

**FINANCING INFRASTRUCTURE PROVISION
IN NEW TOWN DEVELOPMENT IN INDONESIA:
Exploring the Feasibility of Applying the Developer's Contributions Scheme
in the Bumi Serpong Damai New City Project**

By

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Abstract

This study explores the feasibility of applying the developer's contributions scheme in new town development in Indonesia, with particular reference to the case of Bumi Serpong Damai (BSD) new city project. The premise behind this study is that there is a need to review the existing arrangements of infrastructure provision in Indonesia.

Four separate investigations are conducted. The last two of them function as 'pre-feasibility' analysis to the proposed contributions scheme. These are: (i) conceptual and empirical frameworks of infrastructure provision; (ii) the nature of new town development in Indonesia, with the BSD new city project taken as a case study; (iii) infrastructure provision policies in Indonesia; and (iv) the experiences of the State of New South Wales in Australia in applying the scheme in question. Further to these 'external' analysis, an 'internal' analysis is also conducted in order to investigate : (i) the likely support of key stakeholders for the proposed scheme; and (ii) the suitability of the proposed method of implementing the contributions scheme for existing administrative and legislative structures currently applied in Indonesia.

Results of the analysis reveal that the proposed contributions scheme as well as its proposed method of implementation is applicable, given that certain conditions of application must apply. These conditions include the provision of necessary measures to minimize the impacts of the application on low-income home buyers and on the developer, and to apply a special treatment to the local residents. For an immediate application, it is also recommended to regard the BSD new city project as a pilot project.

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Responsibility for the views expressed in this dissertation is of course mine alone.



Table of Contents

	page
Abstract	i
Acknowledgement	ii
Table of Contents	iii
List of Maps and Figure	vi
List of Tables	vi
Chapter 1, INTRODUCTION	1
1.1 Background of the Study	1
1.2 Aims and Scope	4
1.3 Methodology	5
<i>A. Data Collection</i>	5
<i>B. Analysis</i>	6
1.4 Outline	7
Chapter 2, CONCEPTUAL AND EMPIRICAL CONTEXTS	8
2.1 Conceptual Context	8
2.2 Empirical Context	11
2.3 Concluding Remarks	13
Chapter 3, AN OVERVIEW OF THE NATURE OF NEW TOWN DEVELOPMENT IN INDONESIA : THE CASE OF THE BUMI SERPONG DAMAI NEW CITY PROJECT	14
3.1 The Nature of New Town Development In Indonesia	14
3.2 The BSD New City Project	15
<i>A. Key Elements of New Town Development Process</i>	17
<i>B. Profiles and Interests of Key Stakeholders</i>	22
3.3 Concluding Remarks	27
Chapter 4, INFRASTRUCTURE PROVISION POLICIES IN INDONESIA	29
4.1 The 'Conventional' Arrangements	29

4.3 The 'Newly-developed' Arrangements	33
4.4 Concluding Remarks	36
Chapter 5, A COMPARATIVE MODEL : THE APPLICATION OF THE DEVELOPER'S CONTRIBUTIONS IN INFRASTRUCTURE PROVISION IN NEW SOUTH WALES, AUSTRALIA	37
5.1 Basic Concepts of the Developer's Contributions	37
5.2 The Applications of the Developer's Contributions In the State of New South Wales	38
<i>A. Past Experiences</i>	38
<i>B. Major Features of Current Applications</i>	40
5.3 Concluding Remarks	42
Chapter 6, THE FEASIBILITY OF APPLYING THE DEVELOPER'S CONTRIBUTIONS SCHEME	44
6.1 Regarding the Interests of Stakeholders	44
<i>A. Interests of Stakeholders</i>	44
<i>B. The Likely Support of Stakeholders for the Proposed Contributions Scheme</i>	46
6.2 Suitability of Existing Administrative and Legislative Structures	50
<i>A. Proposed Method of Implementation</i>	50
<i>B. Suitability of the Proposed Method for Existing Administrative and Legislative Structures</i>	51
6.3 Concluding Remarks	53
Chapter 7, CONCLUSIONS AND RECOMMENDATIONS	54
7.1 Conclusions	54
7.2 Recommendations	55
Appendices	
<i>A : Hierarchy of Regulations in Indonesia</i>	
<i>B : Town Planning Procedures in Indonesia</i>	



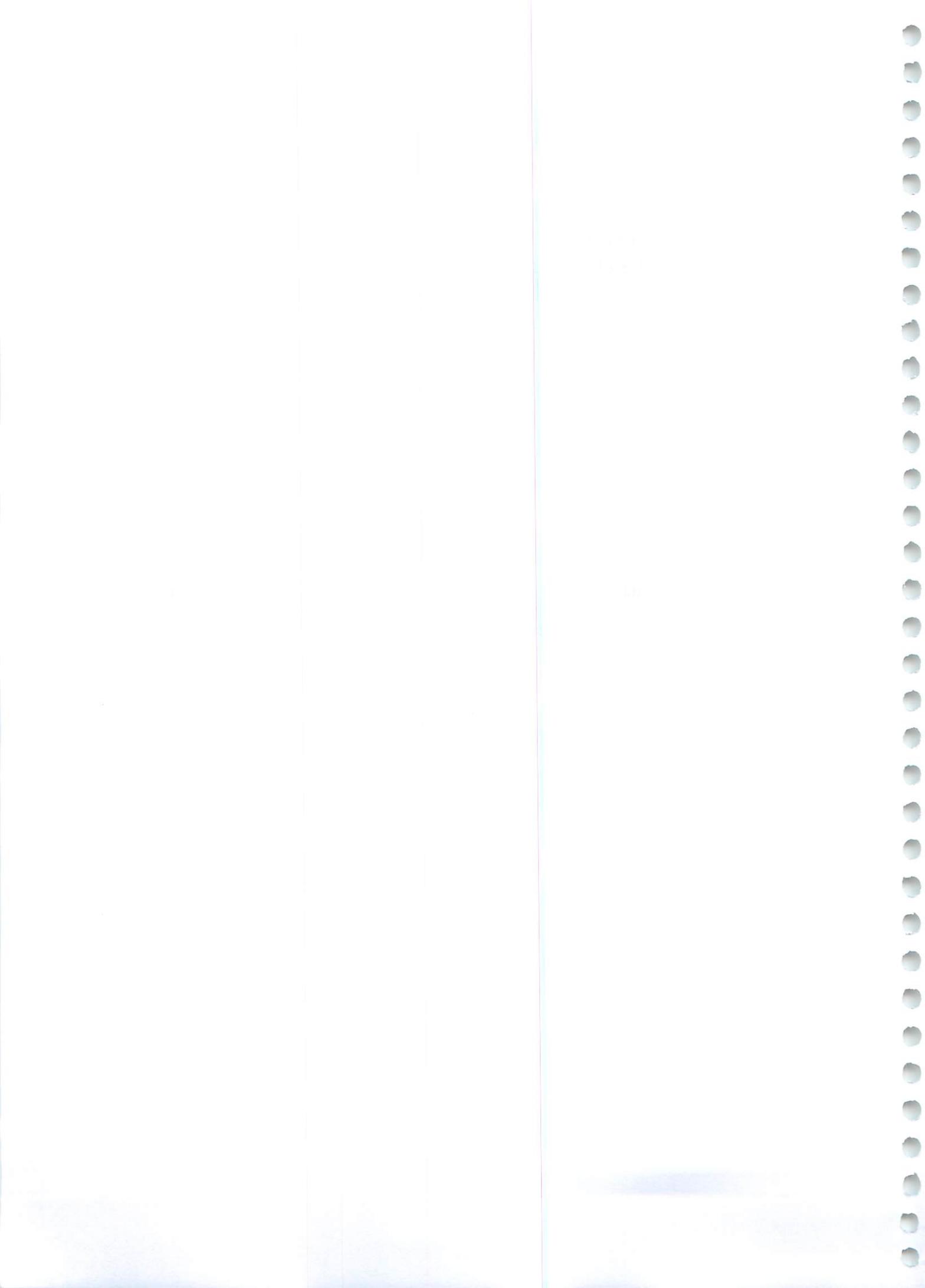
C : Procedure of Land Acquisition

D : Environmental Planning and Assessment Act 1979 No. 203

E : What Do Developers Do If the Quantity of A Good Demanded Exceeds the Quantity Supplied

F : The Structure of Governance in Indonesia

References



List of Maps and Figure

	page
<i>Maps</i>	
Location of the Bumi Serpong Damai New City Project	2a
Hypothetical Economic Development Belt in the Region	16a
Development Phasing	17a
Conceptual Zoning for Housing and Land Use Plan	17b
Implementation Area of Development Phase 1	20a
<i>Figure</i>	
Financial Flow for the Urban Sector	30a

List of Tables

II.1 Characteristics of Public and Private Goods	8a
III.1 Land Acquisition and Land Development Capacities	21a

Chapter 1

INTRODUCTION

This chapter provides the relevant background to this study, the focus of which will be the way infrastructure is provided in new town development in Indonesia, with particular reference to the case of Bumi Serpong Damai (BSD) new city ¹ project. The project is a private new town development located near Jakarta.

This chapter consists of four parts, namely background, aims & scope, methodology and outline of the study.

1.1 Background of the Study

This study is based on the premise that there is a need to review generally the existing arrangements of infrastructure provision in Indonesia. Three main rationales are offered to justify this premise:

First, the increasing social awareness about a fair distribution of costs and benefits among stakeholders involved in such a development. The present arrangements, where the government is the main infrastructure provider, tends to put the government in the position of heavily subsidizing the developer, and later, the home buyers ². A question of equity arises when it is considered that in most cases, consumers of the development are middle-to-high income urban dwellers ³;

¹ New city, new town, new community, and other terms, are commonly used interchangeably. They are to describe, regardless of scale, a newly-developed urban settlement (see Clap 1971, 44-48; Molenkamp 1990, 6-7). This study will use the term 'new town' because it is considered the most commonly used term. However, in naming the BSD project, this study will preserve the term 'new city', because the developer prefers to use this term, as they consider their project is larger than a 'town'.

² See a broad discussion in Chapter 4.

³ Unstructured interviews with officials of the Department of Public Works, 31 January 1991 and the Department of Home Affairs, 21 January 1991; for a broader empirical context, see also Feagin and Parker 1990, 30-32 and 254-255).

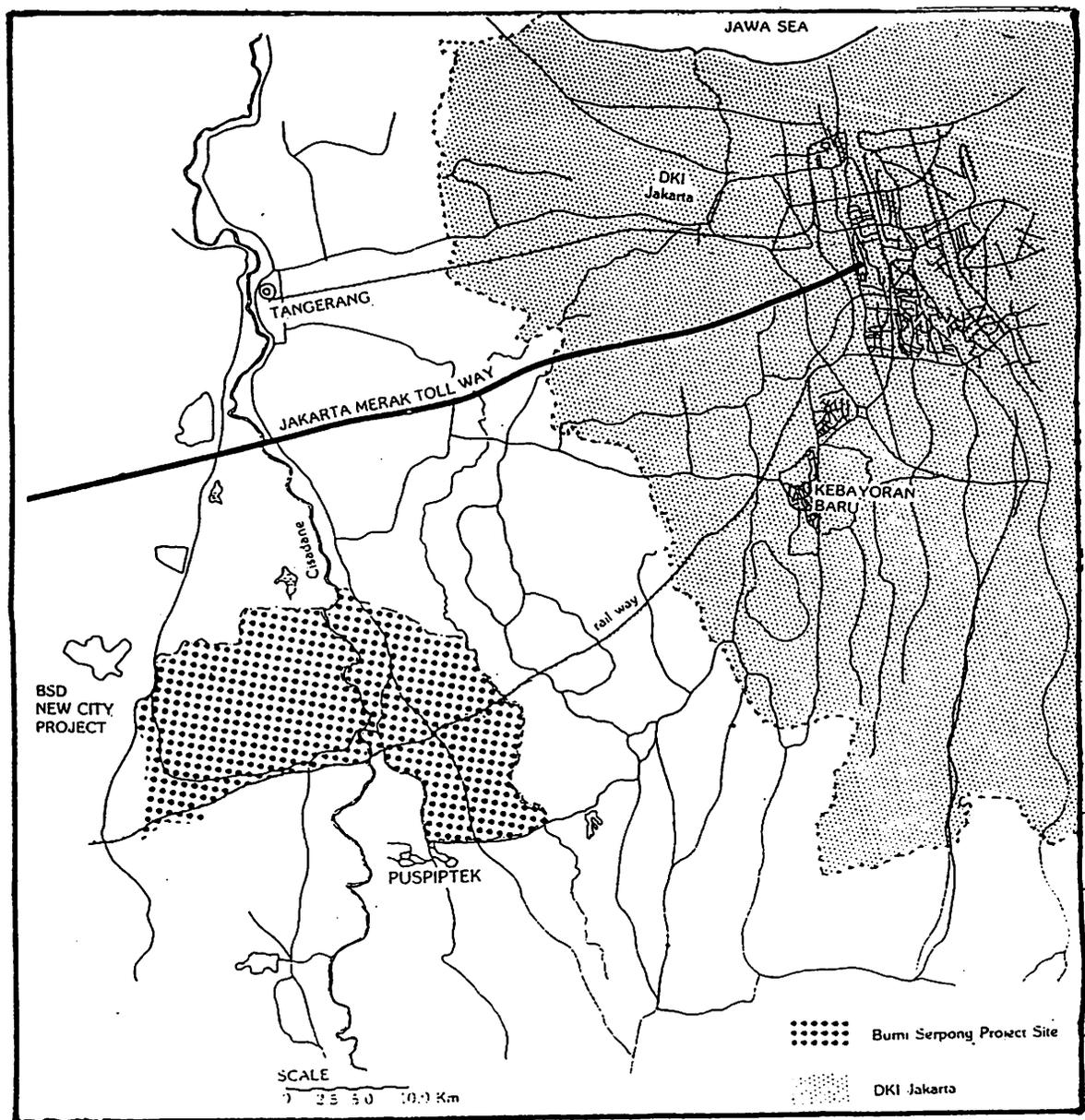
Second, the application of one of the arrangements which deals specifically with new town (or real estates) developments has adversely impacts adjacent areas of a particular development, and the city as a whole, because it is limited to that development area only. The Regulation where this arrangement is based only imposes the provision of necessary infrastructures *inside* the development area to the developers (Regulation of the Minister of Home Affairs No 5 of 1974), and leaves the provision of infrastructures at the urban and regional context (i.e. the primary and secondary networks of infrastructures) to the government; and

Third, with the decreasing financial capabilities of the government, as compared to the increasing need of society, this situation creates heavy social costs, such as congestion outside most new town developments in/near Jakarta. The inadequacies of urban services outside those developments, such as the one which causes traffic congestion, are burden to the whole society.

The BSD new city project provides a good example of the above issue. It is one of several large-scale new town developments in Indonesia, most of which are now being planned or in the early stages of implementation. It is one of the few, and certainly the largest, privately-initiated project. Others, such as Cibinong and Driyorejo, are more or less government-initiated projects (Molenkamp 1990, 43). Consequently, BSD raises issues of infrastructure finance in a sharper perspective than other.

Even though the first development phase of the project is now being implemented, no clear commitment concerning who is going to provide such infrastructures as major arterial roads connecting the proposed town and other centers nearby has yet been determined. The developer, possibly based on the practice discussed earlier (which is based on the Regulation of the Minister of Home Affairs No. 5 of 1974), is only prepared to provide infrastructures on the following basis :

(a) roads : within the BSD boundary;



LOCATION OF THE BUMI SERPONG DAMAI NEW CITY PROJECT

(Source: PT. Bumi Serpong Damai 1985b, no page number)

(b) other infrastructures (i.e. drainage, sewerage, water supply, incineration plant and electricity & telephone) : up to 50 per cent of their land development costs (PT. Bumi Serpong Damai 1985b, 8.2).

Meanwhile, the government, which is expected to provide the rest, is unable to fully satisfy this expectation, due to various structural ⁴ (for the Local Government) and actual ⁵ (for the Central Government) problems in their financial capabilities. However, a number of temporary solutions have been established, such as in the involvement of the developer in the development of a toll road connecting the City of Jakarta and the proposed town ⁶. The developer, in this case, is expecting returns in the forms of accessibility for their home-buyers, and financially, of toll-fees.

A number of methods of financing infrastructure provision are currently being used elsewhere. These include : direct revenue, on- and/or off- site investments by developers, borrowing, government grants and inter-government transfers (Kirwan 1991a, 11-17). All involve the provision of funds for investment, whether by the government or by developers, and the service of debt. This study will focus on exploring the feasibility of applying the on- and off-site investments by developers - here referred to as the developer's contributions - on two grounds. *First*, it is largely drawn on the principle of 'user-pays', so minimizing the involvement of the government whose resources are

⁴ According to Law no 5/1974 concerning Principles for the Conduct of Government Administration in Local and Provincial Levels (*Pokok-pokok Pemerintahan Di Daerah*), the government at local level is the most responsible agency for urban developments. However, structurally local governments only have a limited financial capability, because most of the government's revenues from taxes, retribution and others go to central government, and only few (7.2 percents in 1981/1982) was allocated to local and provincial governments (see Department of Public Works - Directorate of City and Regional Planning, United Nations Development Program and United Nations Center for Human Settlements 1985, 89).

