GROUPS
BY HOUSE TYPE IN DKI JAKARTA 1985

Income/Social Group	House Type*	% Distribution
1) Low	Temporary/Semi-Permanent	47.5 (47.5)**
2) Lower Middle	Permanent D	36.4 (83.9)
3) Upper Middle	Permanent C	12.2 (96.1)
4) High	Permanent A & B	3.9 (100.0)

Note: * According to the definition used in the Home Interview Survey.
For detailed information please refer to the Annex to Progress Report I, October 1985

** Figures in () show the accumulated percentage

To compare the result of the Home Visit Survey with the 1984 household expenditure survey (SUSENAS), those people with less than the average per capita expenditure level (about 70% of the population) are found to live mostly in Semi-Permanent/Temporary houses and partly in Permanent D houses.

From this viewpoint, it can be said that most of Jakarta's inhabitants settle in poor housing and living conditions.

1.3.5 MAJOR FINDINGS OF THE EXISTING SOCIO-ECONOMIC SITUATION IN JABOTABEK

The existing socio-economic situation in Jabotabek has been analyzed in the previous sections and in order to visualize the problems involved in the region, they are summarized as follows:

POPULATION CONCENTRATION TO THE JABOTABEK REGION

Indonesia's average growth rate of population is about 2.0% p.a.. DKI Jakarta has maintained a population growth at about 4.0% in the last 25 years. The Botabek region also recorded a similar population growth rate since 1971.

RAPID URBANIZATION IN PROGRESS

In the 1970's the urbanization started throughout the country and the urban population occupied about one-fourth of the total population at a growth rate of 5.3% p.a..

In the Botabek region the urban population grew at 18.0% p.a., with a high population growth in the suburban area beyond the boundary of DKI Jakarta and a population decrease in the central area of DKI Jakarta.

The urbanization began to spread south of DKI Jakarta in the 1970's as people sought a better living environment. The increase in the urban population was large to the south, but the increasing rates of urban population to the east and west of DKI Jakarta were almost the same as that to the south.

INSUFFICIENT EMPLOYMENT OPPORTUNITIES

According to the 1971 and 1980 census data, the unemployment rate improved significantly. However, the employment situation was comprised of many temporary workers.

Unemployment rates were remarkably high in the young age group less than 25 years of age.

The increased labor force was mainly absorbed by the informal sector. The creation of job opportunities in the formal sector were not satisfactorily realized even in the relatively good conditions of economic development in the 1970's.

The major industrial sectors which created job opportunities were the government/services sector, manufacturing sector and trading sector. Among others, a rate of employment growth was notably high in the manufacturing sector in the 1970's.