

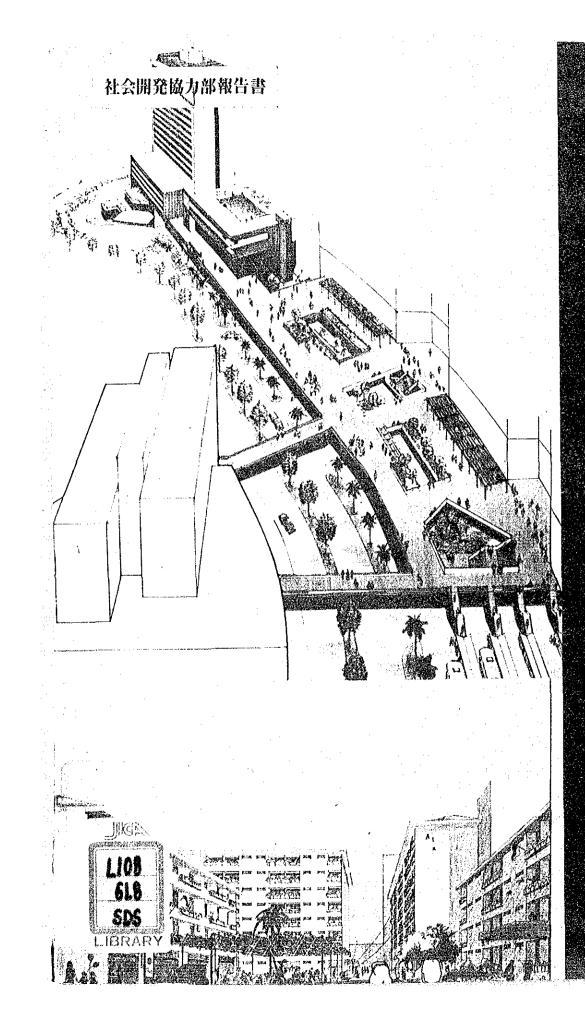
Study on Urban Renewal Housing Project in Jakarta

FINAL REPORT
VOLUME III: URBAN RENEWAL PLAN - KEBON MELATI

DECEMBER, 1983

JAPAN INTERNATIONAL COOPERATION AGENCY





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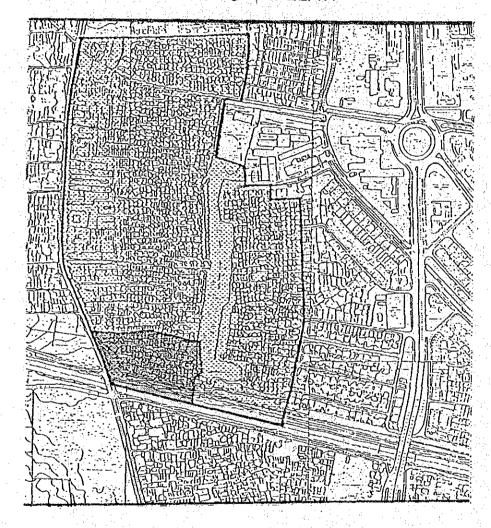
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KEBON MELATI



LEGEND:

: STUDY AREA

PROJECT SITE

PRESENT CONDITIONS

STUDY AREA

* Location : 2.5 km Distant from the Civic Centre

"National Monument - MONAS".

* Area : About 52 Ha.

* Population : Total 29,000

Density 560 person/Ha.

PROJECT SITES

* Area : About 3.9 Ha.

* Population : Total 2,000

Density 510 person/Ha.

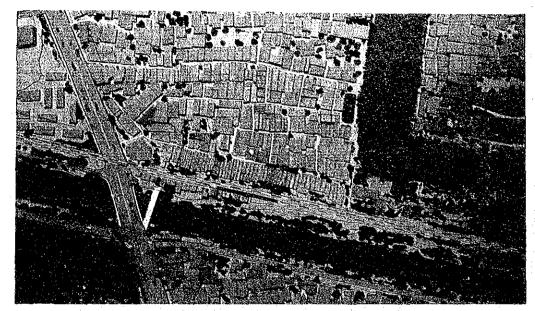
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LOCATION MAP OF THE STUDY AREAS & THE PROJECT SITES

BEFORE RENEWAL

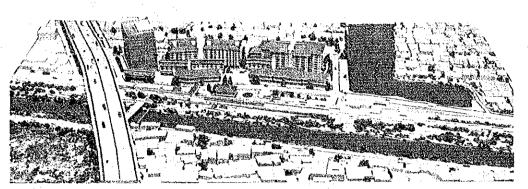


A EXISTING MODEL OF SITE AREA

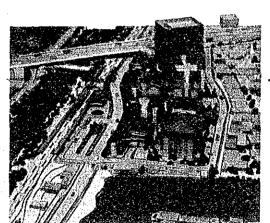


A PHOTO OF EXISTING CONDITION

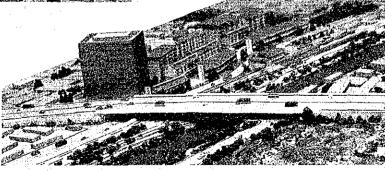
AFTER RENEWAL



A PLANNING MODEL OF TOTAL SITE AREA



◀ VIEW FROM EAST



A VIEW FROM WEST

MODEL OF BEFORE & AFTER RENEWAL - KEBON MELATI

VOL. III: KEBON-MELATI

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CHAPTER GENERAL CONSIDERATIONS

1.1 BACKGROUND OF THE STUDY AREA

Prior to the commencement of the JICA Study, a "contact mission" organised by JICA had discussions with the Government on the selection of the study areas. As a result, the city's Kebon Melati section was ultimately selected together with Manggarai section in consideration of the following aspects.

Improvement of Living Environment

This area is a typical Kampung area and needs infrastructure improvements involving housing development in order to improve living environment.

Improvement of the Melati Flood-Control Pond (Reservoir)

The Melati pond is seriously polluted due to direct discharge of the sanitory waste from the surrounding area into the pond. Especially in the rainy season this contaminated water is discharged to the Banjir Canal to control floods, and this aggravates the water pollution of the Banjir Canal from which Pejompongan water treatment plant is taking raw water downstream.

Potential Land for the Urban Renewal Around the Pond

There exists the state land around the pond which may be advantageously utilised for initiating an urban renewal project.

Utilization of the Housing Units of Tanah Abang and Kebon Kacang Projects for Temporary Resettlement

Tanah Abang and Kebon Kacang Projects may be advantageously utilized for temporary resettlement of the inhabitants who may be affected by the project.

1.2 CHARACTERIZATION OF THE STUDY AREA

The characteristics of the city functions surrounding Kebon Melati are shown in Fig. 1-1.

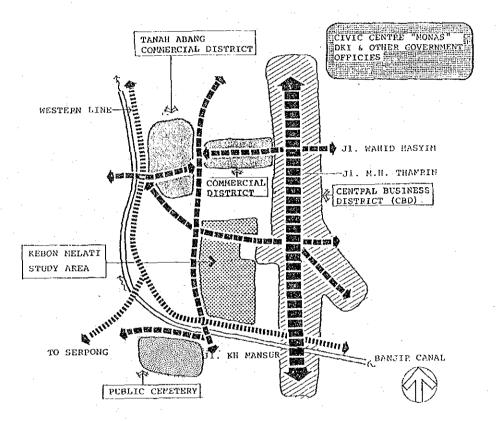


Fig. 1-1 CITY FUNCTIONS SURROUNDING KEBON MELATI

The study area is characterised by the predominant function of the residential sector together with street-type neighbourhood commercial districts. The study area is an built-up attractive urban residential area having the advantage of proximity of the working and living places. Introduction of large-scale commercial and business function will be inadvisable for redevelopment as the introduced function will destroy the existing residential function and there is a little potential for such large-scale commercial and office development due to poor accessibility and difficulty of structure changes.

The CBD along JI. Thamrin, the commercial districts and civil centre, are located to the east and the north of the study area as shown above. The study area is situated next to the CBD, but it is not under the influence of the CBD (JI. Thamrin).

Considering the characteristics in and surrounding the study area, Kebon Melati will be basically redeveloped by infrastructure improvement urban renewal in order to improve the living environment. Kebon Melati can become an example of a Kampung urban renewal housing project in DKI Jakarta.

1.3 PRELIMINARY DKI JAKARTA MASTER PLAN (1985 - 2005)

According to the Master Plan for the year 2005, the study area is mostly designated as urban residential area, and the planned population density in the area will be over 500 persons/Ha. This is the highest population density categorized in the Master Plan. Furthermore, the area is also categorized as requiring environment improvements,

- to provide the inhabitants with piped water (PAM),
- to improve the drainage system, and
- to improve sanitation and solid disposal.

In other words, the area should aim at developing an intensive vertical utilization of land together with infrastructure improvements, in order to realise sound and effective land use as well as environment improvement in the central urban area.