⁵ Central government is in fact the most powerful agency in Indonesia regarding financial capability. However, due to a decrease in its main sources of income, i.e. exports of oil and natural resources, there has been a policy shift since the early 1980's: the government has been encouraging the private sectors to take larger portions (see, for example, Presidential Speech, August 16, 1982).

⁶ This toll road is supposed to be constructed side by side with the existing railway connecting the old Serpong township and Jakarta. The land acquisition activities for the road are currently (1991) underway.

considered limited and belonged to the whole society (not only these particular users). *Second*, it usually covers the whole area of urban infrastructure, whether potential revenue generators, such as water supply, or not, such as open space. This proposed contributions scheme is expected to represent a 'breakthrough' to the somewhat stagnated conventional way of infrastructure provision. Its immediate purpose is to allow the project to proceed. Further, the scheme in question aims to provide a firm and fairer basis for the society to conduct its future developments.

1.2 Aims and Scope

This study aims to provide a mechanism for the provision of infrastructures which are under the statutory responsibility of local government. A test will be conducted in the provision of roads and other 'basic' infrastructures, such as water supply, in the BSD new city project. Specifically, the study will involve the following objectives:

- (1) to develop a conceptual framework through which the manner and methods of infrastructure provision can be evaluated;
- (2) to outline key elements of new town development processes in Indonesia, and to identify the interests of key stakeholders;
- (3) to outline current infrastructure development policies generally used in Indonesia and to demonstrate their inappropriateness in the face of the new challenge of urban development;
- (4) to review a comparative model, i.e. experiences of the State of New South Wales-Australia, in applying the proposed contributions system and to study its relevance to the Indonesian situation;
- (5) to analyze the feasibility of applying the scheme. Further to the above pre-feasibility analysis (points 3 & 4), this section will elaborate two major issues:
 - a. the likely support of key stakeholders, with regard to their respective interests;

- b. the suitability of the proposed method of implementing the contributions scheme for existing legislative / administrative structures currently applied in Indonesia;
- (6) to formulate recommendations.

1.3 Methodology

A. Data Collection

Most of the data used in this study are secondary data. These include :

- (1) Reports, plans and minutes of meeting of the developer and its consultants;
- (2) Policies and laws / regulations of the government, involving Central, Provincial (West Java) and Local governments (the Regency of Tangerang);
- (3) Publications other than the above, including those on the experiences of State and Local Governments of New South Wales, Australia in applying S.94 of the EPA (Environmental Planning and Assessment) Act 1979, studies on local finance and infrastructure provision schemes in Indonesia, etc.

The above data have been collected from their respective sources, i.e. offices of the developer and its consultants, offices of the government in Indonesia, and libraries.

To gather insights into the nature of the problems, interviews with several key persons involved in the planning process of the project were conducted in January 1991. These include officials of the Directorate of City and Regional Planning - Department of Public Works, Directorate of Urban Development - Department of Home Affairs, and officials of the developer and its consultants.

B. Analysis

This study will proceed through the following sequence:

Step 1 : Information Input

A comparative model: experiences of the State of NSW in applying the contributions scheme

The nature of new town development, the BSD case: the development process and interests of key stakeholders

The Indonesian infrastructure provision system

The conceptual and empirical contexts

Step 2 : Problem Formulation: pre-feasibility analysis

There are similarities in major features of the Indonesian and the NSW systems

Urban infrastructure may not be regarded as public goods

Current arrangements of infrastructure provision are inappropriate

There is a need to review the existing arrangements of infrastructure provision in Indonesia, and to look for an appropriate alternative

Step 3 : Analysis of Possible Solution

Analyzing the feasibility: an internal point of view. Criteria:

- the likely support of key stakeholders;
- the suitability of the proposed method of implementing the contributions scheme for existing legislative/administrative structures currently applied in Indonesia.

Step 4 : Recommendations

Conclusions and Recommendations

1.4 Outline

This report is structured as follows :

Chapter 2 presents the conceptual and empirical contexts which establish a framework for the study;

Chapter 3 provides an overview of the nature of new town development in Indonesia, with special reference to the BSD new city project. Two issues will be advanced : key elements of the development process; and the interests of key stakeholders, especially with regard to the characteristics of privately-initiated proposals;

Chapter 4 discusses current policies for infrastructure provision in Indonesia. This includes a review of the 'conventional' and the 'newly-developed' arrangements of infrastructure provision in major urban development;

Chapter 5 reviews a comparative model in financing infrastructure provision, i.e. the experiences of the State of New South Wales - Australia. The chapter begins with a review of its basic concepts, proceeds to its application: past and current experiences, then suggests its relevance for the study;

Chapter 6 analyses the feasibility of applying the developer's contributions scheme in Indonesia, from an 'internal' point of view. This includes analyzing the likely support of stakeholders and the suitability of the proposed method of implementing the scheme in question for existing administrative and legislative structures currently applied in Indonesia;

Chapter 7 presents conclusions and recommendations of the study.

Chapter 2

CONCEPTUAL AND EMPIRICAL CONTEXTS

This chapter provides a framework within which better ways of funding urban infrastructure can be justified. The conceptual context investigates the extent to which the concepts of public - private goods and externalities, and the standard criteria of equity and efficiency, can or should be applied. Extending the conceptual analysis, the empirical context explains the context in which the existing arrangements are applied. Both contexts will later be adopted to develop a more appropriate arrangement.

2.1 Conceptual Context

Conceptual issues will partly be analyzed through elaborating the concept of public - private goods. Public goods are defined as goods "...which all enjoy in common in the sense that each individual's consumption of such a good leads to no subtraction from any other individual's consumption of that good" (Samuelson 1954, 179). Private goods, meanwhile, are goods "...which can be parcelled out among different individuals...", and the total of the goods are the total of each individual's consumption (Samuelson 1954, 179) ¹.

Table II.1 shows other characteristics and examples of such goods.

The above description provides the means for analyzing the nature of a good, such as a road. A road is often regarded as a public good. Two situations justify this understanding, namely : (a) the 'exclusion principle' is rarely applied to any users - except in road toll - and, (b) in most cases, the government usually acts as provider.

¹ Note that Samuelson actually uses the terms "collective consumption goods" for public goods, and "private consumption goods" for private goods. The shorter pair of terms are used here because they are considered the most commonly used terms.

Table II.1 CHARACTERISTICS OF PUBLIC AND PRIVATE GOODS

PUBLIC GOODS	!	PRIVATE GOODS
1. they are jointly consumed (in full); no subtraction from any other individual consumption;		1. the consumption is rival; the goods can be parcelled out among different individuals;
2. the 'exclusion principle' does not operate;		2. those who do not pay should be excluded;
3. market mechanism does not work properly;		3. market mechanism operates on the above principle;
4. can better be provided by the government (assuming the number of people in the served society is large enough to gain a certain level of efficiency);		4. can be provided either by the government or the private sector;
5. the sum of the marginal benefits of all consumers equals marginal costs of the goods;		5. each consumer's marginal benefits equal marginal costs;
6. the marginal cost of providing the good for an additional person is zero;		6. the marginal cost of providing the good for an additional person is not zero;
7. e.g. national security.		7. e.g. a slice of bread.

Sources: Samuelson 1954, 179-180; Mansfield 1988, 497-503; and Boadway 1979, 31.

However, there is a situation where this interpretation is not valid, i.e. in a congestion situation. Here, the consumption of one person indeed subtracts the consumption of others. Moreover, this situation occurs quite often as the limited capacity of roads is obvious. Therefore, as also stressed by Kirwan (1991a, 37-39), roads, and indeed all urban infrastructures, are not a 'public good' ².

This new understanding can be associated with the second concept, i.e. the concept of externalities. Externality, or 'third party effects', is defined as effects which occur when "...an activity by a set of economic agents enters the utility functions of other consumers, or the production functions of other producers not directly involved with the activity", and, furthermore, "the gains and losses from these effects are not properly reflected in the competitive market system" (Tresch 1981, 90-91) ³.

The consumption of a congested road provides a good example of the application of the concept of externalities : the consumption of one individual alters the utility function of (an)other individual(s). Therefore, as suggested by most scholars of public finance / public policy (see, for example, Tresch 1981; Due and Friedlaender 1973; Mansfield 1988), the intervention of the government is justified in order to maintain efficiency.

A discussion of the application of the concepts of public - private goods and externalities, particularly when it leads to the formulation of public policy, requires an examination of the criteria of equity and efficiency. Equity is a condition where "...those who benefit from the supply of infrastructure bear an equivalent share of the cost ", even though this also requires that "...those who do not have adequate means to pay for infrastructure to gain access at least to the socially desirable minimum provision" (Kirwan 1991a, 34). Meanwhile, efficiency

² Margolis, in response to Samuelson, says : " possibly the only goods which would seem to conform to Samuelson's definition (of public goods) are national defense and the aged lighthouse illustration", and not "...such common public services as education, hospitals and highways..." (1954, 185).

³ "In most cases, this second condition is redundant, since externalities satisfying the first condition are almost never handled properly by the competitive market system" (Tresch 1981, 91).

means a condition where "...resources are devoted to the socially valuable ends ", and a condition where resources are used at their least possible amount to satisfy those ends (Kirwan 1991a, 32).

When these criteria are applied to the case discussed above, three points can be highlighted :

- (1). those who consume the (congested) road should bear some costs;
- (2). the burden of costs should include all categories of costs, not only their private costs; and
- (3). the government should intervene in order to maintain efficiency.

There are 4 categories of costs associated with the use of a road :

- (1). private costs, or costs "...paid directly by motorists";
- (2). congestion costs, i.e. costs "...one motorist imposes on another when the number of vehicles using a road reaches the point at which drivers start to impede each other's movement";
- (3). environmental costs, i.e. costs "...imposed by users of the road system on non-road users..." and
- (4). public sector costs, i.e. costs associated with the provision and maintenance of roads, traffic signs, etc.

(Le Grand and Robinson 1984, 173-174).

This study is concerned with the last 3 categories of costs.

These costs should be imposed to consumers on the grounds of equity. However, for efficiency considerations, the application may be limited to roads whose provision is regarded above certain least social amount needed, such as highways. The imposition may

take such forms as direct charges, developer's contributions or developer's direct investment (Kirwan 1991a, xi).

2.2 Empirical Context ⁴

Many countries are seeking new ways to finance their infrastructure provision. The trend is toward a larger portion coming from the private sector rather than from the public sector. Basically, there are two types of shift that are now in-fashion, namely privatization, i.e. the transfer of a part or the whole parts of public sector responsibilities to private companies; and the application of the user-pays principle while responsibilities are still held by the public sector (Pack 1987, 525-6; Kirwan 1991a, xi-xii). The latter may take such forms as direct charge and/or developer's contributions. In some cases, both types are applied simultaneously ⁵. Justifications for such a shift are generally efficiency and equity considerations : the private sector, i.e. a competitive and profit-maximizing private sector, is likely to be more efficient in doing the job, and consumers do not consume the same amount of, or even the same access to, the services provided (Pack 1987, 527-30). Further, these justifications are strengthened by the financial problems the government is currently facing ⁶.

The situation in Indonesia is relatively similar. The existing arrangement in infrastructure provision (and maintenance), which relies heavily on (central) government sources, is perceived to be no longer appropriate given the present problems of the state's financial limitations. The introduction of a new program by the Department of Public Works, namely the Integrated Urban Infrastructure Development Program (IUIDP), for example, indicates this situation :" the program was developed against the backdrop of a steep decline in state

⁴ Some parts of this section will further be discussed in Chapter 4.

⁵ The consortium of private companies who invested in the provision of Cawang-Tanjung Priok part of the Jakarta Intra-urban Toll-way in Indonesia, for example, is gaining returns from users through toll-fees.

⁶ In a report for the governments of the OECD countries (1987, 11), for example, it is said that the traditional arrangement in constructing and maintaining road system, i.e. strong reliance on government sources, "...can not solve the transportation problems of the 1980's". Members of the OECD countries include Australia, the United Kingdom and Japan.

revenue caused by the drop in oil prices in the early 1980's, limiting the capacity of the Central Government to continue financing the major part of local infrastructure investment" (Bastin and Smoke 1991, 13). Under this program, local government is encouraged to "...assume their statutory responsibilities for the provision and adequate maintenance of urban infrastructure more effectively" (Bastin and Smoke 1991, 13). The feasibility of this program is supported by the notion of "cost-recovery", i.e. that the community (users) is responsible for covering their provision and maintenance costs (Sidabutar 1989, 15) ⁷ .

The current situation of infrastructure provision in Indonesia is indeed dubious. Close observation of the capabilities of local governments, as expressed in many studies (see, for examples, Thalib 1968; Smith and Smith 1971; Van Leeuwen 1975; Bastin 1990; Quigley 1990; and Bastin and Smoke 1991) finds that the percentage of income (from rates and taxes) local governments statutorily able to collect is extremely low, as compared to their statutory expenditure responsibilities ⁸. To make up the balance, a large portion of their expenditure is derived from direct grants or subsidies received from the Central Government (Department of Public Works - Directorate of City and Regional Planning, United Nations Development Program and United Nations Center for Human Settlement 1985, 89-90). The increasing shortage of central government funds supports the proposition that, without the notion of 'cost recovery' as mentioned above, the increasing need for such infrastructure and the present inadequacy of services in existing urban areas can not be satisfied properly.

In the past, however, this conventional arrangement did achieve a good performance. Between 1970 and 1980, for example, there was an increase of some 300 % in the length of asphalt roads throughout the country (Hugo 1987, 42). At that period, the economy was benefitting from the oil and timber booms, supplemented by aid from donor countries for the

⁷ Further discussion of this program will be given in Chapter 4.

⁸ See footnote 3 in Chapter 1 for illustration. This issue has interestingly been discussed in Devas (ed), 1989a.

provision of infrastructure. This favorable economic climate no longer exists and government receipts have diminished.

2.3 Concluding Remarks

This chapter has raised two main issues relevant to the study:

- (1) urban infrastructures may not be regarded as public goods, so users should contribute to their provision (and maintenance);
- (2) the existing arrangement for infrastructure provision can not be maintained given both the government's current financial problems and the principles of equity and efficiency;
- (3) Current shift in public-services provision in other countries as well as in Indonesia is toward a greater involvement of the private sector. That is to apply the user-pays principle, such as through developer's contributions and/or direct charge, and privatization.

Having advanced the main framework for the study, the following chapter will overview the nature of new town development in Indonesia - with special reference to the BSD new city project in order to find out the extent to which this framework might be applied.

Chapter 3

AN OVERVIEW OF THE NATURE OF NEW TOWN DEVELOPMENT IN INDONESIA: THE CASE OF THE BUMI SERPONG DAMAI NEW CITY PROJECT

This chapter explains the nature of new town development in Indonesia, with special reference to the BSD new city project. The first part of the chapter describes the nature of new town development in Indonesia. Subsequent sections deal with the BSD case, with an emphasis given to key elements of its development process and profiles & interests of key stakeholders. The description concludes with an identification of the issues.

3.1 The Nature of New Town Development in Indonesia

New town development is not new in the history of modern town development in Indonesia. Since early this century, following the enactment of the Decentralization Act 1903 - which awarded *gemeente* (municipality) status and some degree of autonomy to several large cities in Java (Rasman 1988, 2-3) - many newly-developed residential areas appeared, such as Menteng in Jakarta and Candi in Semarang (Department of Public Works 1990 a, 14). In 1948, after independence, a landmark in this sort of town development, i.e. the development of Kebayoran Baru satellite town, was started (Kompas newspaper August 2, 1987, I and XIII). Subsequently, many other new towns were built, such as Palangka Raya (Central Kalimantan ¹, started in 1955), Pekanbaru (Riau, started in 1962) and Banjar Baru (South Kalimantan, started in 1965) (Molenkamp 1990, 39).

The aims of most of the developments were :

- (1) to build new provincial or municipal capitals, such as was the case with the last three new towns mentioned above;

¹ Formerly known as Borneo.

- (2) to provide accommodation for workers of industrial and mining activities - often called a 'company town' -, such as in Bontang, East Kalimantan;
- (3) to support the transmigration scheme, such as in Arga Makmur, Bengkulu. (Department of Public Works 1990a, 15; Danisworo 1984, 227 - 249); and
- (4) to accommodate urban growth such as in Kebayoran Baru.

While most of those early examples were government-funded projects, except in the case of 'company town' developments, most of the recent ones, especially those of small-scale housing projects scattered in or near metropolitan areas of Jakarta, such as Pondok Indah, and Bandung, such as Setrasari, are of private sector initiatives. One of the most recent, and the largest in scale, now in the implementation stage of its first development phase, is the Bumi Serpong Damai (BSD) new city project.

3.2 The BSD New City Project ²

The project was initiated, in 1984, by a consortium of 10 private real-estate developers (PT. Bumi Serpong Damai 1985 a, i). Its main objective, from the developer's point of view, is to develop "...a self-contained new city that is economically justifiable" (PT. Bumi Serpong Damai 1985a, 5). Located about 25 Kms south-west of the CBD of Jakarta, and administratively bounded to the Regency of Tangerang, the project is planned to house 600 000 people ³ from all categories of home buyers (low to high income) ⁴, mostly 'over-

² Most parts of this section are drawn from my own involvement with the project (1984 - 1988). As a consultant (planning), I was in-charge of plan preparation and consultation with relevant government and private agencies.

'Bumi Serpong Damai' literally mean 'peace on the land of Serpong'. In this project, these words are used as the names of the proposed new town, and of the Consortium who builds the town, i.e. PT. Bumi Serpong Damai. (PT. is the abbreviation of *Perseroan Terbatas*, or limited company).

³ This figure was a subject of disputes among all agencies involved in the planning process of the project. The figure later accepted, as indicated in the approved *RUTRK* (see *Appendix B: Town Planning Procedures In Indonesia*), is 800 000 (see Local Regulation of the Regency of Tangerang No. 4 of 1989, Section 14).

⁴ Four categories of income, according to standard lot size of unit acquired, are included here, namely : high income (standard lot size of unit : 500-1500 Sq.M), middle income (200-500 Sq.M), low income (100-200 Sq.M) and '*Perumnas*' (80 Sq.M) (PT. Bumi Serpong Damai 1985b; 7.5).

spilled' population of Jakarta (PT. Bumi Serpong Damai 1985 b, 4.2), on an effective development area of some 6000 Ha. The expected job opportunities generated were in a range of 140 000 - 180 000 by the end of its last development phase (2005 - onward) (PT. Bumi Serpong Damai 1985a, 5).

The economic viability of the project lies in the facts that, *first*, it is located within the metropolitan region of Jakarta, and *second*, it is also located close to the most-developed economic development belt in Indonesia which crosses through northern side of the Island of Java to the southern part of the Island of Sumatera (see *Hypothetical Economic Development Belt in the Region*, attached). Both facts suggest that the expectation for the proposed town to become a 'growth center', and to generate a large number of job opportunities is reasonable. On the housing market, another fact seems promising: the market in the region is considered a 'seller's market' (the quantity of the good demanded far exceeds the quantity supplied) : the estimated unit of houses demanded in the Jakarta and Tangerang areas between 1985 - 2005 alone is approximately 1 375 000 houses, while target sales the BSD project is going to achieve between the same period of time is only 60 000 - 120 000 units (PT. Bumi Serpong Damai 1985 b, 4.4). In reality, according to sources, experiences in the marketing of houses built in the first stage of the first development phase of the project proved that the quantity demanded far exceeded the quantity supplied : the houses sold out in their first months of marketing ⁵.

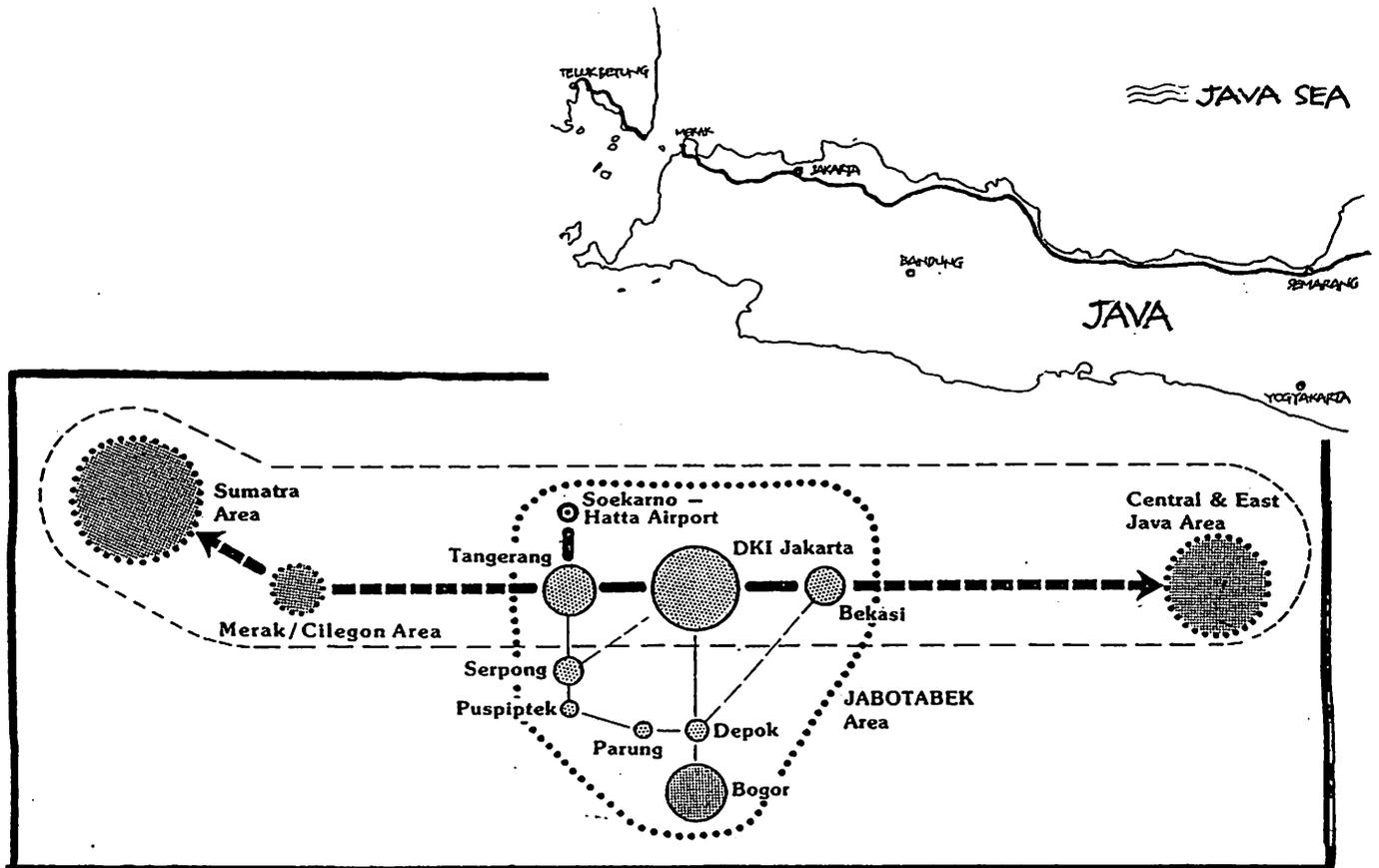
Assuming an urban core scenario ⁶, the development is to be conducted in 4 phases, namely :

(a) preparatory phase (1985-1991); (b) inducement phase (1992-1998); (c) accumulation

⁵ Tempo weekly magazine in its 11 August 1990 edition (Pp.93-94) reports the housing market situation as 'booming': consumers, disregarded price as far as it was considered 'reasonable', bought every single stock available. For some people, buying a house was regarded as a good investment. In Citibank alone, one of the distributors of home loans, the increase of loans given to middle-to-high income home buyers was around 30-40 per cent in the year.

⁶ There are three development scenarios of the project, namely:

(a) urban core scenario: "a self contained with a strong local economic base fully integrated within the regional (*Jabotabek*) economic context";



HYPOTHETICAL ECONOMIC DEVELOPMENT BELT IN THE REGION

(Source: PT. Bumi Serpong Damai 1985b, 2.3)

phase (1999-2005); and (d) maturity phase (2005-onward). Although there have already been some minor adjustments to these initial development phases, the initial framework is still applicable.

A. Key Elements of New Town Development Process

Four basic steps can be identified in a development of this kind, namely : (a) plan preparation; (b) land acquisition; (c) construction; and (d) habitation. These steps are not necessarily sequential, since in most large-scale new town projects, the process is iterating and/or some activities are conducted simultaneously.

(1) Plan Preparation

Several plans have been made to support the project. These include : the Pre-study, which was prepared by consultants on behalf of the developer for internal use; the *RUTRP*⁷ (*Rencana Umum Tata Ruang Perkotaan* - Regional Spatial Development Plan) for the Serpong Area, which was prepared by the Department of Public Works (has not been approved by the President); and the *RUTRK* (*Rencana Umum Tata Ruang Kota* - Urban Spatial Development Plan) for the proposed Serpong township, which was prepared by the Local Government of the Regency of Tangerang (approved, and legally titled as *Peraturan Daerah* or Local Regulation No. 4 of 1989).

The main contents of these plans can be summarized as follows:

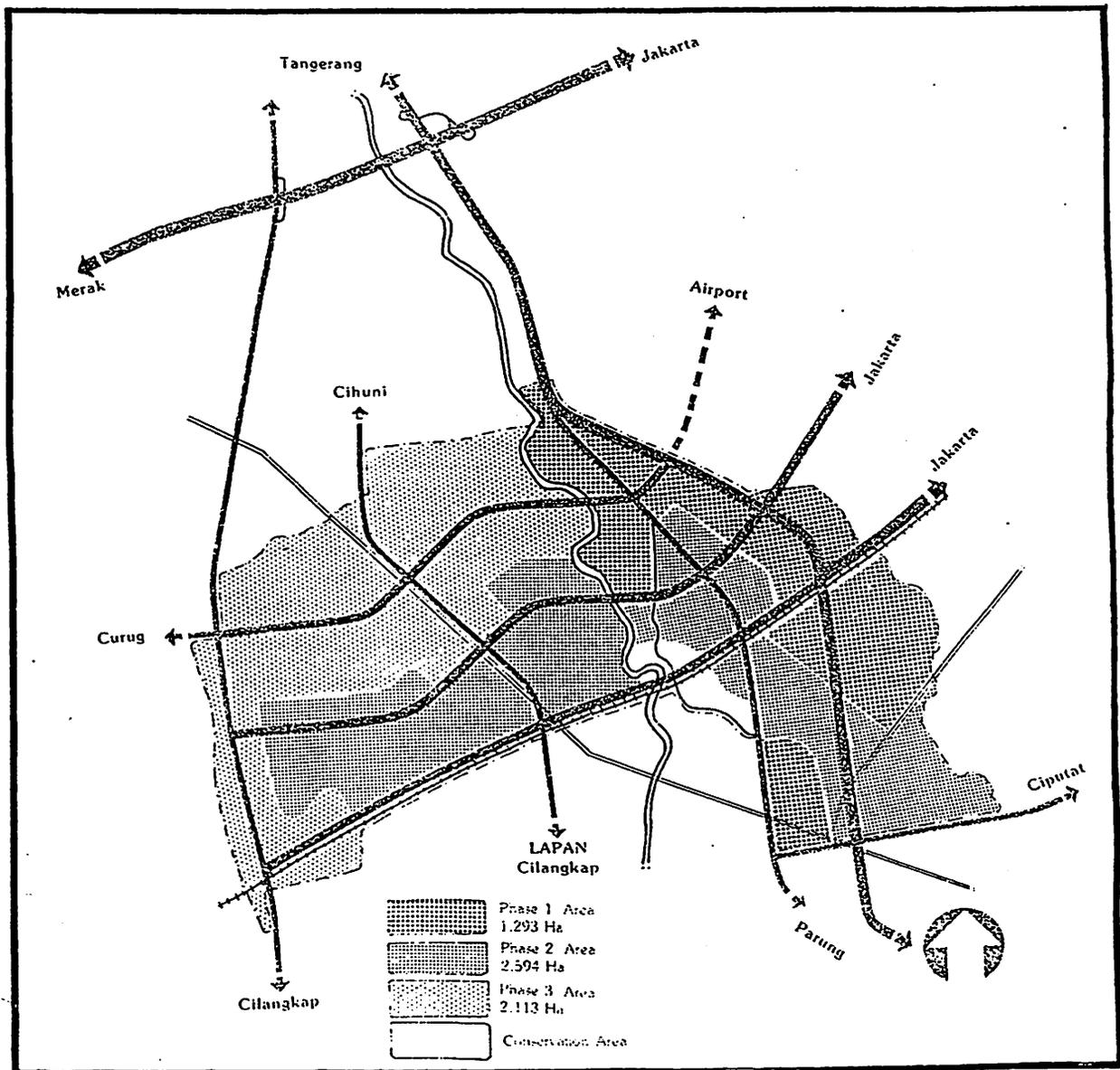
(b) regional sub-center: "a sub-center in ...(the Regency of) Tangerang performing urban center functions for Serpong and the surrounding areas";

(c) dormitory town: "a large residential area within the Jakarta metropolitan area".

(PT. Bumi Serpong Damai 1985a, 11).

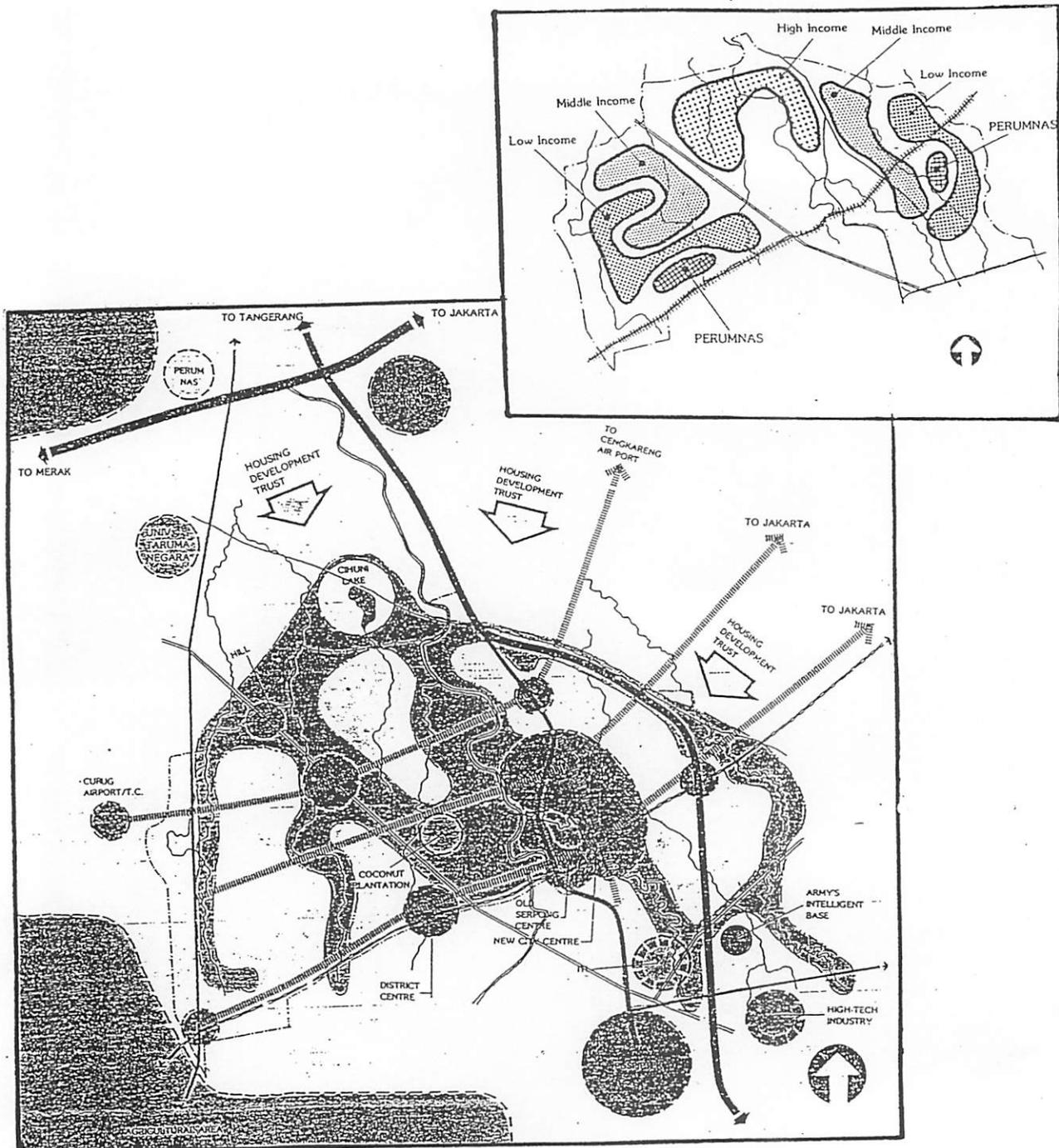
The urban core scenario is the most favorable scenario for the developer.

⁷ The preparation of the *RUTRP*, as well as the *RUTRK*, was legally based on the Joint Degree of the Ministers of Home Affairs (No. 650-1595) and Public Works (No. 503/KPTS/1985) of 1985, concerning Tasks and Responsibilities in Town Planning (see *Appendix B*). The government has tended to apply these general procedures of town planning, due to the absence of a separate regulation to guide new town development in Indonesia (see also Koswara 1986).



DEVELOPMENT PHASING

(source: PT. Bumi Serpong Damai 1985b, 6.8)



CONCEPTUAL ZONING FOR HOUSING AND LAND USE PLAN

(Source: PT. Bumi Serpong Damai 1985b, 7.4)

(a) The Pre-study

This plan primarily served as a pre-feasibility study, through which the idea of developing a privately-initiated new town on this metropolitan fringe was established. The plan consists of:

(i). justification, goals and objectives, and principle concepts of the project; (ii). development possibilities, preliminary concept plan and plan for the first development phase; (iii). economic base of the new town; (iv). financial analysis of the project; (v). recommendations for further actions.

With regard to infrastructure provision, the developer is prepared to provide the following :

(i). roads : within BSD boundary; (ii). other infrastructures, i.e. drainage, sewerage, water supply, incineration plant, and electricity & telephone : up to 50 per cent of their land development costs (PT. Bumi Serpong Damai 1985b, 8.2). The rest is assumed to be borne by the government.

(b) The RUTRP

This plan may to some degree reflect the interests of the Central Government. Its main contents include: (i). population projection and plans for physical, social & economic development; (ii). structure plan (mainly zoning and hierarchy of urban centers); and (iii). stages of development.