Source: The Master Plan for the year 2005 - PRA RANCANGAN POLA
DASAR TATA RUNG DAERAH DKI JAKARTA 2005, AUG. 1983,
PEMERINTAH DAERAH KHUSUS IBU KOTA JAKARTA

CHAPTER CANCELLAND CONTROL OF THE CO

PRESENT CONDITIONS AND IDENTIFICATION OF PROBLEMS IN THE STUDY AREA

2.1 PRESENT CONDITIONS

2.1.1 Population

The study area in Kebon Melati is divided into two administrative areas namely Kelurahan Kebon Kacang and Kelurahan Kebon Melati.

The population tendencies in both Kelurahans show gradual decrease through the past 5 years as shown in Fig. 2–1, and it is anticipated that the population in Kebon Melati will continue to decline in the future. Generally speaking, this phenomena is often seen in the central part of major cities in the world. The population density is shown in Fig. 2-2.

Total	Total No. of	Average House-	Average Popula-
Population	Households	hold Size	tion Density
29,000 persons	6,060 families	4.8 persons/ family	560 person/ha.

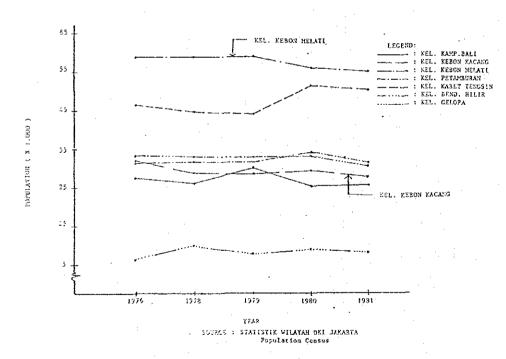


Fig. 2-1 POPULATION TREND OF KELURAHAN IN THE PAST 5 YEARS

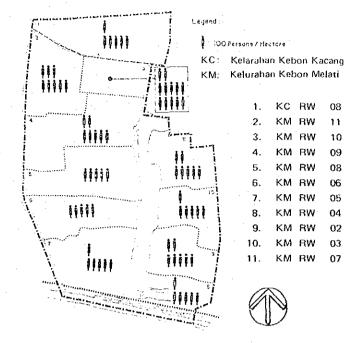


Fig. 2-2 POPULATION DENSITY

2.1.2 Land Use

As shown in Fig. 2-3, the present land use in the study area is broadly divided into predominant residential area and neighbourhood commercial areas along Jl. Mas Mansyur and Jl. Kebon Kacang Jaya. Adjacent to the study area, the Central Business District (CBD) along Jl. M.H. Thamrin is situated to the east side of the study area. To the south-west side of the study area a public cemetery and public service facility area are located.

The land use in the area is characterised as follows:

- Residential areas account for about 60% of the study area and are the predominant land use.
- The neighbourhood commercial areas account for about 10% of the study area.
- No industrial area is seen in the study area.
- No industrial area is seen in the study area.
- No vacant land and parks are seen in the study area.
- The residential areas located next to Jl. Thamrin are under the influence of the CBD. Whereas the study area would not be directly influenced by the CBD because the study area is a little away from Jl. Thamrin.

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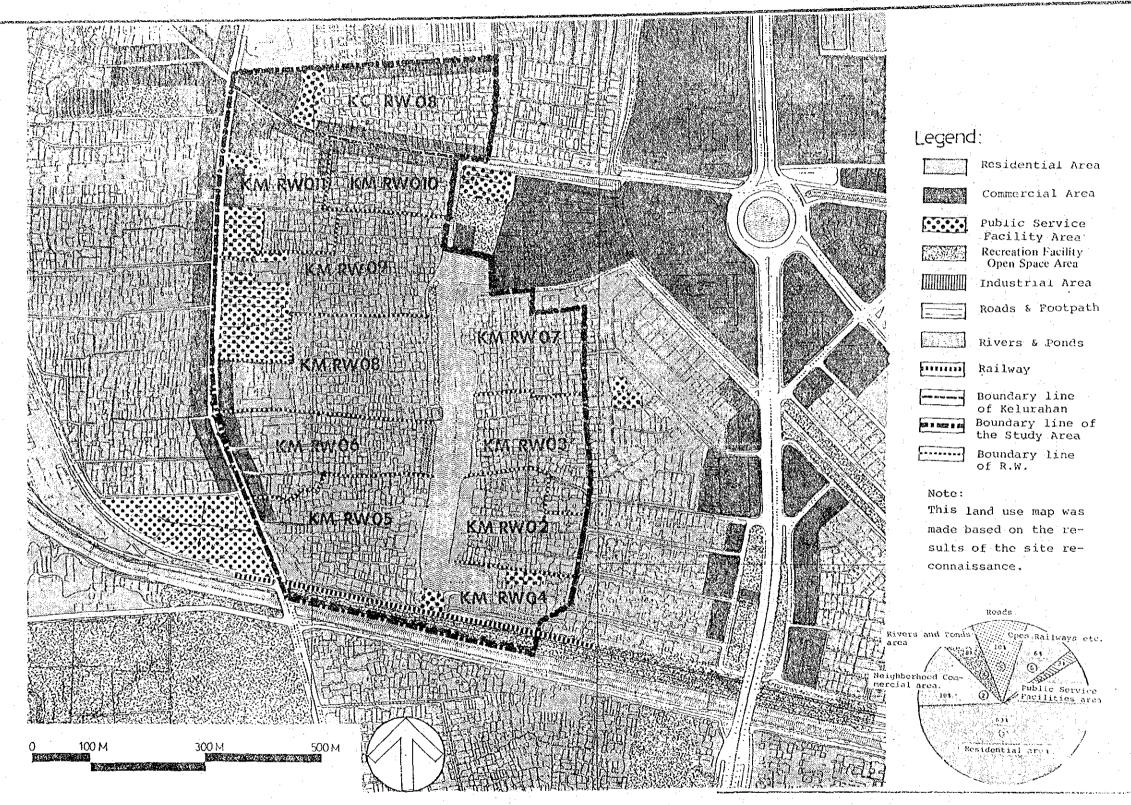


FIG. 2-3 MAP OF LAND USE (1982)

It is forecasted that the present land use pattern would not be drastically changed in the future.

2.1.3 Public Utilities

Water Supply

Main water supply pipes run along surrounding major roads, as shown in Fig. 2-4. However, only 10% of the inhabitants utilize them and 90% of the inhabitants get water from wells.

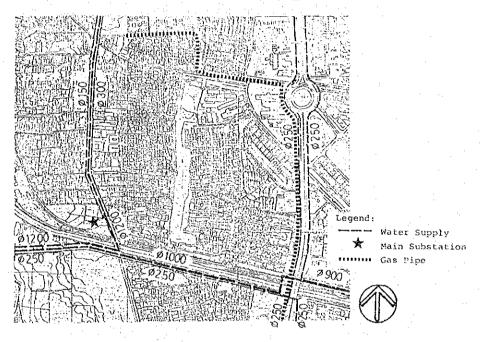


Fig. 2-4 PUBLIC UTILITY AROUND THE STUDY AREA

Eelctricity

85% of the inhabitants have electric lighting in their homes and the rest of the inhabitants use spirit lamps.

Drainage and Sewage

70% of the inhabitants discharge sewage directly to the public channel (Riol Kota) and in particular the residents who live along the pond discharge it directly to the pond.

Garbage Collection

Temporary garbage receiving stations are provided in the study area, but most garbage collections are disorderly due to insufficient capacity of the garbage vessels.

Energy for Cooking

No city gas pipe system has been provided to the area and almost all the inhabitants use kerosene oven for cooking at home.

Note: The figures (%) stated above are derived from the socio-economic survey results.

2.1.4 Community Facilities

Community facilities are important to provide the inhabitants with amenity, convenience, and safety in their everyday life. Community facilities namely educational, religious, shopping and health facilities, located in the study area, are shown in Figure 2.5.



Fig. 2-5 COMMUNITY FACILITIES

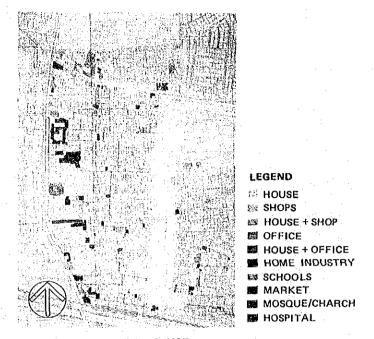


Fig. 2-6 BLDG USE

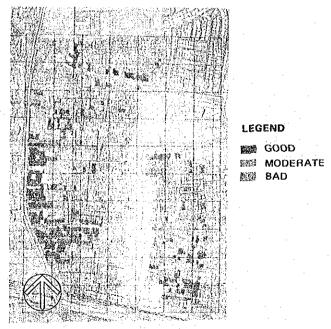
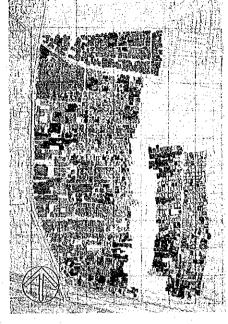


Fig. 2-8 BLDG CONDITION



LEGEND

TEMPORARY

PERMANENT

屬 SEMI PERMANENT

Fig. 2-7 BLDG. STRUCTURE

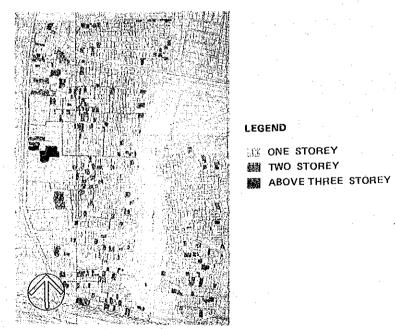


Fig. 2-9 NUMBER OF BLDG STOREYS

For educational facilities, the eight elementary schools are considered to be adequate. Religious facilities play an important part of the inhabitants' daily life and many of such facilities are found in the study area. Therefore, a good community relationship atmosphere is found in the study area.

* The community facility data were obtained from Kelurahan Kebon Kacang and Kelurahan Kebon Melati in August 1982.

2.1.5 Building Conditions

Building conditions in the study area are shown in the Figures from 2-6 to 2-9. These conditions are characterised as follows:

.- Building use;

.,		
Housing	Shops, Offices	Others
90%	8%	2%
 Building structure; 		
Permanent	Semi-permanent	Temporary
37%	37%	26%
 Building conditions; 		
Good	Moderate	Bad
12%	53%	35%
 Number of building stories; 		
One story	Two stories	Over three stories
88%	11.8%	0.2%

2.1.6 Road Network

As shown in Fig. 2-10, the study area is located 300 m west of Jl. M.H. Thamrin (II. Jend. Sudirman) and is bordered by Jl. K.H. Mas Mansyur to the west and Jl. Kebon Kacang to the north. Brief description of these roads are as follows:

- Jl. M.H. Thamrin

 : A major road running through the centre of Jakarta in the north-south direction. The traffic volume in 1980 was 47,700 PCU/24 hours.
- JI. K.H. Mas Mansyur : A road of 24 m wide (4 lanes) running in the north-south direction. The raffic volume in 1980 was 30,600.

The hinterland of the area is connected to these main roads by the local streets although the service area is limited. The rest of the area is covered by the KIP (Footpath). KIP and neighbourhood road network is shown in Fig. 2–11.

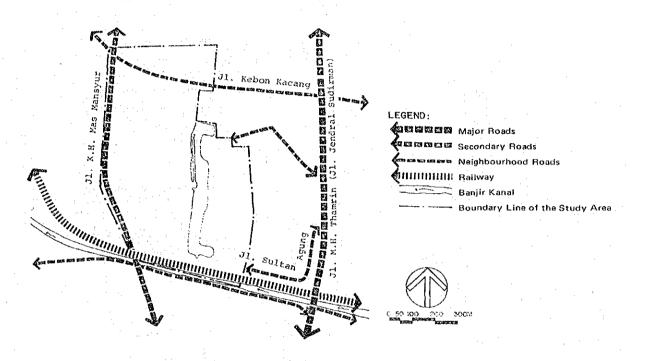


Fig. 2-10 ROAD NETWORK SURROUNDING THE STUDY AREA

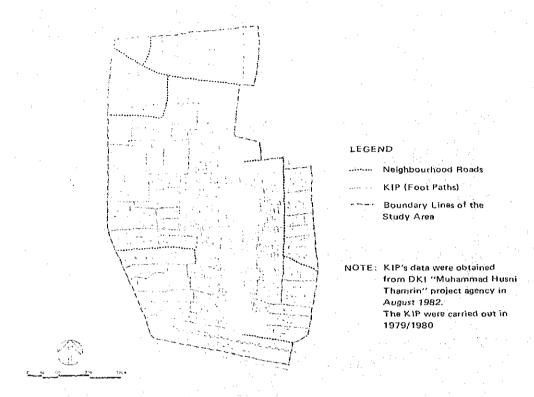


Fig. 2-11 KIP AND NEIGHBOURHOOD ROAD NETWORK

2,1.7 Socio-Economic Conditions

Household Size

From the survey by the Study Team, the number of household members who live in one dwelling unit is 7.2 persons on average. However, according to the statistical data from the Kelurahan office, the average family size in the study area is only 4.7 persons and there are therefore many houses in which more than two families are living. Considering the case of Kebon Kacang, most of the second families in the house are likely to be free co-occupants.

Income and Expenditure

Monthly income of the median class in 90,000 Rp. The percentage of the households whose income is more than 200,000 Rp. per month, is 13 percent. The percentage of households that pay rental or leasehold fee is small and the fee is cheap. About 50 percent of the renters and leaseholders pay less than 2,000 Rp. and this is less than 5 percent of their income.

Land and House

The percentage of households which own both the land and house is about 60 percent, whilst about 20 percent of households own only the house, and 13 percent of households are renters or leaseholders. Although the percentage of renters and leaseholders is small, their rights of living sould be continued in the urban renewal.

The percentage of persons who complain that their houses are too small, is 40 percent of the total and this percentage increase in inverse proportion to their floor space.

Environment Conditions

The items that more than 30 percent of inhabitants consider to be lacking in their area are as follows;

Largest percentage

Open space and green

2nd largest 3rd largest

: Parking place

est : Fire protection

At present the population density is very high and houses of varying sizes stand close together.

Economic Activities

33 percent of the households have a business in the area, amongst which stall is 50 percent or the largest percentage. Their living is based on the local community and so consideration of the field of their activity or the offer of new job opportunities should be a requirement of the urban renewal.

Many venders have their business on the Jl. Kebon Kacang Raya and Jl. Mas Mansyur and the number of stalls and venders are approximately 450.

Urban Renewal Sense in the Study Area

The average percentage who wish to return to the renewal area is 35 percent and this figure decreases in proportion to the income level. In the southern part of the study area, more than 50 percent of the inhabitants have the will to return after the renewal.

Land Ownership

For planning of the urban renewal project, the land ownership survey is an important factor. Possibility of the project actualization is largely dependent on whether the majority of the area is owned by the government or by the citizens.

The data shown in Fig. 2-12 was obtained from the Walikota Jakarta Pusat of Aggraria. The legally registered land is only about 1.5 Ha and the rest is left unregistered. Obtaining further information about land ownership in this area is likely to be difficult.

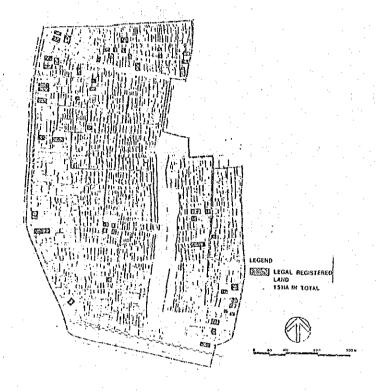


Fig. 2-12 LAND OWNERSHIP REGISTRATION

2.2 IDENTIFICATION OF PROBLEMS

2.2.1 General

This section sets out urban problems and zoning characteristics in and surrounding the study area.

The following are general problems found in the study area derived from the results of present condition. The major urban problems are shown in Fig. 2-13.

 Lack of public utilities such as safe water supply and sewage affecting sanitation, health, everyday life's convenience for the inhabitants.

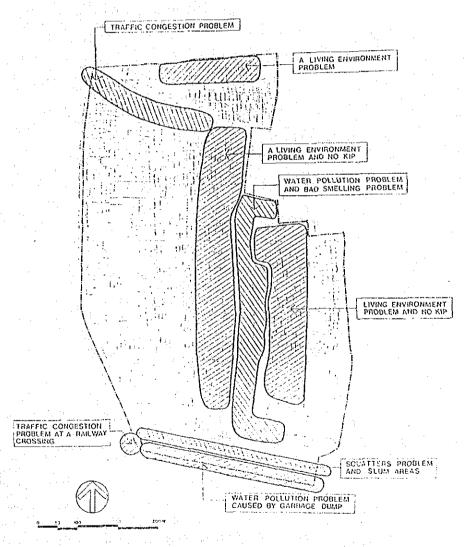


Fig. 2-13 IDENTIFICATION OF MAJOR URBAN PROBLEMS

- KIP has not been completed yet along the pond areas.
- Lack of playgrounds and parks.