Concerning infrastructure provision, the plan indicates the following :

(i). water supply: Serpong area will be served by a water treatment plant (WTP), which is to be built in Serpong for supplying Jakarta and its surrounding regions. At the initial stage (year 1990), 400 liter/sec. can be taken from this source ⁸ for use in the new town. Another source of water supply is well-water. This is applicable for those who have not been served by piped water; (ii). drainage, sewerage, solid waste management : the plan only indicates the network system , but not the method of provision; (iii). electricity and telephone : will be served by their respective agencies (*PLN - Perusahaan Listrik Negara* or state-owned

⁸ Up to the time I visited the project (early 1991), this WTP had not yet been built .

electricity company; and *Perumtel - Perusahaan Umum Telekomunikasi* or state-owned telecommunication company).

(Dept. of Public Works-Directorate of City and Regional Planning 1986, 26-48).

(c) The RUTRK

This plan may reflect to some degree the interests of the Local Government. Generally, its contents are similar in structure to those of the RUTRP, except that the planning area is smaller so that the degree of detail is greater. However, concerning infrastructure provision, as in the *RUTRP*, this plan only indicates the network system and other technical considerations, but not the way to provide them. This applies to all infrastructure indicated above (see Part 2, sections 23 and 24 of the Local Regulation No. 4 of 1989).

(2) Land Acquisition

Around 20 per cent of land needed for the proposed town had been acquired before the project was commenced, i.e. before 1984. The 10 participating developers bought the land which had originally belonged to a state-owned rubber plantation company (*PT. Perkebunan XI*). The remaining 80 per cent, which belongs mostly to the local people of the area, is expected to be completely acquired in 10 years from the starting date of 1984 (*PT. Bumi Serpong Damai 1987 a, 2*).

The general procedure of land acquisition, especially for individual lots belong to the locals, is shown diagrammatically in *Appendix C*. The diagram shows the central role of the Committee for Land Release (*Panitia Pembebasan Tanah*), which is appointed according to the Letter of Decision (*Surat Keputusan*) of the Minister of Home Affairs No. 96 of 1971. The Committee has 2 functions in this process : *first*, to guarantee that the transaction is conducted fairly for both parties; *second*, to validate the transfer of land ownership⁹. This

second function is important, because in the project area the transfer of land ownership will only be allowed between the initial land owners and the developer. In other words, other agencies will not be able to buy any piece of land in the designated area of the proposed new town, even at the discretion of the initial land owners, because the transaction will not be validated by those officials. The legal basis of this practice is the so-called '*Ijin Prinsip*' (literally means 'principle permission' - an approval for conducting land acquisition in a designated area for a real estate/new town project), issued by the Governor of the Province of West Java (Letters of Decision No. 593.82 / SK.152.S / AGR.DA / 99.84 up to 593.82 / SK.161.S / AGR.DA / 99.84 - see PT. Bumi Serpong Damai 1987a, 1). Under this *Ijin Prinsip*, the developer is empowered to assume sole authority to acquire land there.

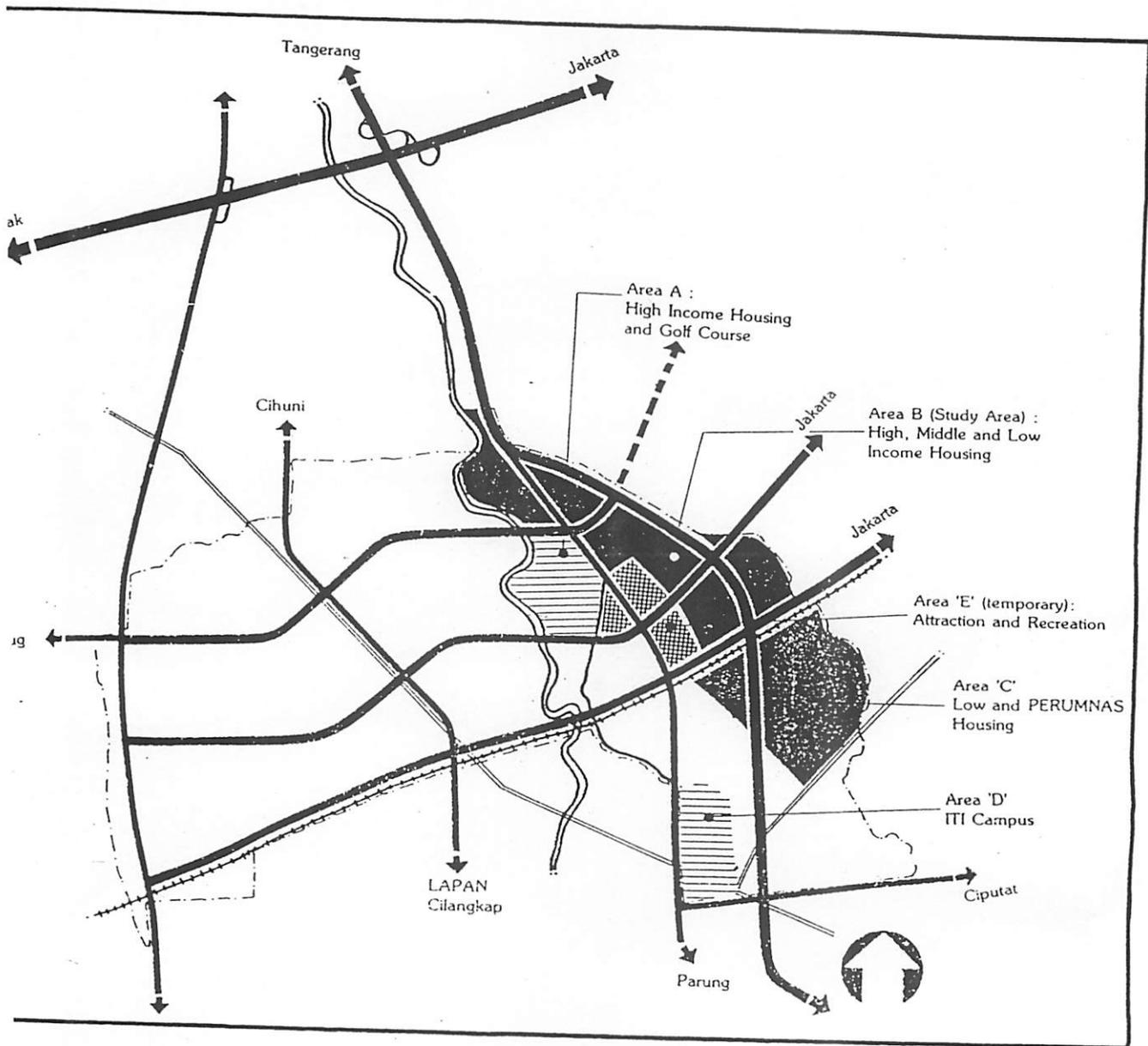
Several problems concerning land acquisition have arisen since the commencement of the project. Most are associated with land price : the developer tends to value the land much lower than that expected by land owners ¹⁰. This has usually resulted in the refusal or the reluctance of land owners to sell their land. However, due to the absence of other buyers, some of the owners, especially those in need of cash, later changed their minds. The others simply resisted transferring ownership. To date, the progress of the developer in acquiring land is supported by the huge availability of unproductive land, which owners tend to be willing to sell.

(3) Construction

The construction of the first development phase of the project was started in 1987. This step consists mainly of land clearing and development (e.g. cut & fill, transportation, spreading and compacting), construction of buildings and other structures (e.g. infrastructures) and finishing. Up to now (1991), around 300 Ha of land have been developed. This includes

⁹ This second function is normally conducted by the *Camat* (Head of *kecamatan* or sub-district) and the *Lurah* (Head of Village), in the case of simple land ownership transfer between two individuals outside a designated real estate/new town development area.

¹⁰ The developer's calculations were based on the market value of the land before the project, while the land owners expect more recent valuations.



IMPLEMENTATION AREA OF DEVELOPMENT PHASE 1

(Source: PT. Bumi Serpong Damai 1985b, 9.1)

houses for 'Perumnas', low and middle-income home buyers and such infrastructures as local roads, open space / playgrounds and social facilities (mosque and church).

The progress of land development is significantly influenced by such circumstances as the government's monetary policy. In direct contrast to the 1990 situation ¹¹, in 1991 the market for housing seems to be decreasing sharply, due to the government's 'tight money policy'. The policy, which was launched in August 1990 with one of its aims to decrease the level of inflation (Ramli 1991, 30), has strongly hit industries, including the construction sector. The increase in interest rates has both limited the capabilities of developers (to develop affordable houses) and the consumers (to buy developed houses). According to the President of *REI* (*Real Estate Indonesia* - Association of Indonesian Real Estate Developers), nationally, house sales are estimated to decrease by 50 percents (in the year), and perhaps 80 per cent of members of the *REI* of middle-to-low classes will collapse (Tempo weekly magazine 9 March 1991, 89-90; 16 March 1991, 90-91).

The initial estimation of the capacity of the developer to develop land, as compared to that of land acquisition, is shown in the following table.

Table III.1 LAND ACQUISITION AND LAND DEVELOPMENT CAPACITIES

Year	1984	1987-1997 (1st phase)	1998-2005 (2nd phase)	2006-onward (3rd phase)
Capacities (Ha)				
Land Acq.	1355	2710	1935	
Land Dev't		874	1959	1657

Source : PT. Bumi Serpong Damai 1987b, 26.

Note :1) This phasing is different from that previously mentioned. Some changes in the development circumstances might be responsible;

2) This Land Development excludes development for the Arterial Road.

¹¹ See footnote 5.

(4) Habitation

The step following land acquisition is habitation, i.e. the settlement of new dwellers. According to an official of the developer (interview with Dr. Jo Santoso, Chief Town Planner of the BSD project, 24 January 1991, in Serpong), most of the houses developed above have been sold, even though some of them had not been inhabited up to the time I visited the project (January 1991).

B. Profiles and Interests of Key Stakeholders

The four key stakeholders involved are: the government, the developer, the local people and the (expected) home buyers. Their profiles and interests, particularly with regard to the provision of roads and other 'basic' infrastructure, are indicated as follows :

(1). The Government

The three tiers of government, namely the Regency of Tangerang, the Province of West Java (both because of their administrative jurisdiction) and the Central Government, are all concerned with the project. However, each regards the project differently. The governments of the Regency of Tangerang and the Province of West Java tend to regard the project as a 'national' project, or a project which represents the interests of 'national' (real-estate) developers and the Central Government. Two factors contribute to this attitude. *First*, the initial concept of the project was historically developed, from its very earliest stages, by the developer with officials of the Central Government. *Second*, these lower tiers of government realize the financial consequences of such a large-scale project. Being traditionally dependent upon subsidies and grants from the Central Government, it is unrealistic for them to assume the roles of key players in this project. Therefore, the initial expectations of these governments were that supports to the project (if it eventuated), e.g. in terms of infrastructure provision, should come from the Central Government.

The Central Government, meanwhile, considering the statutory authorities of these lower tiers of government (re. messages of Law no. 5 of 1974), has urged the government of the Regency of Tangerang in particular to take a major role. This attitude was shown, for example, in the suggestion to establish the so-called *UPTDs* (*Unit Pelaksana Teknis Dinas*, literally the Technical Executing Unit of *Dinas*¹²), new organs within *Dinases* at local government level, to deal with (technical) problems associated with such a new town development¹³. In general, central government seems convinced that this project is of the national interests and, therefore, ask supports from all tiers of government¹⁴.

To date, however, no clear commitments have been made concerning the division of responsibilities between all tiers of government, and between the government and the developer, especially with regard to the provision of, for example, roads outside the development area but made necessary as a consequence of the development. In general, all parties seem to rely on the 'conventional' arrangement of roads provision, where all tiers of government are responsible for particular categories of road¹⁵, but with a note that the developer and the Central Government should make a significant contribution.

(2). *The Developer*

As mentioned earlier, the developer actually comprises of 10 smaller real estate developers. Some (such as PT. Pembangunan Jaya), are well-known as prominent members of the *REI*

¹² A *Dinas* is an agency within a provincial or a local government which deals with a specific function, such as public works (including roads provision / maintenance), health and industry. See *Appendix F: The Structure of Governance in Indonesia*.

¹³ I personally attended several meetings (1986-1987) between all tiers of the government and the developer at which this matter, among others, was discussed.

¹⁴ See, for example, minutes of the meeting between the Jabotabek Planning Board, PT. Bumi Serpong Damai and the government of the Regency of Tangerang, chaired by the Deputy of Regional and Local Affairs of the *Bappenas* (*Badan Perencanaan Pembangunan Nasional* - the National Planning Board), on 30 August 1986. Concerning the participation of the developer in urban development / housing provision, the chairman of the meeting revealed particularly two points, namely: (a) that the role of the private sector in the development is increasing; and (b) that the private sector should be assisted, so as to maintain the existing favorable development climate. Relating to this proposed new town, its specific role in housing provision and employment generation is often said to be the importance of this project to national interests.

¹⁵ See 4.2 The 'Conventional' Arrangements for further discussion concerning this issue.

(*Real Estate Indonesia* - The Indonesian Association of Real Estate Developers). By joining forces in such a consortium, they are committed to run the business as a group, instead of as individual developers.

Generally, the interests of the developer are identified as *being to conduct the development in a manner which is economically justifiable*. This can be achieved through :

(a) *the full participation of other stakeholders, mainly the government and banks / financial institutions, to cover the financial and social/political costs of the development*. This interest involves such issues as: (i) requesting government assistance in the process of land acquisition, in the preparation of town plans, and in the provision of the necessary infrastructure, especially for that outside the development area, as is usually the case in other new developments; (ii) requesting banks / financial institutions to assume the risks in the investment ¹⁶.

(b) *to provide a high quality living environment, through, for example, a good access to urban centers nearby, so to increase the competitiveness of the new town over other estates in the region*. The importance of this interest lies in the fact that the expected new dwellers of this new town are the over-spill of the population of Jakarta. Two immediate consequences of this situation: they tend to demand timely available and highly quality urban infrastructure and public facilities, and the need for such a good accessibility ¹⁷.

¹⁶ See PT. Bumi Serpong Damai 1985b, 1.1-1.2 and Ciputra (1986) for further elaboration concerning this issue. The importance of Mr. Ciputra's opinion lies in the fact that he is one of the commissioners of PT. Bumi Serpong Damai, and well-known as the man who developed the idea of this new town development.

¹⁷ This second demand conforms with findings of Adibroto (1990, 165-178). Comparing the two new towns of Bekasi and BSD, which are both located on the fringe of the Jakarta Metropolitan Region, she reveals that 'distance' and 'accessibility' seem to be the most important factors affecting residents's commuting activities in both towns. Commuting activities, furthermore, are conducted by most residents (91.41 per cent of respondents in Bekasi and 64.29 per cent of respondents in BSD), because they are engaged with such urban activities as working, shopping and recreation in Jakarta and other centers nearby.

(3) *The Local People*

Since no data are available concerning the entire population of local people in the development area ¹⁸, it is assumed that the profiles of those who lived in the villages where the first development phase of the proposed new town project is located are representative of the other local residents.

In 1985, there were 14 757 persons living in the villages, with the rate of population growth around 3 per cent/annum (PT. Bumi Serpong Damai 1987b, 5). Most residents were no longer predominantly engaged by agricultural sector activities. Around 60 - 80 per cent were identified as being engaged in urban informal sector activities, whether through commuting to nearby cities or by establishing their own non-agricultural activities in the villages. Concerning land ownership, these people held 70,8 per cent of the available land (PT. Bumi Serpong Damai 1987b, 7) ¹⁹.

Regarding attitudes toward the new town project, the locals can be grouped into two categories : (i) those willing to sell their land; and (ii) those who do not wish to sell their land, or only sell part of it and prefer to stay in the villages. The former group consists largely of those who hold unproductive land (for agricultural activities) and, who have, therefore, already engaged in urban informal sector activities. The latter group consists mainly of those who hold productive land and are still engaged in agricultural sector activities, and/or those who have established their non-agricultural activities in the villages, such as small-scale trading activities (*warung*) and transportation (*tukang ojek*). Given the achievement of the developer in land acquisition, i.e. estimated to be only around 50 per cent of the total land required (in 1991) and the limited availability of unproductive land especially in the western part of the development area, it is estimated that the number of the

¹⁸ Among the reasons are : (a) there was, in 1983, a change in the administrative boundaries of the villages; and (b) at the time I conducted my field survey (December 1990-January 1991), the results of the 1990 national census at village level had not been published.

¹⁹ Some parts of the land (*tanah wakaf*, 6.4 per cent of the total) belong to a clan or a group of people.

first group (i.e. those willing to sell their land) is, or will be, lower than that of the second group. The availability of job opportunities after the construction of the project started, and its habitation, will enlarge the number of this second group. In other words, most land owners will simply resist to sell their land, except if the developer is able to offer a favorable benefits, such as higher prices for the land.

Summarizing the above profiles, the interests of the locals can therefore be identified as follows:

- (a). those willing to sell their land : their interests are in *higher land prices and/or other benefits*;
- (b). those who wish to stay in the villages : their interests are in acquiring the opportunity to become a part of the new development (see Bumi Serpong Damai 1986a), such as, with regard to roads provision, *to obtain access to centers of urban activities nearby*.

(4) The (Expected) Home Buyers

The developer of this new town is expecting to house home buyers from almost all levels of income (see footnote 4 in this chapter). Most of these expected buyers are estimated to be the spill-over from the population of Jakarta and of its surrounding regions.