2.2.2 Zoning Characteristics and Problems

The zones have been divided by the means of a similar land use or similar urban issues as shown in Fig. 2-14. Detailed zoning characteristics and problems are explained as follows:

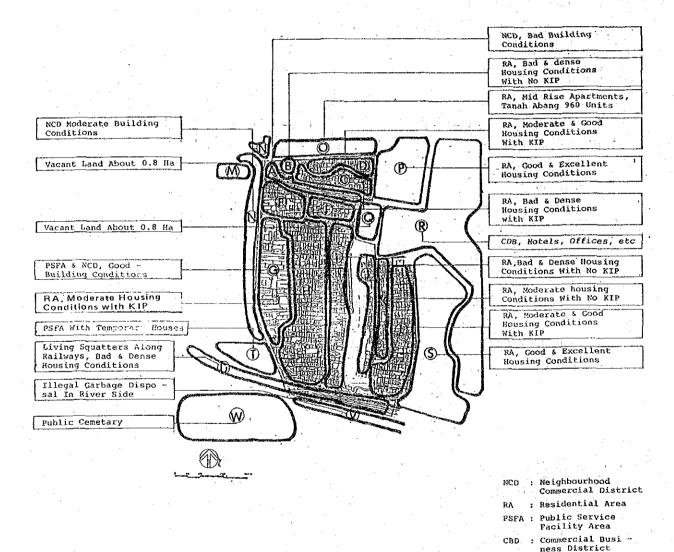


Fig. 2-14 ZONING MAP

Zone A (NCD - Bad Bldg Conditions)

- A neighbourhood shopping area is situated along Jl. Kebon Kacang, and most retail and stalls are located in the west part. Most retail shops are in very poor condition, whereas the neighbourhood shopping area itself is prospering.
- Many stalls located in the west part occupy the street by standing in front of the shops, and are causing traffic congestion.
- A lot of disordered garbage is found on the side of the streets.
- In the rest of the area, the east part of Jl. Kebon Kacang, offices, houses and shops are located and many buildings are good or moderate condition. Traffic congestion in this part is not so bad as that of the west part.

Zone B (RA - Bad & Dense Housing Conditions with No KIP)

- Row houses of very deteriorated condition are located in the east. Schools, and the rest of houses in this area are in a bad living environment.
- Many stalls along the street between Jl. Kebon Kacang and Jalan Kebon Kacang
 41 are selling perishable foodstuffs such as fresh fish in a bad sanitary condition.

Zone C (RA - Moderate & Good Housing Conditions with KIP)

- KIP has been carried out in this area. Many houses are in good condition, and a good living environment is seen in this area. Also, some houses of moderate condition are found in this area. Two elementary schools in the west of this area are in very good condition.

Zone D (RA - Bad & Dense Housing Condition with KIP)

A lot of small houses with temporary structures are crowded together and of bad conditions. KIP has been partially carried out in this area, but on the whole, a bad living environment is seen. A few small shops are found along Jl. Kebon Kacang

Zone E and F (The same as Zone D)

- KIP has been partially executed in these areas. Along KIP many moderate houses are found. Bad houses and living environment are found in the area where KIP has not been executed.
- Some shops are situated along Jl. Mas Mansyur and local streets.
- Garbage problems are found on the local streets.

Zone G (PSFA & NDC — Good Building Conditions)

— Many big size buildings such as schools, offices, apartment houses are located in this area. Most buildings are permanent structure with 2 to 3 stories and are in good condition.

Zone H (RA - Moderate Housing Conditions with KIP)

- KIP has been carried out in this area. Many moderate houses are found out in this area. Although as a whole, a good living environment is seen in this area, some bad houses are found in the east part. Some shops are located along Jl. Mas Mansyur.
- Traffic congestion is found on Jl. Mas Mansyur near the railway crossing.

Zones I and J (RA - Bad & Dense Housing Conditions with No KIP)

- No KIP has been executed in these areas due to lack of finance of the part of DKI
 Jakarta. Most houses are in bad condition, and a bad living environment is found
 in these areas.
- Water pollution problem of the pond is found as the waste water generated by surrounding houses flows directly into the pond.

Zone K (RA - Moderate Housing Conditions with No KIP)

No KIP has been carried out in this area for the same reason as above. However, a lot of moderate houses are found in this area.

Zone L (RA - Moderate & Good Housing Conditions with KIP)

- KIP has already been executed in this area and a lot of moderate houses are found in this area. In particular, good houses are found in the east of the area next to the excellent housing area, zone S. As a whole, a good living environment is found in this area.
- Car parking problems are found in this area because some households park their own private cars on the neighbourhood roads.
- Traffic congestion sometimes takes place on the roads.

Zone M (Vacant Land)

- Empty land of about 0.8 Ha is found to the northeast of the study area. The land may be used for temporary houses or a pasar during the urban renewal construction.

Zone N (NCD — Moderate Building Conditions)

 A neighbourhood shopping area is located along II. Mas Mansyur. Most buildings are in moderate condition and the shopping area has good business.

Zone O (RA – Mid Rise Apartments, Tanah Abang Flat)

 Modern apartment houses completed in March 1982 and called Tanah Abang Flats, are situated on a total land of four hectares. They are 4 stories and composed of 960 units of F-36 type. A good apartment living atmosphere is seen in this area.

Zones P and S (RA — Good & Excellent Housing Conditions)

The neighbourhood roads in these areas are formed in a partial gridiron pattern.
 Almost all houses are in good condition and a good living environment is found in these areas.

Zone R (CBD – Hotels, Offices)

- International hotels, offices, restaurants are situated along Jl. Thamrin and Jl. Jend. Sudirman both of which can be marked as CBD (Commercial Business District).
- CBD impact is gradually expanding to the residential areas.
- Traffic congestion is found on Jl. Thamrin and Jl. Jenderal Sudirman during the morning and evening peak hour.

Zone T (PSFA with Temporary Houses)

- Public use buildings such as schools, governmental offices are being constructed in the north part of this area. Kelurahan Kebon Melati office and temporary housing for Kebon Kacang urban renewal housing project are also situated in the south part of this area. All buildings are good condition.
- The land where the temporary houses are located may be used for temporary houses during the construction of the Kebon Melati urban renewal housing project.

Zone U (Living Squatters along Railways)

- Temporary bad houses illegally using the right of way of the railway.
- The living environment is very bad.
- Before execution of the railway improvement project, squatters must be instructed to move out of this area.

Zone V (Illegal Garbage Disposal in River Side)

 A lot of garbage illegally dumped on the river bank is causing water pollution problem.

Zone W (Public Cemetery)

-- A public cemetery of about 40 Ha is situated in this area and plays an important part of urban open space as there are a lot of trees in the cemetery.

2.3 PRIORITY PROGRAMMES

2.3.1 General

The priority programmes which may directly or indirectly influence the study area are listed below, and shown in Fig. 2.15.

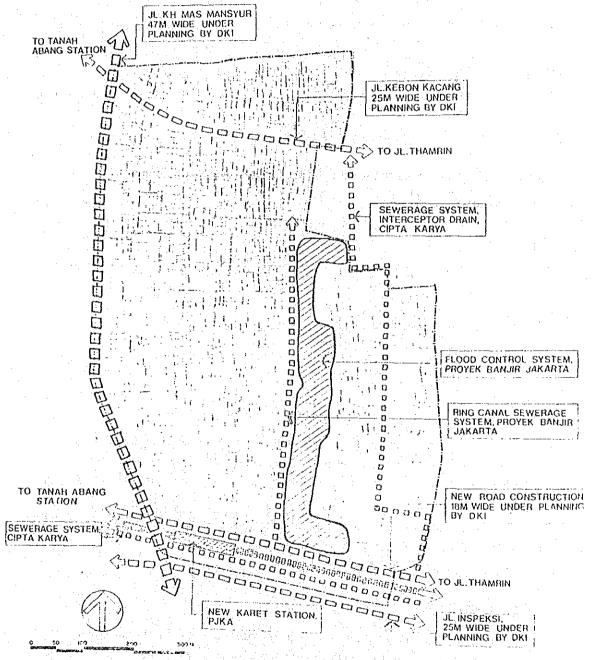


Fig. 2-15 PRIORITY PROGRAMMES

2.3.2 New Karet Station

According to the Railway Master Plan, as part of the electrification, track and facilities improvement programme of the Western Line, a new Karet Station will be constructed in 5 years time at the southwest corner of the study area.

2.3.3 Roads Improvements

DKI Jakarta has plans to improve streets and roads within the city area but has not yet finalized the implementation programme and the completion time of each improvement is still therefore unknown. The following are the improvements now tentatively planned by DKI Jakarta.

- Jl. K.H. Mas Mansyur having 24 m width with 4 lanes at present, will be expanded to 47 m in right-of-way and will be gradeseparated with the Western Line by constructing an over-pass bridge.
- J1. Kebon Kacang having 10 m width with 2 lanes at present, will be expanded to 25 m right-of-way and this road will be further connected to the Tanah Abang station.
- In consideration of the shortage of the roads running west and east-wards, roads with 18 m and 25 m right-of-ways respectively, are planned to be constructed along the north and south of the Banjir Canal.

2.3.4 Sewerage Improvement Project

The wastewater treatment system in Setia Budi planed to construct a box-culverttype outfall sewer along the north of the Banjir Canal up to the lower reaches of the intake of water treatment Pejompongan Plant. But it was cancelled.