Profiles of (the majority of) home buyers of urban housing in Indonesia, in term of their affordability ratio, can be established from findings of Struyk et.al (1990, 251-58) ²⁰. These include :

- (a) on average, those who are now holding ownership of housing are willing to spend 23.63 per cent of their income on housing, with a range from 16.92 per cent in small cities to 27.66 per cent in Jakarta;

²⁰ It is important to note that the median income of home owners and renters investigated were Rp160 000 and Rp133 000, respectively (equivalent to A\$103 and A\$86, both at 1991 currency rate).

- (b) on average, renters are spending 14.38 per cent of their incomes on housing, with a range from 13.63 per cent in small cities to 17.73 per cent in Jakarta;
- (c) Factors affecting the variety of affordability ratios between cities include the conditions of the housing market (in Jakarta/larger cities, the market is tighter than in smaller cities), and the quality of infrastructure services (better services in larger cities). Meanwhile, factors affecting the variety of affordability ratios between home-owners and renters include the tendency of home-owners to improve their houses for 'investment' purposes.

This study assumes that some portion of home-buyers in the BSD new city will be those whose incomes are around the median ²¹. Given the types of houses in the proposed new town as a point of reference, the other portion is middle-to-high income home buyers.

The developer of this new town, at least since the marketing of their first constructed houses, is emphasizing the availability of a range of high quality urban infrastructure and public facilities at lower developed-land prices and various financial schemes in their advertisements. It is reasonable, therefore, to estimate that home buyers are in fact expecting these on the ground. With the above broad categories of home buyers in mind, their expectations form the following formula of interests :

- (a) *for those in the low-to-middle income group : the provision of urban services that are economically affordable and appropriately timed;*
- (b) *for those in the middle-to-high income group : the provision of high quality urban services that are appropriately timed.*

3.3. Concluding Remarks

From the discussion in this chapter, the following key points can be highlighted :

²¹ Given the above median, it is estimated that majority of those home-owners and renters are low-to-middle income people.

- (1). There is a long history of new town development in modern town development in Indonesia. However, the accompanying long history of government domination in town development activities has not created a strong framework through which future new town development, particularly that of private-sector initiative, can be conducted. In other words, new town development in Indonesia is still largely dependent on government intervention / favorable policy;
- (2). Current evidence shows, however, that a shift to an increasing role for the private sector in urban development is occurring. In the construction sector this is still fragile : changes in circumstances, such as government monetary policy, can strongly affect its existence;
- (3) The provision of such 'basic' infrastructures seems to favor the interests of all stakeholders. However, there exists a sharp contrast between the government and the developer concerning who is actually responsible for providing them.

These points allow the discussions in the following chapter of infrastructure provision policies in Indonesia to be placed in their proper context.

Chapter 4

INFRASTRUCTURE PROVISION POLICIES IN INDONESIA

This chapter presents an overview of infrastructure provision policies in Indonesia. Two major issues will be discussed, namely the division of function between all agencies involved, and the sources of finance in such a provision. Both issues are covered in the two sub-headings of the chapter, namely the 'conventional' and the 'newly-developed' arrangements concerning the policies.

4.1 The 'Conventional' Arrangements

With regard to issues stated above, i.e. the division of function between agencies involved and the sources of finance in the provision, there are three identifiable arrangements of infrastructure provision in Indonesia. *Firstly*, the arrangement which involves mainly government agencies, and uses government capital investments; *Secondly*, the arrangement which involves state-owned enterprises and uses part government subsidy and part contributions from consumers; and *Thirdly*, the arrangement which places the developer as the provider, and uses funds from the developer and/or the home-buyers. The following description elaborates these arrangements in detail.

Under the first arrangement, the responsibility for the provision of infrastructure, such as roads, is divided between various agencies of central, provincial and local governments, according to the category of the road. State arterial roads, i.e. roads which connect capitals of provinces, are the responsibility of Central Government, i.e. Directorate General of Road Development (*Bina Marga*) of the Department of Public Works. Lower categories of arterial roads, i.e. provincial roads and roads of strategic value to the interests of Provincial Government are the responsibility of Provincial Government, while roads of categories

lower than the above (including local roads), are the responsibility of Local Government¹. In addition to roads, the arrangement also applies to such infrastructures as water supply, drainage, and solid waste & waste water management. The notion 'responsibility' means that these levels of government are given authority to plan, design, construct and manage the use of the infrastructure. Legal basis of this arrangement is Government Regulation (*Peraturan Pemerintah*) No. 14 of 1987 concerning the Transfer of Parts of Public Works Tasks of the Government to Provincial and Local Governments (*Penyerahan Sebagian Tugas Pemerintah Di Bidang Pekerjaan Umum Kepada Daerah*). This regulation is basically derived from Law No. 5 of 1974 concerning the Principles for the Conduct of Government Administration in Provincial and Local Levels (*Pokok-pokok Pemerintahan Di Daerah*). Among other issues, this law stipulates that local government is given autonomy to manage its own 'household'.

This division of function, however, has not been supported by an appropriate financial arrangement. Article 10 of the regulation stipulates that funds needed for the provision of such infrastructure should first be taken from the respective levels of government's own budgets. In contrast, a close observation to the financial capabilities² of local governments, under current financial arrangement of all tiers of government, show that such a stipulation is dubious. The central government, in practice, provides and manages most of funds needed for such provision (see *Figure 1: Financial Flow for the Urban Sector*), whether in such forms of block grants (e.g. *Inpres* grant³), sectoral expenditures of central government's

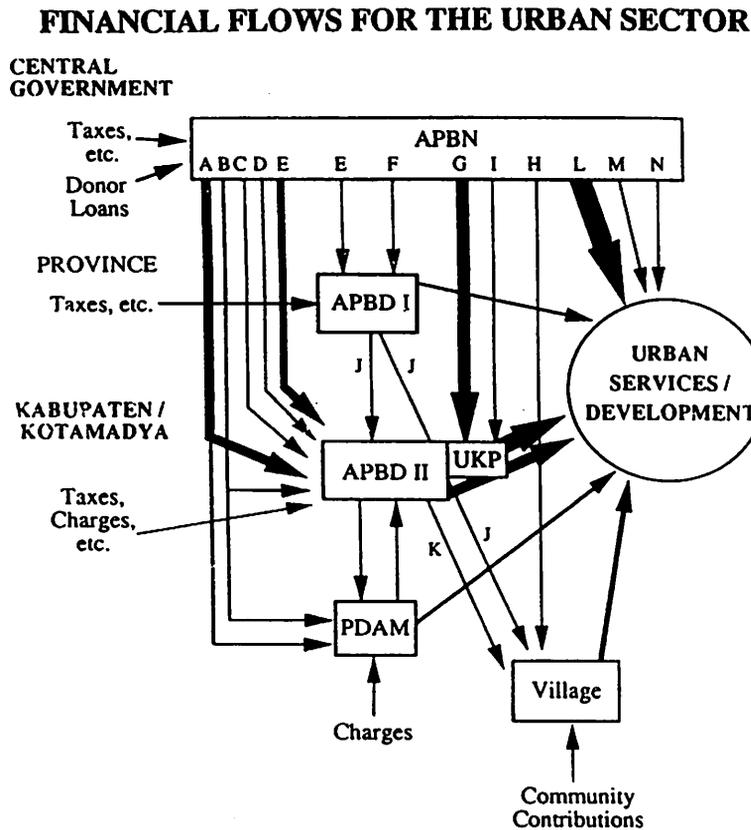
¹ Local government may take either such forms as regency (*kabupaten*) or municipality (*kotamadya*). A regency covers predominantly rural areas with a capital which may sometimes be regarded as 'urban', while a municipality covers mainly urban areas.

Urban affairs are generally the responsibility of local government, except for the Special Capital Region (*Daerah Khusus Ibukota*, or *DKI*) Jakarta, which is managed by a provincial level of government.

² Local government's own incomes, such as from local taxes, for example, at average only accounted for 2.3 percents of total government revenue including all grants and loans in 1983/1984 (Devas (ed.) 1989a, 55). Even though, since 1986, a new property tax system, i.e. *PBB* (*Pajak Bumi dan Bangunan*, or Land and Building Tax), has been introduced, it is still estimated that the increase in local government's own revenue is very marginal compared to its total revenue (less than 1.5 percents) (see Kelly 1989; Devas (ed.) 1989a).

³ *Inpres* is the abbreviation of *Instruksi Presiden* (Presidential Instruction). *Inpres* grant is a form of block grant given by the Central Government, on the discretion of the President, to governments of lower levels. It is usually intended to cover basic necessities, such as roads, markets and schools.

Figure 1



y:

- APBN : State Government's Budget
- APBD I : Provincial Government's Budget
- APBD II: Local Government's Budget
- PDAM : Local Government Enterprise for Water Supply
- UKP : Cash and Accounting
- D : Donor Loans on-let
- E : Government Equity
- F : Government Loans
- G : *Inpres* Market Loans
- H : Staff Grant
- I : *Inpres* Grant for Provincial Government
- J : *Inpres* Grant for Local Government
- K : *Inpres* Grant for Village Administration
- L : Sectoral *Inpres* (primary schools, health, roads, etc.)
- M : Provincial Government Grants to Lower Levels
- N : Local Government Grants to Villages
- O : Sectoral Budget of the Department of Public Works
- P : Sectoral Budget of the Department of Transportation
- Q : Sectoral Budget of the Department of Home Affairs

ote :

- KP : usually covers all *inpres* grants for local government
- pres* (*Instruksi Presiden*, or Presidential Instruction) : block grants of the Central Government to lower levels
- abupaten/Kotamadya* : Local Governments (Regency / Municipality)
- source : After Devas (1989a, 251)

departments, or others. Consequently, in most cases of infrastructure development, higher levels of government tend to intervene in one way or another, on the ground that local government is resourceless in terms of management and financial capabilities. The other problem is the inability of local government to estimate the amount of such inter-governmental transfers in medium-to-long terms, due to their nature as a 'yearly-basis' subsidy.

It is understandable, therefore, that the service level of such urban infrastructures in Indonesia has not achieved a satisfactory standard. The piped system of drinking water (provided by the *PDAM - Perusahaan Daerah Air Minum*, or the local government enterprise for water supply), for example, can only serve around 24 percents of all urban households. The rest obtains water for household consumptions from such sources as pump (22 percents), well (41 percents), peddlers (11 percents) and even directly from river (2 percents) (Struyk et.al 1990, 52). With the decreasing financial capabilities of the central government, as happened in the last few years and is estimated to continue in years to come, the above situation might be expected to become worse ⁴, unless an innovative 'breakthrough' is found.

The second category of arrangement, i.e. that which involves state-owned enterprises, is applied for such infrastructure as electricity and telecommunication. These enterprises, i.e. the *PLN (= Perusahaan Listrik Negara*, or State-owned Electricity Company) and the *Perumtel (= Perusahaan Umum Telekomunikasi*, or State-owned Telecommunication Company), are authorized to deal directly with their consumers. However, their main sources of revenue are not merely the consumers of their services, but also the government in such forms as subsidized loans. This sort of involvement has enabled the enterprises to provide services in a more equitable way, i.e. to service as many consumers as possible at

⁴ This is not to mention another major weakness of such an arrangement, i.e. the distortion between what is perceived (by the Central Government) to be the needs of the local governments and their actual needs, which often occurs in the provision of services elsewhere in the country.

various levels of contribution capabilities, but simultaneously, has decreased the capability of the enterprises to expand their services, due to the government's restriction to increase consumers's contributions. In *Perumtel*, for example, to provide one telephone line, a new customer only contributes Rp200 000-Rp500 000 out of a total cost of Rp3.7 million (Tempo weekly magazine 29 September 1990, viii). It is claimed that this is one reason for the long waiting list of those who wish to be served by the company.

For new (town) developments, another arrangement exists. According to the Regulation of the Minister of Home Affairs (*Peraturan Menteri Dalam Negeri*) No. 5 of 1974, the developer has responsibility (a) to provide and maintain for a certain period of time such infrastructures as local roads, sewerage / drainage, water supply, electricity, telephone and social, cultural and economic facilities such as mosques and markets which are needed by new residents of the estate; and (b) to transfer the management of these infrastructures to local governments after the said period is over (See Salam 1985, 6-7). This arrangement has undoubtedly assisted the government in providing the required infrastructure inside the development areas.

When the provision of infrastructure inside a development area is somewhat satisfied, the problem of inadequacies quite often occurs in the outside. In most cases, the government and/or the providing state-owned enterprises are unable to satisfy the increasing demand of services resulted from the development. It is common, for example, to find letters from readers (*surat pembaca*) in newspapers or magazines in Indonesia complaining of this sort of problem ⁵. The inadequacies of funds, for capital investment as well as recurrent expenditures, are said to be the cause of this problem.

⁵ A resident of Kosambi Baru, an estate in west Jakarta, for example, recently complained that electricity in her residence was frequently off. At the time she wrote the letter, it had already been off for 1 week. According to an officer from PLN (*Perusahaan Listrik Negara* or state-owner electricity company), she continued, the capacity of the main power distributor (*gardu*), which was supposed to supply the area, was inadequate to service the number of houses developed.

Many efforts have been made to help solve the problem. Among them are efforts to strengthen the financial capabilities of the local government. Policies no.3, 4 and 5 of the Statement of Policies for Urban Development in Indonesia ⁶, for example, indicate various means to improve the administration and mobilization of local government's own incomes (taxes and rates). However, given the above situation, it is argued that a more comprehensive review should be made, such as concerning the present function - financial arrangements of infrastructure provision, the broad aspects of central - local financial relations (e.g. tax income sharing), as well as the conventional 'wisdom' of government 'free service', so to allow the providing agencies to face the new challenges of urban development more appropriately.

4.3 The 'Newly-developed' Arrangements

Attempts to improve the situation have also resulted in the application of various new arrangements. The main drive behind these efforts is the decreasing funding capabilities of the Central Government. Of these new arrangements, two types which make significant contributions to the development will be discussed here, namely: (1). the IUIDP (Integrated Urban Infrastructure Development Program) scheme; and (2). the public - private partnership, as recently applied in a newly-developed intra - urban toll way in Jakarta.

(1). The IUIDP Scheme

This scheme was first introduced in 1985 by the Directorate of Program Development (*Bina Program*) of the Department of Public Works. It was justified on the ground that, among others, it would strengthen the principle of local autonomy, as stipulated in Law No. 5 of 1974. The main aims of the program are:

⁶ See the Letter of the State Minister of National Development Planning to the Vice-President of the World Bank No. 1458 / Ket / 4 / 1987, dated 11 April 1987.

- (a). to encourage and to assist local governments in programming the provision of urban infrastructure;
 - (b). to increase efficiency in the use of funds, through determining investments priorities;
and
 - (c). to increase local capabilities in mobilizing potential resources.
- (Sidabutar 1989, 2)

The scheme, therefore, is "...not simply a programme for the delivery of urban infrastructure", but "...a way of thinking, an operational environment and a mode of implementation" (Suselo 1990, 1). It reflects "...a basic change in the approach of the Directorate (General) of Human Settlements (of the Department of Public Works) toward urban development", from an emphasis on Central Government role to a larger role for local governments in an integrated management organization (Bastin and Smoke 1991, 12 - 13).

The program currently covers a selected area of urban infrastructures, namely :(a). water supply; (b). sewerage; (c). solid waste management; (d) urban drainage / flood control; (e). urban roads; (f). kampung improvement projects (KIP); (g). market infrastructure improvement projects (MIIP); (h). guided land development (GLD); and (i). resettlement or new settlements.

All tiers of governments involved in preparing, proposing and implementing the program. *First*, program proposal is formulated and re-formulated at local and provincial levels, respectively. At both levels, the offices of Public Works (*Dinas*), with assistances from other concerned agencies such as *Bappeda* (*Badan Perencanaan Pembangunan Daerah*, or Local / Provincial Development Planning Boards) play a central role in the preparation of the proposed programs. Approved proposal is submitted for assessment to the Central Government. *Second*, proposals from all provinces are evaluated at national level by the Directorate of Program Development of the Department of Public Works. Three main

criteria for the evaluation: technical, financial and integration of the programs. The approved programs are implemented by the local government.

The financial and implementation mechanisms of the program are largely drawn from the following principles :

- (a). Being the statutory responsibility of local governments, funds for the implementation of the program should primarily come from the local government's budget (*Anggaran Pendapatan dan Belanja Daerah*, or *APBD*). However, central and provincial governments may assist with the balance of the investments, especially in the case where the program is regarded as a pilot project (*perintisan*). Here, funds are taken from the two governments's budgets, and given in the form of grants and/or inter-governmental transfer;
- (b). The program should be justified for cost recovery. This requires the full participation from the society, particularly from those who directly benefit from the infrastructure provided. There are 3 other methods of cost-recovery : local taxes; direct charges; and mutual help (*gotong royong*), i.e. the provision of (part of the) infrastructure through direct involvement of the people.
- (c). The execution of the program is under the responsibility of the Local Government, i.e. through the so-called *Badan Pelaksana P3KT* (Executing Body of *IUIDP*).

(2). *The Public - private Partnership*

The recently operated toll road connecting Cawang and Tanjung Priok (17.6 Km), as part of the Jakarta intra-urban toll road, represented a new way of providing urban infrastructure in Indonesia. The road was developed and funded by a consortium of several private and state-owned enterprises (Tempo Weekly Magazine 17 March 1990, 25). It is expected to alleviate the problem of transportation in the area.

F. Jasa Marga - a state-owned enterprise which statutorily holds the right to develop and to manage toll roads throughout the country - played a key role in making the arrangement possible. In order to enhance its capabilities in developing toll roads in heavily congested areas in Indonesia, it promotes co-operation with private investors. This is justified as trends in policy are toward a more 'off-budget' financing of development programs. In return, the investors are given concession right for a certain period of time to collect a certain committed amount of charges from users.

4.4 Concluding Remarks

This chapter has presented an overview of infrastructure provision policies in Indonesia. Generally, it has suggested that :

- 1). the 'conventional' arrangements of infrastructure provision, as well as their current financial arrangements, have come to be regarded as inappropriate in the face of current urban development challenges, and limitations on the availability of public funds for infrastructure provision; and
- 2). the applications of the 'newly-developed' arrangements, however limited they may be in assisting to solve the problems, have opened up a new perspective. That is the possibility of increasing the involvement particularly of users of the services. This trend is justified as policy is shifting in that direction and, in some cases, it is in line with the ideal of existing administrative and legislative structures, such as Law No. 5 of 1974.

These suggestions, again, justify the needs for a more appropriate arrangement of infrastructure provision, and open up perspectives concerning some possible future directions.

Chapter 5

A COMPARATIVE MODEL : THE APPLICATION OF THE DEVELOPER'S CONTRIBUTIONS IN INFRASTRUCTURE PROVISION IN NEW SOUTH WALES, AUSTRALIA

This chapter reviews experiences of the State of New South Wales, Australia, in applying the developer's contributions. The relevance of this review lies in the facts that (a) there are similarities of major features of the Indonesian and the New South Wales infrastructure provision systems, e.g. the central role of local government, and (b) the relatively similar situations between what was (and is) happening in New South Wales, i.e. the situation which justified the application the scheme in question, and what is currently emerging in Indonesia: the increasing awareness about impacts of a development toward its surroundings, while the government alone is unable to cope with them. Furthermore, (c) experiences of the State of New South Wales in applying the scheme may be taken as lessons so preventing the same things to happen in the Indonesian situation.

This chapter begins with a review of the basic concepts of the contributions, then goes on to discuss their applications. The final section concludes major findings of the chapter.

5.1 Basic Concepts of the Developer's Contributions ¹

The developer's contributions are basically a special user's tax, in companion to other general taxes. Justification for this sort of tax is the fact that the services are provided for a particular group of people who require them. Therefore, the costs for the provision and

¹ This section is an extension of the discussion in Chapter 2. The 3 categories of costs mentioned in the chapter, i.e. congestion costs, environmental costs and public sector costs, are assumed the 'costs' of the consumption of the services by the home buyers. Therefore, for equity reason, such burden can not be imposed to the society in general, because they are not in particular the one who consume, nor the one who benefit from the consumption.

operation / maintenance of the services should be paid by those who gain the benefits, in a way that reflects the benefits gained. This approach to tax equity is often called the 'benefit principle' (Musgrave and Musgrave 1984, 227-228). Kirwan (Commission of Inquiry for Environmental and Planning 1989, 51), furthermore, uses the terms 'beneficial services' to show these services, as compared to 'distributive services', i.e. services which are provided to all society and paid out of general taxes.

Even though the contributions may be imposed to the developer, they are basically a tax on the home buyers. In other words, the tax is an 'indirect tax', i.e. tax which is to be shifted to the one who is supposed to be the final bearer of the burden (Musgrave and Musgrave 1984, 224).

5.2 The applications of the Developer's Contributions in the State of New South Wales

A. Past Experiences²

The request for applicant/s of a development to contribute towards the provision of urban infrastructure has been applied in New South Wales since 1919. Initially, however, contributions sought were limited to land for parks and road construction work inside the development area. The provision of the remaining services (i.e. roads, water and sewerage, footpaths, drainage, etc) for local subdivision, particularly during the 1920's and the 1930's, was financed by local authorities and their respective servicing agents.

The above scheme often resulted in the inadequacies of the services years after the habitation of the settlements. This, together with the increasing awareness about impacts of a development upon its surroundings, especially in term of the requirement for urban infrastructure, has widened the scope of application of the contributions. This was

² This section is drawn largely from the Report of Commissioner Simpson (Commission of Inquiry for Environment and Planning 1989, 14-21).

particularly happening during and after the 1950's³. Factors which affected this, among others, was the tendency of local governments and society to seek better standards of infrastructure provided. Initiated by the Metropolitan Water Sewerage and Drainage Board's policy in 1963, which required developers to "... pay for reticulation and contribute towards any necessary amplification", the SROP (Sydney Region Outline Plan) in 1968 recommended "...the extension of Water Board contributions to all subdivisions of land". Another factor was expressed in 1970 by the Minister for Local Government: due to "...limitations on the State's financial capabilities because of the Commonwealth constraints, there was a need to look at alternate avenues for the funding of essential works and services required for future expansion".

General acceptance of the developers towards the contributions increased through the 1960's and 1970's. During that period of time, there was a boom in the housing market, and, therefore, the developers were eager to seek for 'fully' serviced-land, which was made available by such contributions, to enable them to satisfy housing demands.

Attempts to 'formalize' the methods of financing urban infrastructure resulted in the Environmental Planning Bill in 1976. Section 114 of the Bill is often called the forerunner of the later known Section 94 of the EPA (Environmental Planning and Assessment) Act 1979. The 1976 Bill was abandoned after the change of government shortly thereafter. The EPA Act 1979 then replaced the Bill, and its S.94 has generally been justified on such grounds as the limitations of the 'traditional' loan & fund raising methods, additional costs of servicing public needs (due to, e.g. the increasing expectation in term of number and standards of the services), and the general trend towards the application of the user-pays principle. This Section, after being amended several times, is now making way for the

³ One of the factors stimulating such awareness was the publication of the County of Cumberland Planning Scheme, the first metropolitan plan of Sydney, which was gazetted in 1951. This scheme and other subsequent schemes suggested such impacts in various ways.

imposition of many more types of urban infrastructure than did preceding Acts, such as the Local Government Act 1919.

B. Major Features of Current Applications ⁴

Current applications of the developer's contributions show their increasing importance to the financing of urban services in the State of New South Wales. The following features demonstrate this in detail.

- (1) The increasing variety of services / amenities which requires contributions as their source of funds. From contributing land for the provision of parks and road construction work inside a development area, the scheme is now financing almost all urban infrastructures, even though there is a list of the most common facilities where contributions are to be sought ⁵. This requires an increasing professionalism of the local government in :
 - (a) administering the contributions "... in a way that ensures ... at all times (the local government) is able to demonstrate that the funds are being applied for the purposes specified" (Department of Planning 1989, 6);
 - (b) establishing the nexus between the development and the needs for those specified amenities / services ⁶;
 - (c) establishing a sound line of co-ordination with other agencies whose responsibilities are to provide recurrent funding of facilities developed through S.94 levies ⁷;

⁴ This section is drawn largely from 3 sources, i.e. Commission of Inquiry for Environment and Planning 1989 (the Report of Commissioner Simpson), Department of Planning 1989 (Circular No. D2) and Department of Planning 1990 (Guidelines for Levying Section 94 Contributions).

⁵ These include: community facilities, open space, roads, traffic management facilities, drainage, water supply, sewerage and car parking (Department of Planning 1990, 7).

⁶ The required amenities/services are those which are sought within five years of initial settlement of the area.

⁷ The two guidelines emphasize that contributions sought should only be limited to capital costs (and "... land acquisition" - Department of Planning 1989, 3) only. Furthermore, it is said that they are to be sought on \$/lot or \$/person basis, are not exceeding the local market cost of 4.8 sq.m per dwelling of serviced residential land, and are made payable at the time of issue of the Town Clerk's Certificate.

(2) The central role of local government is justified because this level of government is responsible in the provision of most services at local level. Among the tasks of the councils are:

- (a) preparing a social plan in which a list of urban amenities & services required in the area is established;
- (b) imposing the amount of contributions sought based on certain accepted standards⁸;

Despite the fact that the developer's contributions have enabled the local authorities to provide some of the necessary amenities and services within their areas, there are still problems of application. Commissioner Simpson's report indicates that central to the causes of such problems is, *first*, the lack of professionalism among some of the authorities : at various degrees, they failed to apply the scheme appropriately, such as: the imposition of the contributions without being supported by necessary studies; and relating public services / amenities needed on a general municipality basis, instead of on a certain locality; and *second*, the tendencies of many local authorities to use the regulation as a general taxing or revenue raising method, instead of a special user-pays tax on development (Commission of Inquiry for Environment and Planning 1989, 2-3).

The following is a list of some of the problems that have been encountered during the application of the Act.

- (1). *Establishing the nexus* : In Peterson v Parramatta City Council case (unreported Land & Environmental Court, May 1987), the Local Government (the Council) proposed that a contribution be paid for the provision of car parking space nearly 1 km away from the subject site. This case shows that the nexus might be interpreted in a way far exceeding the expectations of an applicant.

⁸ The standard, however, may be varied according to local variations.

(2) *Establishing the amount of contributions* : In *McClelland v Penrith City Council* (Appeal No. 10244 of 1987), the Local Government proposed contributions of \$500/lot for the provision of community facilities and \$360/lot for the upgrading of Erskine Park Road. These amounts were calculated from the projected demand of the area, as indicated in the Social Plan for the locality. From the applicant's point of view, this case overruled guidelines made by the Department of Environment and Planning (Circular No. 42), which suggests that the contribution per block for non-land capital cost should not exceed \$500.

This case illustrates the effects of the absence of guidelines concerning the way contributions should be calculated (see also Roseth 1991, 3).

(3). *The problems of urban sprawl* : The Act, which suggests contributions on \$/lot or \$/person basis, disfavors the idea of urban consolidation. Furthermore, it also raises the issue of fairness : smaller lots subsidize the larger ones (see Payne 1991).

(4). *The problem of staged development* : The 'once and for all' assessment nature of S.94 is inadequate for staged development, due to the difficulty in identifying future needs, and the difficulties of assessment.

(5) *The problem of land price* : The price of serviced land is undoubtedly increased. This creates difficulties especially for first home buyers.

5.3 Concluding Remarks

Discussions in this chapter confirm points mentioned in the introduction of the chapter.

They are :

- (a). The move towards a more extensive use of user-pays principle emerged when, *first*, an awareness about impacts of a development, in term of the requirement for urban infrastructure, upon its surroundings was increasing; *second*, the government alone was unable to meet such an increasing demand; and *third*, there was an increasing awareness about equity: who is actually responsible to cope with such impacts;
- (b) The responsibility to provide such infrastructure lies mainly with local government. The application of the contributions, therefore, should be regarded as an appropriate way for the local authorities to respond to such a responsibility. Indeed, the contributions in question have provided a strong basis for allowing local governments to supply some of the necessary amenities and services within their areas;
- (c) Lessons from experiences in the State of New South Wales also indicate that a certain method or approach should be updated and be fit to recent needs of the society, such as the increasing standards of infrastructure provided. Furthermore, even though the contributions have long been applied and its development has been gradual, experiences still show that the absence of detailed guidelines concerning, for example, how to calculate the amount of contributions sought, also creates problems.

Given that there are similarities between these features and the Indonesian current situation, and the obvious facts that the latter is shifting toward a somewhat similar direction, then it is justified that these points may be taken as a supporting illustration concerning why, when and how to apply the contributions scheme.

Chapter 6

THE FEASIBILITY OF APPLYING THE DEVELOPER'S CONTRIBUTIONS SCHEME

Further to discussions in the previous chapters ¹, this chapter goes on to analyze the feasibility of applying the contributions scheme from an internal point of view, i.e. (a) how the contributions scheme relates to interests of stakeholders, and how those stakeholders would cope with such an application's potential impacts; and (b) to what extent a certain method of implementing the scheme could fit with current administrative and legislative structures of the country. These two questions will become topics of discussion in the following sections.

6.1 Regarding the Interests of Stakeholders

A. Interests of stakeholders ²

Interests of (key) stakeholders, i.e. the government, the developer, the local people and the home buyers, can be summarized as follows.

1. The Government:

- (a) generally, to maintain the existing favorable development climate where the private sector is taking a larger portion in development activities;

¹ The previous two chapters have advanced 'pre-feasibility' analysis of applying the proposed contributions scheme, i.e.: (a) Chapter 4 has argued that the present arrangements of infrastructure provision are no longer appropriate to cope with current problems of urban development; and (b) Chapter 5 has suggested conditions for a more extensive application of the contributions system, which are quite similar to the present Indonesian situation. Furthermore, this chapter also suggests a method of implementing the proposed scheme, i.e. through the local government (tax system).

² They are drawn from the discussion in Chapter 3.

- (b) in dealing with the developer, however, the interests are to request substantial financial contributions for the provision of the necessary infrastructure required as a consequence of the development;
- (c) to give a higher degree of autonomy to local government in dealing with developments within their administrative boundaries.

2. The Developer: generally, to develop the project in an economically justifiable way, such as through :

- (a) the full participation of other stakeholders, mainly the government, banks/financial institutions and the home buyers, to cover some of the (financial and social/political) costs of the development;
- (b) to provide as high quality living environment as possible, to enable the new town to compete with other estates/new towns in the region. This can be obtained through, for example, providing a good access to urban centers nearby.

3. The Local People:

- (a) higher land prices and/or other benefits for those willing to sell their land;
- (b) an opportunity to become a part of the new town for those who wish to stay on the villages.

4. The Home Buyers:

- (a) for those of low-to-middle income group, the provision of urban services that are economically affordable and appropriately timed;
- (b) for those of middle-to-high income group, the provision of high quality urban services that are appropriately timed.

B. The Likely Support of Stakeholders for the Proposed Contributions Scheme

The application of the proposed contributions scheme would create advantages as well as disadvantages to stakeholders. Their likely support, therefore, would be determined by the extent to which advantages could outnumber disadvantages, and/or the disadvantages could be minimized or eliminated (by certain actions or policies).

The following is an analysis of such advantages, disadvantages, and includes possible 'solution/s' to the disadvantages.

1. The Government:

To the interests of government (of all tiers), the application of the scheme offers the following *advantages*:

- (a) the provision of the required services by using other's funds;
- (b) a high degree of autonomy for the local government to manage the new town development.

The *disadvantage* is that it might run counter to government's policies in providing a favorable climate for housing provision, because it imposes an extra cost to the existing practice;

The most obvious '*solutions*' to such a disadvantage is offering the government's traditional powers: subsidy and concession. For example:

- (a) providing subsidized loans to low-income home buyers;
- (b) providing concession right to the developer to charge other users of the services for a certain period of time.

In line with government's current deregulation policies, there is another measure that can be applied, i.e. :

(c) minimizing some of the developer's current 'production costs', such as the costs of delay in gaining planning approval, various administrative charges (official and non-official) for development & building applications (e.g. *ijin prinsip, ijin mendirikan bangunan*, or *IMB*), etc. In other words, the existing trend to deregulate those considered to cause high-cost economy needs to be extended to the construction industry.

2. The Developer

Advantages:

- (a) providing a better quality of living environment, so to enable the project to compete with other existing estates/new towns or other existing 'formal' housing developments ³ (e.g. owner's builders, etc);
- (b) ensuring that certain required infrastructure can timely be provided ⁴.

Disadvantages:

- (a) the increase in production costs ⁵, which later causes an increase in house prices and the decrease in market volume, particularly in short-time ⁶;

³ This has been the essential of two among five established goals of the BSD new city project. Other goals are: "the establishment of a self-contained new city..."; "the establishment of a successful working relationship between the government and the private sector in the development of the new city, particularly in the full involvement of all levels of the government..." in all aspects of the development; and "the establishment of an economically sound urban development project..." (PT. Bumi Serpong Damai 1985b, 1.1.).

⁴ The importance of this issue has been mentioned in footnote 5 of Chapter 4.

⁵ As a rough estimate, the increase in unit cost of land development in the BSD new city project, i.e. including all major infrastructures such as drainage, sewerage, water supply, electricity & telephone, but excluding arterial / sub-arterial roads, if the government does not subsidize the so-called city-scale infrastructures, is around 55 per cent, i.e. from Rp19310 / Sq.M to Rp29910 / Sq.M, at 1985 price (the calculation is based on data from PT.Bumi Serpong Damai 1985b, 8.2).

⁶ Property business in Indonesia is regarded quite sensitive to government's monetary policy. The reason is mainly because both developers and (home) buyers are relying largely on borrowed funds, instead of combining them proportionately with their own equity. See explanation concerning experiences of developers under current 'tight money policy' in Chapter 3. However, besides being a constraint, this dependency can also be manipulated to become a 'solution', i.e. in the form of subsidized loan (see the next section, *solution*).

- (b) the possibility of transfer of demand, from this to other new towns or to other 'formal' housing developments, if the proposed scheme is not being applied to all new towns, or other 'formal' development.

Solutions:

- (a) asking the government to impose the scheme in question to all new housing developments, so to minimize the possibility of 'leakage' in housing demand, i.e. the transfer of demand from one mode of development to another;
- (b) the possibility of transferring some of the burden to other stakeholders, especially the home buyers and the government:
- the home buyers: through the increasing prices of houses ⁷;
 - the government: through subsidized loans, concession and/or trade-off: the involvement of the developer in providing housing for low-income home buyers can be regarded as contributions.