In order to lessen the water pollution of the Melati pond (reservoir), two schemes will be implemented under the project, one is to provide aeration and oxidization facilities in the pond, another is to construct an interceptor drain along the east of the pond (probably along Jl. Muaralabu) to collect wastewater from the surrounding areas. By the latter scheme inflow problem of the wastewater to the pond will be solved in the east side of the pond.



STRUCTURE PLAN AND SELECTION OF THE PROJECT SITE

3.1 STRUCTURE PLAN

3.1.1 Planning Policies

Ultimate Goal

In view of the future land use master plan of DKI Jakarta as well as the present land use pattern. Kebon Melati shall basically remain as urban residential area providing decent housing for the people. It will be particularly benefitial for the people who have jobs in CBD, thus achieving the proximity of working and living places,

In order to achieve this, it is essential that the living environment of the area should be improved, for example improvement of the water pollution of the Melati pond which is now emitting an offensive odour.

Because of its location close to the CBD, the development potential as business or commercial areas should not be overlooked, although they might be of a secondary nature. This potential is found in connection with the following factors or impacts.

- Construction of the new Karet station and its consequent station-front development.
- Inward penetration of commercial and business activites from Jl. K.H. Thamrin and Jl. Mas Mansyur.
- Preservation of existing neighbourhood commercial functions along the northwest end of Jl. Kebon Kacang.

In general, as the ultimate goals and objectives, the inner part of Kebon Melati should be developed as an attractive urban residential area with the garden water front of the Melati pond. Outer perimeter areas to some depth should be developed as mixed commercial/business and residential areas.

Planning Policies

The following planning policies are established on the basis of the general conditions of the study area and urban betterment considerations such as safety, health, convenience, environmental quality, and amenity.

- To achieve and maintain a good living environment aimed at building up an attractive urban residential area.
- To provide sufficient drainage system (interceptor drain) along the pond in order to contribute to the reduction in water pollution.
- To construct sufficient road network together with pedestrian ways to upgrade accessibility to the area.

- To provide the inhabitants with safe piped water to assure health and sanitation.
- To provide the inhabitants with urban parks, especially playgrounds for children.
- To accommodate a desirable mix of residential and shopping activities in the neighbourhood commercial district.
- To maintain a Kampung community atmosphere with a human touch.
- To rehabilitate and rebuild the physically unsound residential area.
- To provide the inhabitants with adequate community facilities for their routine lives.

3.1.2 Infrastructure Improvement

Major Concents of Infrastructure Improvement

Reduction of the water pollution of the Melati flood control pond is an urgent necessity. Due to direct inflow of the waste water from the surrounding areas, the water pollution of the pond is far beyond the tolerable limit in the dry season (more than 150 mg/g in BOD) and emits an offensive odour with the resulting deterioration in the living environment.

The water pollution is also causing a serious problem when the water is discharged to the Banjir Canal in the wet season, since the water producing plant in Pejompongan is taking raw water from the Banjir Canal through the intake located downstream of the pond.

Infrastructure Improvement Plans

To solve the problems, the following countermeasures are conceived.

- Provide an interceptor drain to collect the waste water from the surrounding areas in order to prevent the pond receiving the direct inflow. Collected water should be discharged to the Gambir Sewerage System.
- Periodical flushing of the pond with the water from the Banjir Canal to flush out the stagnant polluted water in the dry season.
- Provide a water treatment system (aeration and oxidization) in the pond.

According to the information from the Project Banjir Jakarta, the water quantity of the Banjir Canal is not sufficient to flush the pond until such time as the present C.J.C. (Cisadane-Jakarta-Cibeet) Water Resources Development Project is completed.

Project of the last above is now planned under the Jakarta Sewerage and Sanitation Project but envisaged to take a long time until its completion.

It is therefore highly recommended that this urban renewal should include the construction of the interceptor drain as mentioned in the first above.

The Study Team was also told that the quality of the well-water in Kebon Melati area is bad due to some chemical ingredient, and this necessitates that piped water be made available from the water main along Jl. Mas Mansyur.

The installation of the interceptor drain and water supply pipes can be carried out in parallel with the construction of the service road along the east water front of the pond, as this road is essential for the proposed housing complex.

In connection with the priority programmes, the following three projects are proposed to be implemented.

- Development of the station-front plaza of the new Karet station with provision of passenger car access, bus stop, taxi and becak stands, small parking space, etc.
- To facilitate east-west bound traffic, according to DKI programmes, the road along the north of the Banjir Canal should be constructed.
- Redesign of the "ring canal" to utilize it as an interceptor drain and to prevent direct inflow of the waste water into the pond.

3.1.3 Alternative Structure Plan

General

The general information on the proposed structure plan is explained in Chapter 3.1.4 of Volume II — General.

Alternative

The local characteristics in and around the study area were explained in Chapter 1.1 and 2.1 of this Volume III. Taking into consideration the geographical features, existing conditions and priority programmes, two alternative developments are conceived as the most feasible ones, i.e. housing and commercial developments.

However, in the light of the feasibility not only from the financial aspect but also from socio-economic aspect, an intensive commercial development which necessitates alteration of the existing structure in its entirety, is considered to be impractical for the following reasons.

- Kebon Melati is regarded as a low to moderate class of Kampung where KIP has already been applied intensively and more than few well-off people are living. This characterises the area as a built-up urban residential area and any drastic alteration of the community may create not only serious social repercussions but also become economically and financially unfeasible due to the serious resettlement problems of the people living in the area.
- In principle, urban renewal should achieve full resettlement of the inhabitants in their original or nearby places. A large-scale commercial development on an areawide basis will jeopardize this resettlement. Even if the resettlement could be achieved, the cost must be recovered by the commercial development, thus making the development itself financially unfeasible.
- The study area is located behind Jl. Thamrin and the accessibility to the area is too poor to assure a large-scale commercial and business development by outsiders. Ingress and egress is limited to the flyover (Daerah Blora) or via the roundabout in front of the Hotel Indonesia and through Jl. Kebon Kacang. Apart from the lack of accessibility, the traffic to be generated as a result of the commercial and business development would in turn aggravate the current traffic congestion on Jl. Thamrin.
- According to the information on marketability, the demand for office buildings will not remain at a high level for long, because supply will meet demand in the near future (a real estate developer was quoted as saying that in 5 years time, supply will meet demand although such calculations are dominated by the current economic recession). The profitability of a large-scale (particularly luxurious) commercial complex is decreasing partly because of heavy initial investment costs but mainly because of the current economic recession.

As a consequence, the inner part of Kebon Melati should be developed as an attractive urban residential area with the garden water front of the Melati pond. Outer perimeter areas to some depth should be developed as mixed commercial/business and residential areas.

3.1.4 Proposed Structure Plan

General

The proposed structure plan is shown in Fig. 3–1.

Population

Based upon the considerations as stated in Chapter 3.1.4 of Volume II – Population,

the population holding capacities in the study area are planned.

Because population has been increasing in DKI Jakarta annually, the population holding capacity in the study area is, basically, planned to be much than the present population.

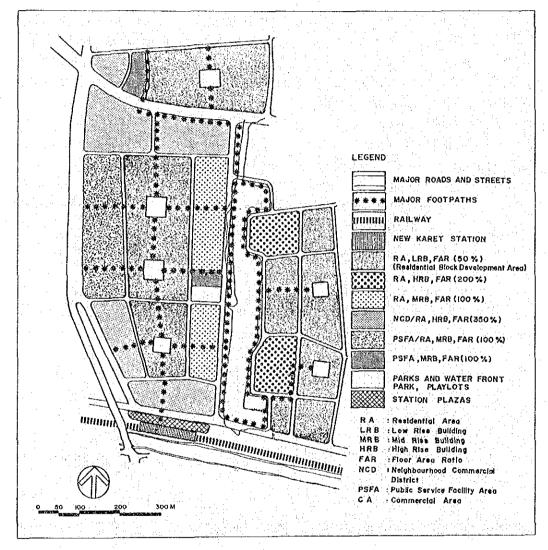


Fig. 3-1 THE PROPOSED STRUCTURE PLAN - KEBON MELATI

Comparison of population between the present and proposed structure plan is given in Table 3-2.

Table 3-2 COMPARISON OF POPULATION BETWEEN THE PRESENT AND THE STRUCTURE PLAN

Items	The Present (1982)	The proposed structure plan
Total population	29,000	about 44,000
No of household	6,060	about 8,800
Population density (Gross)	560 P/Ha	850 P/Ha

The above table gives the maximum population holding capacities which can be accommodated in the study area, and thereby should not be considered as the expected population in the long term plan.

Land Use

Generally speaking, the land use plan should be influenced by economical, social and public-welfare aspects as well as governmental policies. These aspects are all interrelated and the land use plan should be determined taking into consideration the complicated interactions. The land use composition is explained in Table 3-3.

Table 3-3 LAND USE IN THE PROPOSED STRUCTURE PLAN

Land		RA		NCD/RA	PSFA/RA	PSFA	ROADS	POND	Park incl, Station Plaza	TOTAL
	LRB	MRB	няв						B Open Spoce	
•	13 95ho	3 45 ha	2.10ho	7.56 ha	5.10 ha	1.17 ho	ii.OO ha	4.10 ha	3.57 ho	32 yo
Areas		19.50	μiα	7.36114	J. 10 .14	3,10 114 115	1.001.			
% .		37 %	•	15 %	10 %	2 %	21%	8 %	7 %	100 %
Note :	RA :		ial Area		L	HRB : I	L	Buildings	mercial Distri	:1

Note: RA: Residential Area
LRB: Low Rise Building
MRB: Mid Rise Building

NCO : Neighbourhood Commercial District
PSFA : Public Service Facilities Area

The land use plan is determined based upon the following considerations.

- The present land use will basically remain as the land use pattern for the future because no significant specific economical and social external impacts are anticipated in and surrounding the study area.
- Mixed land use manners (NCD/RA, PSFA/RA, etc.) should be adopted to increase housing stocks and should be divided into different land use sectors in an intensive vertical utilization system.
- Intensive land use (mid-rise and high-rise buildings) should be adopted to increase the housing stocks.
- Existing residential areas should be retained in the areas where moderate to good houses and a good living environment exists at present.

- Existing neighbourhood commercial districts should be maintained because they
 add to the prosperity of the area.
- Due to inclusion of the new Karet station development project in priority programme, neighbourhood commercial districts together with houses should be planned facing the station-front plaza.
- Water front parks should be provided around the pond.
- Playlots should be provided in the preservation areas.

Road Network

The road network is planned considering the urban residential characteristics as shown in Fig. 3-4.

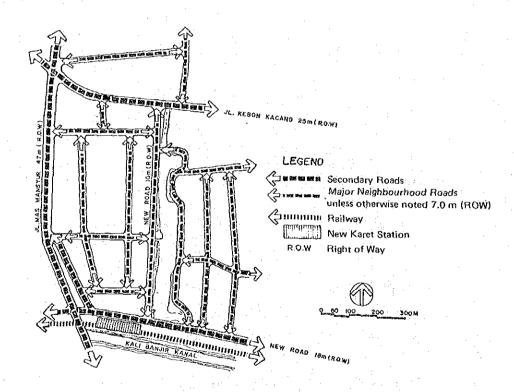


Fig. 3-4 ROAD NETWORK IN KEBON MELATI

Community Facilities

The community facilities are not sufficiently provided in the study area to meet the standard required by the criteria as described in the Chapter 3.1.4 — Community Facilities of Volume II and do not even meet the requirements of the present

population. Provision of the community facilities should desirably be constructed through the renewal project, by using the intensive vertical utilization system.

3.1.5 Proposed Urban Renewal Methods

Proposed urban renewal methods are classified into five categories, namely, (Ref. Fig. 3-5).

- Preservation areas (Residential Block Development Area),
- Housing renewal surrounding the pond,
- Road-side/NCD and housing renewal,
- Station plaza/road-side/NCD and housing renewal and
- Reserved area for future renewal

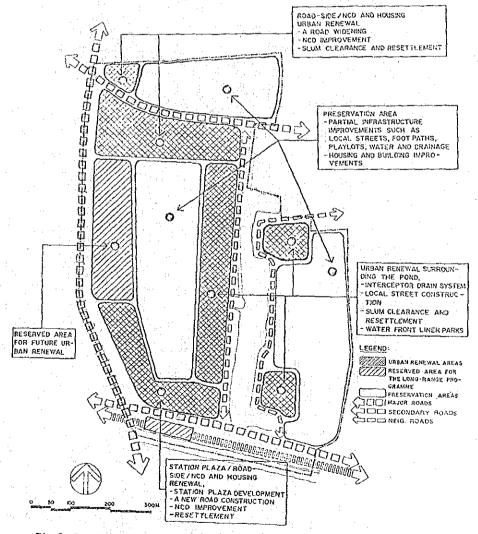


Fig. 3-5 THE URBAN RENEWAL METHODS - KEBON MELATI

The preservation areas (Residential block development areas)

Infrastructure such as piped water supply drainage system, neighbourhood roads, footpaths and playlots will be developed gradually in order to upgrade the living environment in the areas.

In connection with the improvement of the infrastructures, bad or moderate houses will be rehabilitated and rebuilt spot by spot. Especially, to maintain the human touch community characteristics KIP type footpaths together with playlots will be activily developed. In other wards, entry of cars will be controlled.

Housing renewal surrounding the pond

Interceptor drain system should be installed along the pond and flowing to the north in order to solve the water pollution problem. In conjunction with the interceptor system other infrastructure such as piped water supply, neighbourhood roads, water front linear parks and housing renewal will be constructed simultaneously.

For Road-side/NCD and housing renewal

Multi-story buildings together with apartment houses will be constructed by way of road-side development projects. Commercial activities will occupy the lower parts of the buildings (1st and 2nd floor) and the rest will be taken up by houses. Neighbourhood commercial district will be attractive for the inhabitants.

Station plaza/Road-side/NCD and housing renewal

The new Karet station will be constructed within 5 years as per the priority programmes in the study area. In connection with the Karet station project, a new road 18 m ROW and multi-story buildings including commercial and residential sectors will be constructed at the same time.

Reserved area for future renewal

Public service facilities together with houses will be rebuilt in the future because schools, mosques and apartment houses exist in this area.

3.1.6 Construction Cost Estimates

The construction cost to be involved in implementing the structure plan was roughly estimated at the prevalent price in December 1982, and any inflated cost including interests was excluded from the construction cost. The results area summarized as Table 3-6 and the details of assumed housing and commercial buildings are shown

in Table 3-7 and Fig. 3-8. Although land cost is estimated as shown in Table 3-6 for reference, it may not need to be counted in the case of right conversion. The cost must be subject to reestimation depending upon the method to be adopted for actual implementation.

Table 3-6 THE CONSTRUCTION COST

Sub-Projects		nmount: L. Rp.1:	Reaarks
Urban Renewal Housing & Commercial Building	:		13.85 ha Including on-site infrastructure
Station Plaza	:	130 :	2,600 sq. meter
Water Front Park	:	107 :	0.9ha
Municipality Road	:	, i.	Planned by DXI jakarta Includ. half of Jl. Mas Mansyur Includ. bridge over pomp station
Other Road	:	1,822:	1=5,200a w=7a,10a
Major Footpath in the Preservation Area		240 :	with gutter ==2.5a 1=1,300æ
Play Lot in the Preservation Area	:	162 :	2,500 sq. meter x 6
Arterial Drainage	:	341 :	Planned by Cipta Karya
Other Drainage	:	1,186 :	
Water Supply	:	456 :	
Land Cost	:	27,600 :	23.0ha Including coopensation & land preparation
Total	;	82,017 :	

Table 3-7 BUILDING CONSTRUCTION COST

	Site					(sq. m.)	Co	Cost Mail. Rp.	
Hū.	Area (ha)	Housing	Coaperc.	Social	Building	Infra.	Total		
i	0.6	17,600	3,600	-	3,005	204	3,211		
2	0.6	73,900	15,300	800	13,140	894	14,034		
3	1.6	37,100	4,500	400	5,241	550	5,791		
4	2,0	19,600	· -	400	1,754	460	2,214		
5	0.7	· · · -	-	3,200	387	151	548		
é	1.45	14,500	-	-	1,262	334	1,596		
7	1.2	33,900	7,600	50ù	5,292	413	5,765		
8	1.5	47,800	7,000	1,200	8,375	550	8,925		
9	0.8	14,900.	-	1,100	1,742	248	1,990		
10	1.3	25,400	-	600	2,700	403	1,990		
Total	13.85	284,700	39,000	8,200	12,898	4,219	47,117		

Note: Land cost is excluded

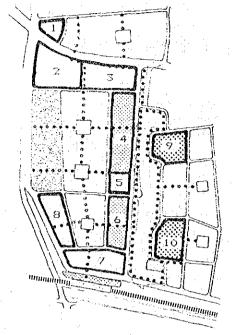




Fig. 3-8 BLDG. CONSTRUCTION SITE LAYOUT

REFERENCES

- 1. The DKI Jakarta Master Plan, The DKI Jakarta Regional Council, 1977.
- 2. Structural Development strategy, DKI Jakarta 1985–2005 (Laporan Strategi Pengembangan Struktur Jakarta Tahun 2005, Rencana Induk DKI JKT 1985–2005) DKI, JKT, April 1982.
- 3. The initial plan of urban housing renewal of Kebon Kacang Kebon Melati, Tanah Abang District, Direktorat Perumahan, May 1979.
- 4. Jabotabek Metropolitan Development Plan, Directorate of Urban and Regional Planning, Dec. 1981.
- 5. Jakarta Planning Atlas 1975, Dinas Tata Kota, Dec. 1977.
- 6. The Study of Low Cost Housing Project in Cengkareng, JICA, March 1980.
- 7. The Master Plan for the Year 2005, Aug. 1983.