3. The Locals

Advantage:

the increasing accessibility of the area, which later might end up in the increasing value of their land.

Disadvantages:

Obviously, this stakeholder does not have direct opposing interests to the application of the proposed scheme. However, there might be measures which create burden to them:

- (a) to charge the consumption of the services, in one way or another;

⁷ The market of housing in the region can be called a 'seller's market'. This means that, due to the excessive of demand as compared to the quantity of goods supplied, the provider (= the developer) is able to control the market. Consequently, the developer is also able to transfer most of their burden to the consumer (see *Appendix E: What Do Developers Do If the Quantity of A Good Demanded Exceeds the Quantity Supplied*).

- (b) the possibility that the government-developer's collaboration, such as in land acquisition, under a tougher business climate caused by such an application, would regard the landowners's resistance to sell their land as a form of 'production costs', so tend to suppress them.

Solutions:

- (a) providing subsidy on the ground that the locals are not to be suffered by such a development, which is held beyond their wishes. The subsidy may be coming from the government or the developer or both;
- (b) asking the government to apply an open and controllable land acquisition process.

4. The Home Buyers

Advantages:

- (a) in long-term, cheaper to acquire the timed-services;
- (b) a relatively constant, or even increasing, housing prices, made possible by the availability of sufficient fund to provide and to maintain the services;

Disadvantage:

extra costs which might be a great burden especially to low-income home buyers;

Solutions:

There are two alternative ways for the government to assist low-income home buyers⁸, i.e.:

- (a) by decreasing interest rates of home-loans; and

⁸ Both ways have currently been at stage at various degrees. Interest rates of home loans for low-cost housing in 1990, for example, were around 9-15 per cent, compared to that of commercial banks at the same period of time which were around 23-29 per cent, or that of home loans for medium-to-high income purchasers which was 18 per cent (Nirwhono 1990, 2.1). Current trade-off between developers and the government is in the provision of various home loan schemes: they are rewarded in exchange to the willingness of developers to develop housing at 1 (high): 3 (medium): 6 (low) composition.

Given that such applications have already been in existence, it is assumed that various modifications can be made possible so to fit with a new situation.

(b) by offering a 'trade-off' to the developer: to regard their involvement in the provision of low-cost housing, at subsidized prices, as contributions.

Summarizing the above discussion, it is obvious that the developer and the home buyers would be the most to suffer under the application of the proposed scheme. The most feasible way to minimize their burden is through government's assistances. That is, to 'trade-off' improvement to the existing infrastructure provision system with various forms of subsidy and concession, particularly in the short-period of time. Resources for the assistances might be taken from the benefits or savings obtained from 'not to use the government own funds', as the existing practice suggests. These assistances will make way for the government to gain support from other stakeholders in the application of the proposed scheme.

6.2 Suitability of Existing Administrative and Legislative Structures

A. Proposed Method of Implementation

Regarding current arrangements of infrastructure provision (see Chapter 4), there are two major ways of implementing the proposed contributions scheme, i.e.:

- (a) for services provided by government agencies, such as roads, drainage, water supply and open spaces, contributions can be paid to, and managed by, the local government;
- (b) for services provided by 'independent' state-owned enterprises, such as electricity (*PLN*) and telecommunication (*Perumtel*), contributions are paid to, and managed directly by, their respective enterprises.

The third arrangement, i.e. the arrangement which applies to new town developments, is to be abolished as the new provision system is applied.

Detail explanation concerning the above first arrangement, i.e contributions paid/managed through local government, is given as follows:

- (a) the scheme is applied through local government's tax system. So it is a tool to increase local government's financial capabilities;
- (b) such an application would involve the following agencies:
 - local government's tax office;
 - agencies involved in assessing planning and building applications: Local (*Dinas*) Public Works Office, or the *Dinas* for Town Planning (*Tata Kota*), or Local Development Planning Board (*Bappeda II*);
 - the providing agencies, i.e.: *Dinas* for Public Works for roads, drainage and open spaces, and the *PDAM* (local government enterprise for the provision of water supply) for water supply;
 - controlling agencies, i.e. : (a) internal: Inspectorate of the Local Government; and (b) external, i.e. *BPKP* (*Badan Pengawasan Keuangan dan Pembangunan*, or the Board for Finance and Development Control) and *PTUN* (*Pengadilan Tata Usaha Negara*, or the Court for (Mis-conduct of) State Administration).
- (c) the mechanism is that the contributions are regarded as a pre-requisite before the issuance of the planning and development approvals (*IMB*, *Ijin Mendirikan Bangunan*, etc.).

B. Suitability of the Proposed Method for Existing Administrative & Legislative Structures

To a great extent, the proposed method fits to existing administrative & legislative structures currently applied in Indonesia. Mainly, it strengthens the message of Law No. 5 of 1974 concerning local autonomy. Further, it also in line with current trends of policy shift, i.e. towards more responsible local government and users.

However, there are some potential problems which might diminish the achievement of the application particularly in the short-time. These problems are considered common to all local governments in Indonesia.

(a) the lack of qualified staff and managerial skill at local government level.

Several studies have indicated these problems, and regarded them as the main constraint in applying an innovative idea at local level (see, for example, Devas 1989b; Ministry of Home Affairs 1989). Devas (1989b, 37) further indicates two main causes as to why local authorities find difficult to recruit staff of sufficient calibre:

- the fact that resources and actions are decided and managed by the Central Government, so stimulate skilled resources to move to the center;
- the inability of local governments to pay staff sufficiently.

(b) the inappropriateness of most of current town plans to give a guidance for infrastructure development.

Experiences in the application of the *IUIDP* scheme show that such plans are inappropriate when countered to such detail requirements as: target groups of infrastructure provision, and spatial allocation of the provision (Risyan 1989, 50-51). Roots of this problem might be found in the fact that most of the plans are of *RUTRP* and *RUTRK* levels, which are regarded 'strategic plans', instead of 'statutory plans', such as *RDTRK* and *RTRK* levels (see Chapter 3 and *Appendix B: Town Planning Procedures in Indonesia*).

(c) the division of responsibility in the provision of recurrent funds.

The application of the proposed scheme might suggest that such funds are to be provided mostly by (various agencies of) local government. This is also in line with the message of Government Regulation No. 14 of 1987 as mentioned earlier (Chapter 4). However, given that under current central-local financial relations, and pricing policies of most services provided by the government, which both left local government underfinanced, such a suggestion is obviously dubious.

Responding to the above potential problems, it is recommended that:

- (a) the proposed scheme, if it eventuated, is to be applied gradually, so to give time for the first two problems mentioned above to improve;
- (b) to establish appropriate pricing guidelines for 'consumption charges' and favorable (for local governments) central-local financial relations;
- (c) specific to the BSD new city project, it is suggested to regard the project as a pilot project, so to make use of resources of the public and the private sectors optimally in setting up an appropriate structure of implementation.

6.3 Concluding Remarks

Analysis in this chapter has led us to the conclusion that the method is applicable, given that conditions are satisfied. Generally, these conditions include the following :

- (a) the willingness of the government to 'trade-off' achievements in infrastructure provision system with subsidy and concession to other stakeholders, so to enable them to settle down in the new system, particularly in the short time;
- (b) to impose the scheme to other new town developments as well as other forms of 'formal' housing development (e.g. owner's builders), so to eliminate the possibility of the transfer of demand from one form of development to another;
- (c) to implement the contributions scheme, which is recommended through local government's tax system, in a gradual manner, so to enable all involved agencies to adapt to the new system. Besides this, there are also needs to establish various guidelines for use by all parties. In this context, it is also recommended to regard the BSD new city project as a pilot project where the public and the private sectors can develop a better structure of implementation, with regard to various potential problems mentioned above.

Having now presented both the background and the feasibility analysis, the final chapter will state the conclusions of the study and propose recommendations.

Chapter 7

CONCLUSIONS AND RECOMMENDATIONS

This final chapter concludes findings of the study and formulates recommendations.

7.1 Conclusions

In general, the proposed contributions scheme appears feasible for application, given that conditions of the application are met. Justifications for the application, conceptually as well as empirically, can briefly be given as follows:

- (a) Conceptually, such an application is justified on equity and efficiency grounds: urban infrastructure may not be provided out of the expenses of the whole community. Instead, such a provision should be paid through contributions of its particular users (user-pays). In other words, those who benefit from the service should pay in the way that reflects the benefit gained. In the taxation theory, it is usually called 'benefit principle';
- (b) Further, empirically, the application of such a user-pays principle can be extended to cover a wide range of infrastructure currently provided by government agencies or state-owned enterprises in Indonesia, particularly in new town developments. Reasons for such an extended application are : *first*, the main source of funds for the provision of infrastructure, i.e. (central) government budget, is currently under heavy pressure, and can therefore no longer support such a practice. The direction of various schemes of infrastructure provision currently being applied in Indonesia, which is toward more responsible local government / users, can further be followed; and *second*, to save huge investments currently in place in the BSD project, as well as other similar projects;

The experience in the State of New South Wales-Australia in applying the scheme in question can be used as a comparative model in this regard. The Indonesian and the New South Wales systems show some similarities in their major features, such as the situations which justify the application, and the central role of local government in managing urban development;

(c) Further examination, which involves two major issues, i.e.:

- the likely support of stakeholders involved in the development; and
 - the suitability of the proposed method of implementing the scheme for existing administrative and legislative structures,
- also confirms that such a scheme is feasible for application in the BSD new city project specifically, and in the Indonesian situation generally. Various conditions to be satisfied, however, are also be noted.

7.3 Recommendations

It is recommended that the proposed contributions scheme be applied. However, given the limitations of this study in terms of, for example, the comprehensiveness of grounds investigated and the degree of detail, it is also recommended that further investigations are to be conducted. These investigations may lead to the establishment of a clarification concerning the method of implementing the scheme, and supporting policies required. Among the objectives of such investigations are as follows:

(a) to establish such detailed guidelines as:

- methods of calculating the amount of contributions sought;
- procedures of administering the contributions (e.g. collection, budgeting, controlling, etc.);
- kinds and contents of supporting documents (e.g. town plans).

(b) to establish a broad policy, concerning:

- supporting regulations, such as concerning the need to pay contributions for the provision of infrastructure to be imposed fairly on all developers and other 'formal' housing builders (e.g. owner-builders), so the possibility of the shifting of demand from one mode of housing development to another can be minimized. The regulation needs to be placed reasonably high in the regulation hierarchy, so to ensure its effectiveness;

- financial responsibility of local government. This includes subsidy and concession schemes, which are needed, for example, in the earlier stages of the application of the scheme in question. In a broad perspective, this may be covered within the improved policy of central-local financial relations.

Various conditions for the application of the proposed contributions scheme as mentioned earlier, can be attached to these objectives.

These investigations, however, may take time to be accomplished. This leads to a delay in the application of the proposed contributions scheme. Considering that the BSD new city project needs immediate 'solutions' to its current problems, it is suggested therefore that the following specific recommendations be applied:

- (a) generally, to put the project in an ad hoc manner, e.g. as a pilot project. This will allow all parties to develop an acceptable implementation structure, within the frameworks recommended in this study, and to make use of resources of the public and the private sectors. This pilot project scheme also allows more 'trade-offs' to happen, such as the provision of double-track railway by the developer with water supply (provided by the government).

The application of the contributions scheme in this pilot project may be directed by a committee, which consists of representatives of the Central Government (chair), the

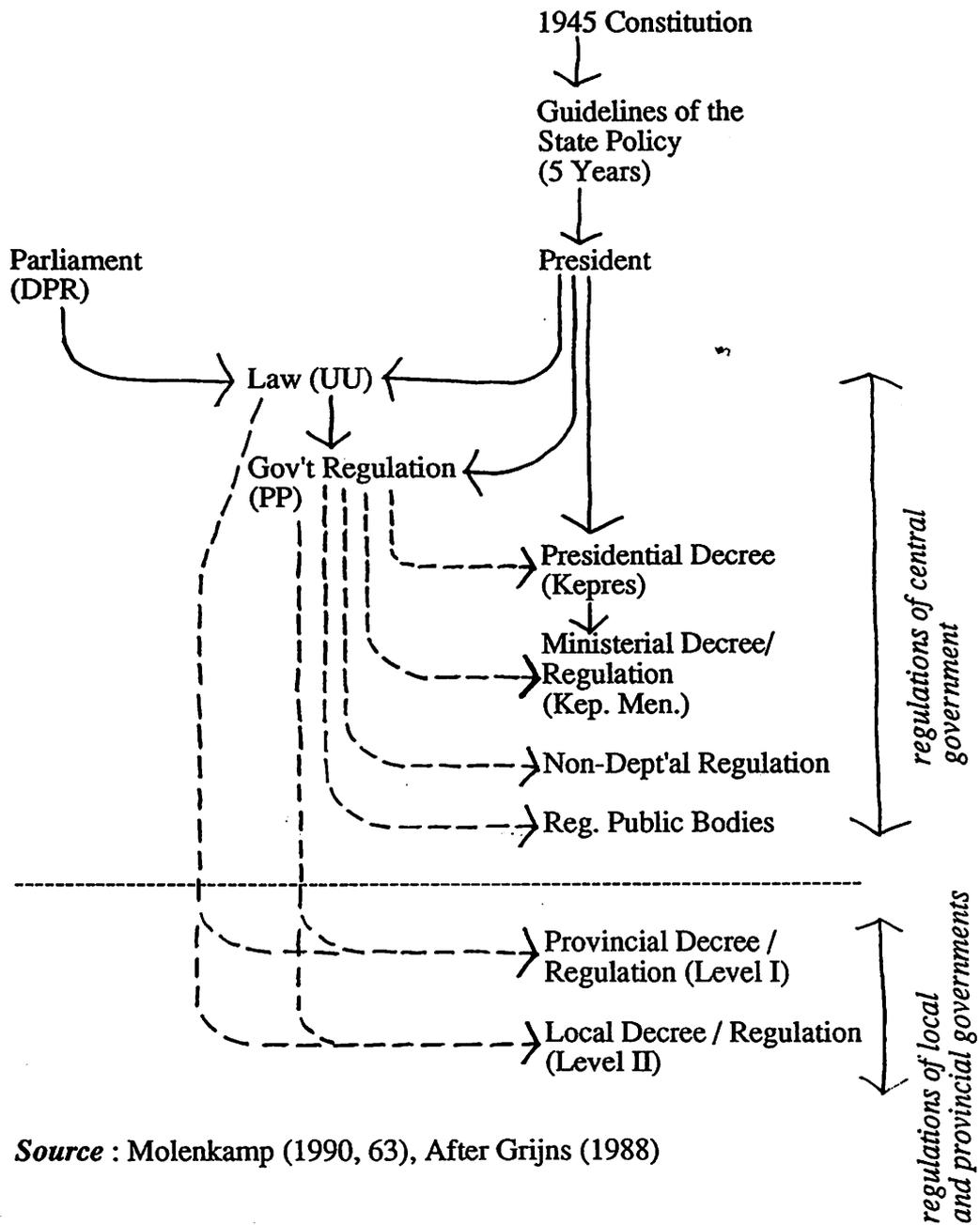
Governments of the Regency of Tangerang & the Province of West Java, and the Developer. Among the committee's immediate tasks are to establish:

- a commitment concerning the extent to which the proposed scheme should be applied;
- the division of responsibilities of all parties involved; and
- the guidelines for preparing supporting documents.

(b) in line with the above recommendations, it is also recommended to review current applications of various urban development policies in new town development. Among them is the application of the town planning procedures, which were designed to deal with existing or old towns. These procedures and the prescribed contents of the plans seem inappropriate to the dynamic nature of new town development generally, and specifically to the requirements of the proposed contributions scheme. As a pilot project in the application of the contributions scheme, the BSD new city project might be allowed to develop its own town planning procedures.