3.2 SELECTION OF THE PROJECT SITE FOR FEASIBILITY STUDY

3.2.1 Criteria for Selection of Sites

The basic concept is the same as described in Chapter 3.2.1 of Volume-II, Manggarai.

3.2.2 Alternatives

General

Three alternative sites for feasibility study were selected according to the same procedure as Manggarai, as shown in Fig. 3.10 (Selection of expected feasibility study sites in Kebon Melati). The alternatives are shown in Fig. 3.-9.

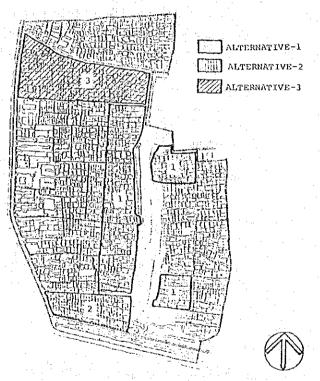


Fig. 3-9 THREE ALTERNATIVE SITE PLAN

Alternatives

(1) Alternative I

This alternative is to attempt to redevelop the housing area surrounding the Melati pond and is called the "Water Front Housing Renewal".

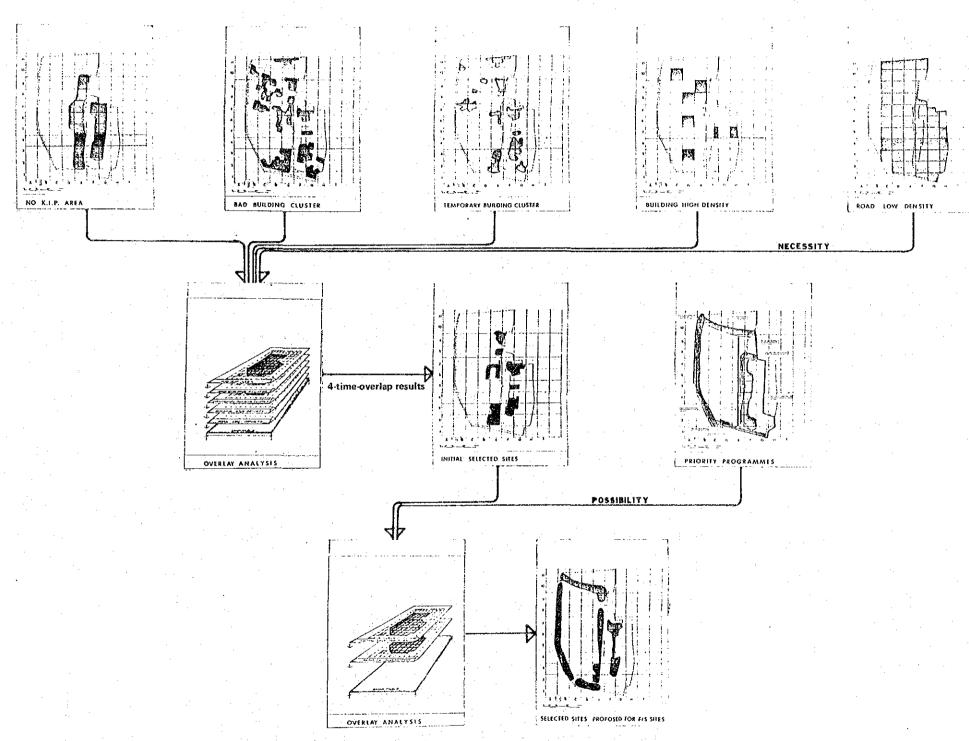


Fig. 3-10 SELECTION OF EXPECTED FEASIBILITY STUDY SITES IN KEBON MELATI

As mentioned in the previous pages, the pond should be developed so as to function as a significant facility in the city sewerage system in the near future, and in parallel with this project, the water front area is better to be redeveloped.

The area to be renewed in this context is assumed to be approximately 9.2 ha with an existing population of 5,500 persons.

(2) Alternative 2

This alternative has characteristics of encouraging the commercial function as well as housing function in front of the assumed new railway station planned by PJKA. This alternative is called the "Station Front Housing Renewal".

The alternative is to involve various projects as the relevant projects, such as station, station plaza and service roads development.

The selected area is approximately 2.2 ha and the existing population within the area is estiamted to be about 2,000 persons.

(3) Alternative 3

This alternative is to attempt to renew the existing Pasar area and the surrounding

The principal of this project is to develop a housing environment with adequate shopping space and accordingly the development of the front street is significant.

The selected area to be renewed is appriximately 5.1 ha with an existing population of 4,000 persons.

3.2.3 Evaluation of Sites

Outline of the Alternatives

Major projects involved in each alternative are assumed as shown in Fig. 3–11 and Table 3–12. In the Figure and Table, some considerations on the development method and the cost are described.

Basically, every alternative ensures a sufficient development of infrastructure such as streets, sewerage and station-front plaza.

Selection of F/S Site

All of the alternatives studied herein are necessary to be executed from an urban planning point of view. The selection of F/S site, accordingly, is one of the recom-

mendations which should be executed with a high priority.

Simultaneously, a decision on selecting the F/S site basically depends on what project should be politically advantageous in the context of the urban development programme as well as the development target of the municipality or the Government, e.g. the suitable site is changeable in accordance with the case of dominant development policy. (Ref. Table 3–13)

Table 3-13 SELECTION OF F/S SITE IN ACCORDANCE WITH DOMINANT POLICY

Case of Dominant Policy	Alternative	Alternative 2	Alternative 3
Housing Renewal	9	•	. 0
Development of Infrastructure (Especially Sewerage System)	•	}	
Encouragement of Uxban func- tion or Facilities		8	0
Countermeasure against present problems	6		0
Countermeasure against anti- cipated future problems		0	
Financial Feasibility	∮		0
Easiness of Implementation			0

The follows are basic considerations for the decision:

- In the case that housing renewal is predominant, needless to say, all of the alternatives are suitable.
- In the case that an infrastructure, especially sewerage system, development should be predominant, the Alternative 1 should be adopted for an urgent project.
- Standing on a recognition that an encouragement of urban function through commercial development, the Alternatives 2 and 3 will be suitable.
- In terms of the above, if solution of actual problems should be urgent, the Alternative 3 will be suitable for the F/S site because of the front trunk road improvement involved in this site.
- On the other hand, if a countermeasure against anticipated future problems is necessary to be built, the Alternative 2 is better to be selected.
- Considering that the most feasible project should be adopted, the Alternative 3 will be probably most feasible financially. Because, in that site, commercial development potential is assumed to be high, judging from the conditions of existing commercial accumulation.

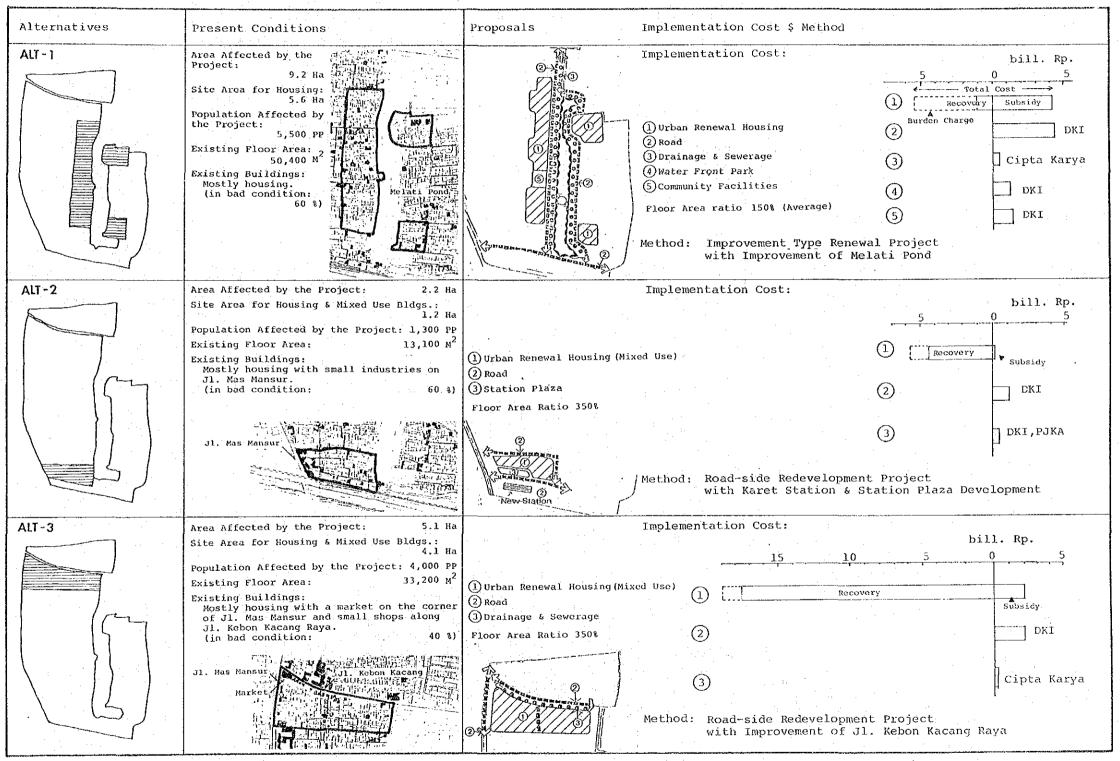


Fig. 3-11 OUTLINE OF THE ALTERNATIVES

* Staging of the implementation may be considered.

Table 3-12 GENERAL CONDITIONS OF PROJECT FINANCE - KEBON MELATI

ALT - 1	ALT - 2	ALT - 3
. Before	Refore	Refore
	Private Use Floor: 13,100 sq. c.	Private Use Flour : 33,200 sq. a.
Private Use Floor: 30,400 sq. a.		
After	After After	After
Private Use Floor : bb,000 sq. o.	Private Use Floor : 31,500 sq. B.	Private Use Floor :110,300 sq. a.
Housing Floor : 66,000 sq. n. (60,500 sq. m. for Resettlers) (If All F-21 3,100 units) (If All F-42 1,600 units)	Housing Floor : 25,400 sq. s. (15,700 sq. s. for Resettlers) (1f All F-21 1,200 units) (1f All F-42 600 units)	Housing Floor : 92,500 sq. o. (39,800 sq. o. for Resettlers) (If All F-21 4,400 units) (If All F-42 2,200 units)
Connectial Floor: -	Connercial Floor: 6,100 sq. m.	Coanercial Floor: 17,800 sq. n.
FRDJECT COST	PROJECT COST (aill. Rp.)	PROJECT: COST (mill. Rp.)
BURDEN(+) ITENS: TOTAL SUBSIDY CHARGE: REMARKS	BURDEN(*) I T E M S : IOTAL SUBSIDY CHARGE : R E M A R K S	RURDEN(#) I TERS : TOTAL SUBSIDY CHARGE: REMARKS
ENVIRONMENT IMPROVEMENT Road : 1,960 - 1,960 : DKI Jakarta Mater Supply : 97 - 97 : PAM Drainage & Sewerage : 393 - 393 : Cipta Karya Mater Front Isprov. : 107 - 107 : DKI Jakarta Station Plaza :	ENVIRONMENT IMPROVEMENT Road : 321 - 321 : DKI Jakarta Water Supply : 34 - 34 : FAM Drainage & Semerage :	ENVIRONMENT IMPROVEMENT Road : 1,053 - 1,053 : DXI Jakarta Water Supply : 23 - 23 : PAM Drainage & Sewerage : 95 - 85 : Cipta Karya Water Front Improv. : : - Station Plaza : : - Social Facilities : : - {##} LAND COST : 1,164 - 1,164 : DXI Jakarta
### ### ### ### ### ### ### ### #### ####	BUILDING CONSTRUCTION (*11) Housing & Commercial: 5,195 = 114 -:= (2.0 %) PERUMAS Social & Infra. : 475 -:- PERUMAS	######################################
(#1:Burden Charge by Autholities Concerned {##1:Revenue for Urban Renewal Project {###1:For Adjust Max. Sales Price of Residual Floor to be 200,000 Rp/sq.s.	(*):Burden Charge by Autholities Concerned (**):Revenue for Urban Renewal Project (***):For Adjust Max. Sales Price of Residual Floor to be 200,000 Rp/sq.m.	(*):Burden Charge by Autholities Concerned (**):Revenue for Urban Renewal Project (***):For Adjust Max. Sales Price of Residual Floor to be 200,000 Rp/sg.a.
Total Project Cost : 12,677 milliRp.	Total Project Cost : 8,155 mill.Rp.	Total Project Cost : 22,118 mill.8p.
r Burd. Charge by R. A.: 4,332 (45%) Urban Renewal Housing: 9,572—— f Revenue of Resid. F.: 1,102 (12%) Subsidy: 4,138 (43%)	r Burd. Charge by R. A. : 1,176 (21%) Urban Penewal Housing : 5,670 —— Revenue of Resid. F. : 4,380 (77%) Subsidy : 114 (2%)	r Burd. Charge by R. A. : 1,164 (62) Urban Renewal Housing : 20,957 ————————————————————————————————————
Relevant Public Work : 3,105 by Relevant Autholities {+4,332}	Relevant Public Mork: 485 by Relevant Autholities (+1,176)	Relevant Public Work : 1,161 by Relevant Autholities (+1,164)
Subsidy / Private Floor = 65,600 Rp./sq.m. Subsidy / Housing Floor = 65,600 Rp./sq.m.	Subsidy / Private Floor = 3,600 Rp./sq.m. Subsidy / Housing Floor = 4,500 Rp./sq.m.	Subsidy / Private Flaor = 19,400 Rp./sa.m. Subsidy / Housing Flaor = 23,100 Rp./sq.m.

Table 3-14 EVALUATION OF THE ALTERNTIVE FEASIBILITY SITES - KEBON MELATI

	ALTERNATIVE 1		ALTERNATIVE 2		ALTERNATIVE 3		REMARKS
General conditions	PRESENT	PROPOSED	PRESENT	PROPOSED	PRESENT	PROPOSED	
(1) Area Affected by the Project. (Ha) (2) Population (3) Dwelling Unit (units) (4) Housing Floor (sq.m) (5) Private Floor (sq.m)	9.2 5,500 ND ND 50,400	9.2 6,300 1,600 66,000	2.2 2,000 ND ND 13,100	2.2 2,000 600 25,400 31,500	5.1 4,000 ND ND 33,200	5.1 14,000 2,200 92,500 110,300	* See footnote. If all flats are P-4
	Note: ND: No Data Ο Δ				X : Low Priority — : Not existing		
CRITERIA FOR EVALUATION FACTORS	-				:		:
l. Contribution to the Priority Policy and Programes							
(1) Increase of Adequate Hosuing Stock (2) Station Front Plaza (3) Main Road Development		X 		Δ Ο Λ	() -)	
(4) Flood Control and Sewerage Improvement	O = 1, Δ:	= 1, X = 1	O = 1		O =	- = 2	
2. Easiness of Implementation of the Project (1) Land Ownership and Rights (2) The Resident's Agremeent to the Project (3) Coordination with Relevant Agencies	3	X X X		Δ Δ X	() 	
	X	= 3	$\Lambda = 2$	X = 1	0 = 3,	$\Delta = 1$	
3. Project Finance (1) Efficiency of Subsidy (2) Efficiency of Defrayment (3) Revenue - Producing Project	3	X X X		0 0 0	: <u>!</u>) /	
		= 3	0	= 3	0 = 1,	Δ = 2	
4. Physical Aspects "as necessity" (1) Construction of New Houses (2) Improvement of Neighbourhood Roads (3) Improvement of Public Facilities	(0 0 0 = 3		Δ Δ Ο L, Δ = 2	$\Lambda = 2$	$ \frac{x}{2} $ $ \frac{x}{x} = 1 $	

^{*} The figure "7.0 sq.m/p" is used for residual floor area.

$$P_1 = P_0 + \frac{F_1}{7.0}$$

where: P : Present Population P_1^o : Proposed Population F_1 : Proposed Residual Floor

Regarding the ease of implementation, it is assumed that the implementation programme in the Alternative 3 will be comparatively easily made by incorporating the pasar development programme into the project.

The Alternatives were evaluated in accordance with the same criteria as Manggarai, as shown in Table 3-14.

3.2.4 Selection of Site for Feasibility Study by the Government

In April 1983, JICA received the official notice on the Government's decision on the site for the subsequent feasibility study in Stage II, i.e. Alternative 2 in Kebon Melati. Of the three alternative sites recommended in the Interim Report, the Govvernment ultimately chose this Alternative taking into account the following points.

- Improvement of the water front of the Melati pond should be planned and implemented in close coordination with the future sewerage treatment programme; however, when and how the programme be implemented, still remain as question, and hence the implementation of Alternative 1 should wait for the time being.
- Whereas, the construction of the new Karet station is considered rather committed along with the betterment programmes of the Western Line of PJKA, and this would necessitate the development of a station-front plaza that may be realised by the implementation of Alternative 2.
- The implementation cost to be involved in Alternative 2 is relatively small as compared with other Alternatives.
- To mitigate the increasing traffic congestion in the central area, improvements of existing road network, particularly eastwest bound roads, are urgently needed; for this purpose, Alternative 2 can include the construction of a new road running along the north of the Banjir Canal.

The Government decision was confirmed at the meeting held at the beginning of State II Study and the feasibility studies were performed to the site of Alternative 2.