Appendix A

HIERARCHY OF REGULATIONS IN INDONESIA



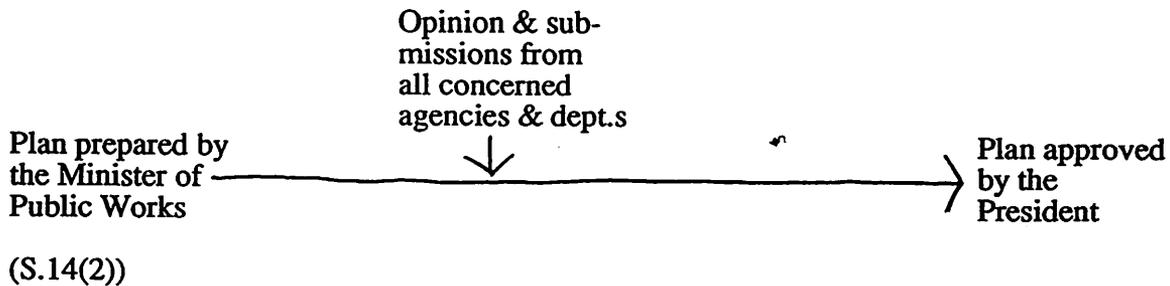
Source : Molenkamp (1990, 63), After Grijns (1988)

Appendix B

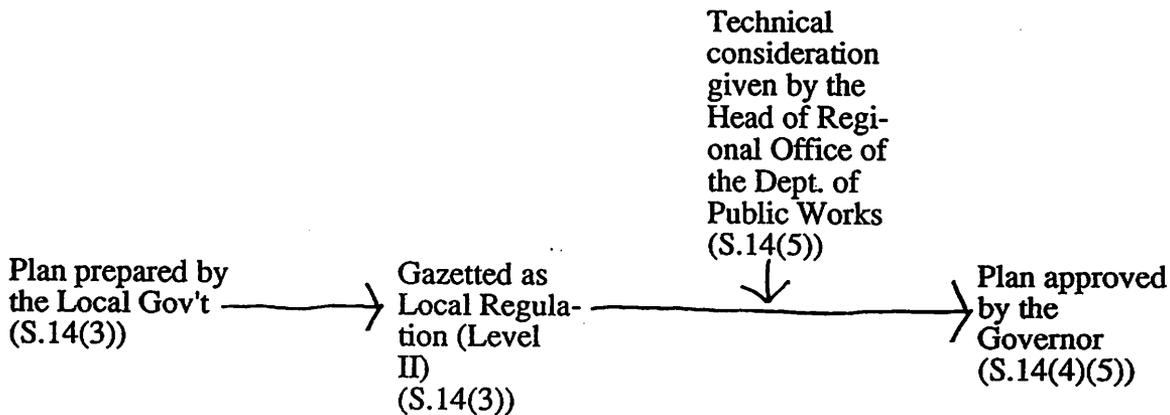
TOWN PLANNING PROCEDURES IN INDONESIA

(Joint Decree (*Surat Keputusan Bersama*) of the Minister of Home Affairs No.650-1595 and the Minister of Public Works No.503/KPTS/1985)

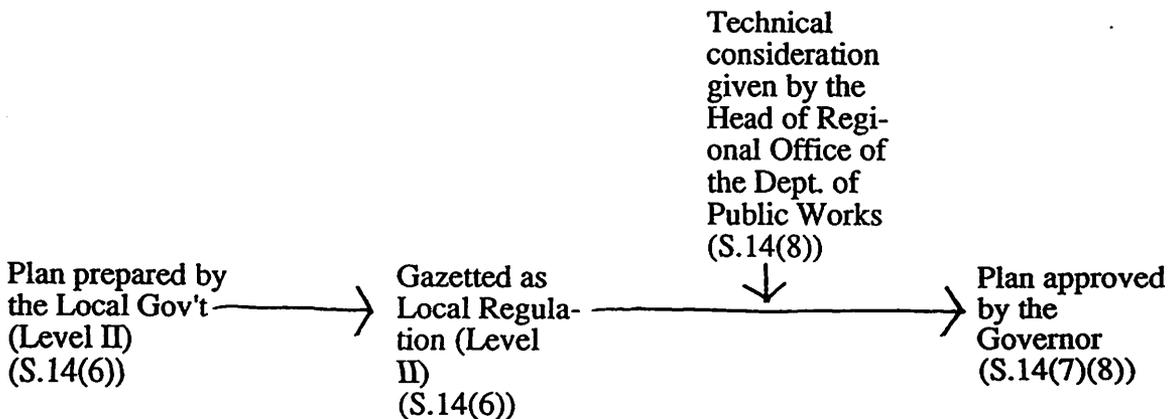
1. Regional or Extra Urban Spatial Development Plan (= RUTRP, *Rencana Umum Tata Ruang Perkotaan*)



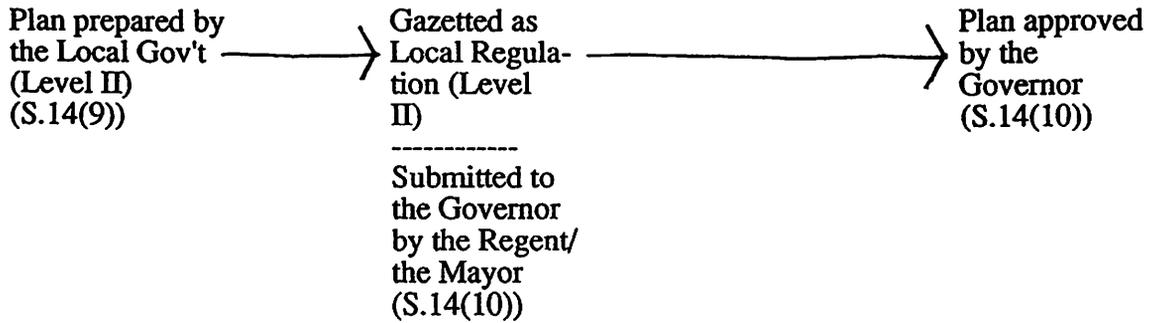
2. Urban Spatial Development Plan (= RUTRK, *Rencana Umum Tata Ruang Kota*)



3. Urban Spatial Detailed Plan (= RDTRK, *Rencana Detail Tata Ruang Kota*)



4. Urban Spatial Detailed/Technical Plan (= RTRK, Rencana Teknik Ruang Kota)



Notes :

1. Local government (level II): A regency (*kabupaten*) or a municipality (*kotamadya*), headed by a regent (*bupati*) or a mayor (*walikota*);
2. Provincial government (level II): headed by a governor (*gubernur*)

Appendix C

PROCEDURE OF LAND ACQUISITION

PROCESS

EXPLANATION

Land Documents
from Land Owners



PT. Bumi Serpong Damai



Committee for Land
Release
(*Panitia Pembebasan Tanah*),
appointed according to
the Letter of Decision of
the Minister of Home
Affairs No.96 of 1971



Transaction between the
Developer and Land Owner

- Field checking;
- Checking of the completeness of the documents.

Members of the Committee:

- Head of the Agrarian Office (Level II);
- Head of Land Registration Section of the Agrarian Office;
- Head of the Office of Local Taxes (*IPEDA*, now *PBB*);
- Head of the Sub-district (*Camat*); and
- Head of the Village (*Lurah*).

- Witnessed by members of the Committee;
- The transaction should be based on maps issued by the Agrarian Office (Level II).

Source : Adapted from PT. Bumi Serpong Damai 1987b; *Appendix*.

Appendix D

ENVIRONMENTAL PLANNING AND ASSESSMENT ACT 1979 NO. 203

Section 94 (Payment towards provision or improvement of amenities or services)

(1) Subject to subsection (2), where a consent authority is satisfied that a development, the subject of a development application, will or is likely to require the provision of or increase the demand for public amenities and public services within the area, the consent authority may grant consent to that application subject to a condition requiring -

(a) the dedication of land free of cost; or

(b) the payment of a monetary contribution,

or both.

(2) A condition referred to in subsection (1) shall be imposed only -

(a) * * * * *

(b) to require a reasonable dedication or contribution for the provision, extension or augmentation of the public amenities and public services mentioned in that subsection.

(2A) Subject to subsection (2B), where -

(a) a consent authority has, at any time, whether before or after the date of commencement of this subsection, provided public amenities or public services within the area in preparation for or to facilitate the carrying out of development in the area; and

(b) development, the subject of a development application, will, if carried out, benefit from the provision of those public amenities or public services,

the consent authority may grant consent to the application subject to a condition requiring the payment of a monetary contribution towards recoupment of the cost of providing the public amenities or public services.

(2B) A condition referred to in subsection (2A) shall, subject to any direction of the Minister under section 94A (1), be imposed only to require a reasonable contribution towards recoupment of the cost referred to in subsection (2A).

(2C) The consent authority may accept -

(a) the dedication of land in part or full satisfaction of a condition imposed in accordance with subsection (2A); or

(b) the provision of a material public benefit (other than the dedication of land or the payment of a monetary contribution) in part or full satisfaction of a condition imposed in accordance with subsection (1) or (2A).

(3) The consent authority shall hold any monetary contribution paid in accordance with a condition referred to in subsection (1) in trust for the purpose for which the payment was

required and apply the money towards providing public amenities or public services or both within a reasonable time and in such a manner as will meet the increased demand for those amenities or services or both.

(3A) The consent authority shall apply any monetary contribution paid in accordance with a condition referred to in subsection (2A), where the whole or any part of the cost incurred in providing the public amenities or public services with respect to which the contribution is paid remains unpaid, towards repayment of that cost.

(4) Land dedicated in accordance with a condition imposed under subsection (1) or in part or full satisfaction of a condition imposed under subsection (2A) shall be made available by the consent authority for the purpose of providing public amenities or public services or both within a reasonable time.

(5) Where a consent authority proposes to impose a condition in accordance with subsection (1) or (2A) in respect of development, the consent authority shall take into consideration any land or other sum of money that the applicant has elsewhere dedicated free of cost within the area or previously paid to the consent authority other than as a condition of the grant of consent under this Act or approval, consent or permission under Part XII or XIIA of the Local Government Act 1919 as in force at any time.

(6) Where -

(a) a condition imposed under subsection (1) or (2A) in relation to development the subject of a development application has been complied with; and

(b) a public authority would, but for this subsection, be entitled under any other Act to require, in relation to or in connection with that development, a dedication of land or payment of money in respect of the provision of public amenities or public services or both,

then, notwithstanding that other Act, compliance with the condition referred to in paragraph (a) shall be deemed to have satisfied the requirement referred to in paragraph (b) to the extent of the value (determined, if the regulations so provide, in accordance with the regulations) of the land dedicated or the amount of money paid in compliance with the condition.

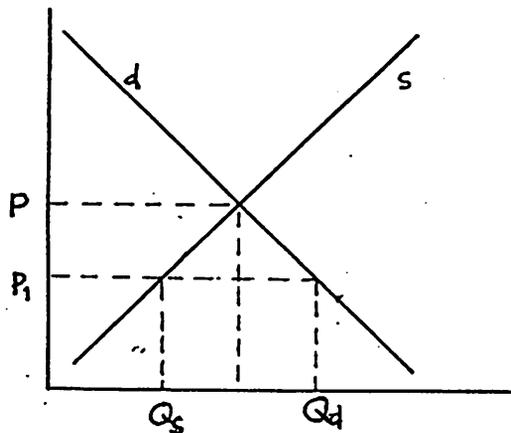
(7), (8) * * * * *

Appendix E

WHAT DO DEVELOPERS DO IF THE QUANTITY OF A GOOD DEMANDED EXCEEDS THE QUANTITY SUPPLIED

The market where the quantity demanded exceeds the quantity supplied is usually called a 'seller's market'. In a situation where there is a shortage of supply of the good like this, the sellers largely determine the price. In other words, the sellers tend to impose most of their burden (e.g. production costs) on the consumers. The following graph illustrates this:

Graph 1

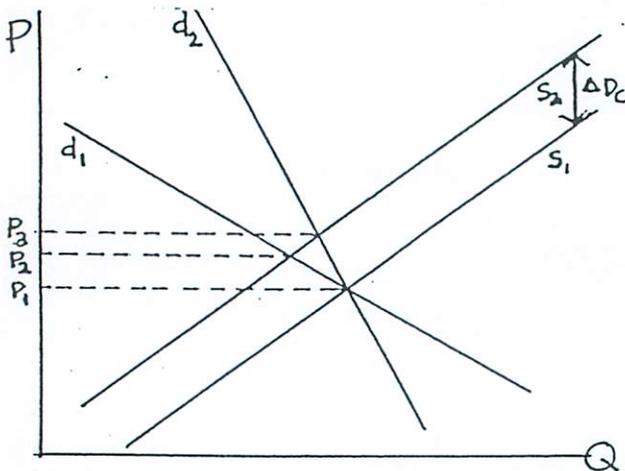


In the above illustration, the price tends to increase to P, where the quantity demanded equals the quantity supplied. This graph best illustrates the housing market in Indonesia in early 1990, when a rush to buy houses occurred, especially in/near Jakarta.

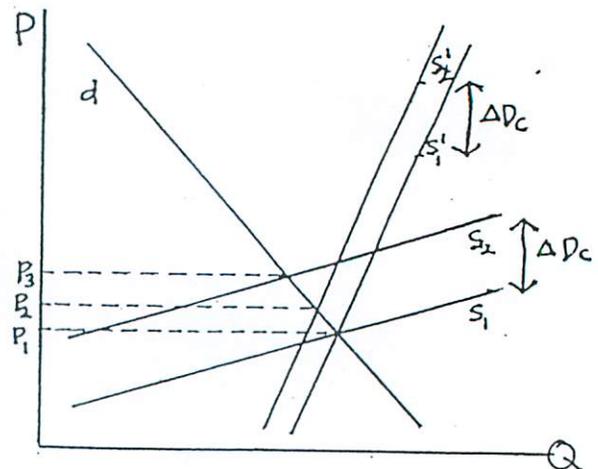
However, the to which the developers will impose the burden on the consumers in the case of the developer's contribution method being applied, will depend upon such

economic factors ¹ as supply and demand characteristics of the goods. The following graphs illustrate the situation.

Graph 2



Graph 3



Note :

ΔD_c : the increase of development costs due to the imposition of the proposed contribution;

P_1 : the price of the house at 'base case' situation;

P_2 : the price of the house at 'base case' situation, after the imposition of the proposed contributions;

P_3 : the price of the house at different sensitivity situations, after the imposition of the proposed contribution.

Graph 2 shows that a larger increase in price will occur if *the quantity demanded is less sensitive to price* than if it is more sensitive.

Graph 3 suggests that a larger increase in price will occur if *the quantity supplied is more sensitive to price* than if it is less sensitive.

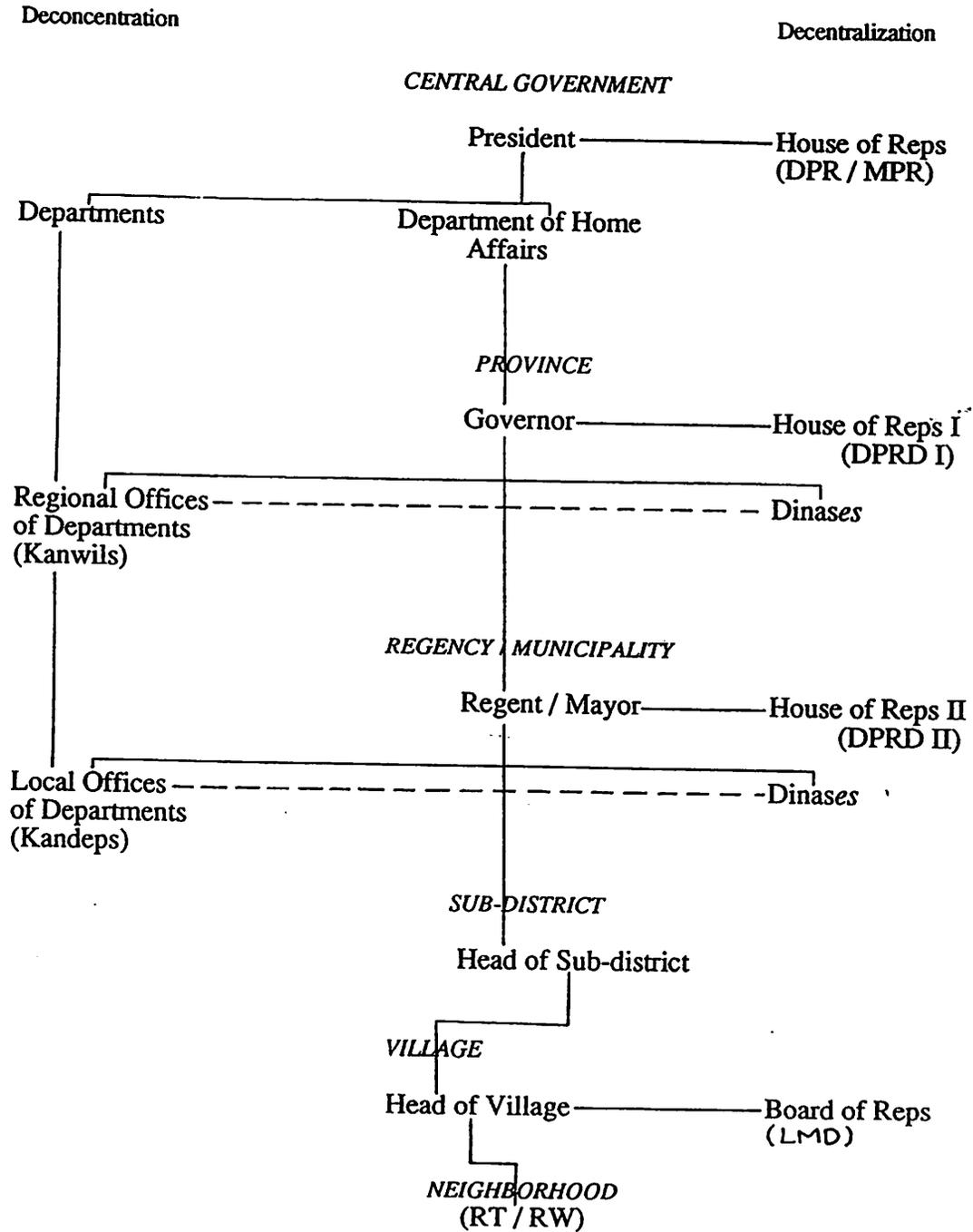
These illustrations lead to the conclusion that the portion of the burden (e.g. the increase of development costs due to the imposition of the proposed contribution, D_c) shifted to consumers will be larger (e.g. $P_3 - P_2$ is larger than $P_2 - P_1$) if the quantity demanded is less

¹ Another factor of particular importance is the political one, such as government control on housing prices.

sensitive to the price of the good, and/or if the quantity supplied is more sensitive to the price of the good.

Appendix F

THE STRUCTURE OF GOVERNANCE IN INDONESIA



Source: After Devas (1989a, 6)

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