Japan International Cooperation Agency (JICA)

Department of Town and Country Planning Ministry of Interior The Kingdom of Thailand

> The Study **Application Scheme of Land Readjustment** National Urban Development Thrust

> > **Final Report**

June 1993

Yachiyo Engineering Co., Ltd.

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Department of Town and Country Planning Ministry of Interior The Kingdom of Thailand

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on
Application Scheme of Land Readjustment
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国際協力事業団

PREFACE

In response to a request from the Government of the Kingdom of Thailand, the Government of Japan agreed to conduct a study on the Application Scheme of Land Readjustment in National Urban Development Thrust, and entrusted the study to the Japan International Cooperation Agency (JICA).

JICA send to Thailand a study team headed by Mr. Koomi NODA, Advisor, YACHIYO ENGINEERING CO., LTD. five times between February 1992 and March 1993.

The team held discussions with officials concerned of the Government of Thailand, and conducted field surveys at the study area. After returning to Japan, further studies were accomplished and the present report was prepared.

I hope that this report will contribute to the project's promotion and to the enhancement of friendly relations between the two countries.

I wish to express my sincere appreciation to the concerned officials of the Government of the Kingdom of Thailand for the close cooperation extended to the Study Team.

JUNE 1993

Kensuke YANAGIYA

PRESIDENT

JAPAN INTERNATIONAL COOPERATION AGENCY

Mr. Kensuke YANAGIYA
President
Japan International Cooperation Agency

Dear Mr. Yanagiya:

We have the honor to submit to you the Final Report for the Study on Application Scheme of Land Readjustment in National Urban Development Thrust. It is with great pleasure that this Study was completed under the close cooperation of the two governments of Japan and Thailand.

The final report was prepared during the past 17 months by the Study Team organized by Yachiyo Engineering Co., Ltd. members, and directed by Mr. Koomi NODA. It comprises a Summary and a Main report.

In preparing this Report, the Study Team benefited a great deal from the cooperation of officials and experts of the Japan International Cooperation Agency and other concerned authorities of the Government of Japan.

On behalf of the Study Team, I would like to express my deepest appreciation to the officials and to other related agencies of the Government of the Kingdom of Thailand for the significant cooperation, assistance, and warm hospitality extended during the Study.

We sincerely hope that this Report will contribute to the further development of the Government of the Kingdom of Thailand and citizens.

Sincerely yours

Koomi Noda

Team Leader

Study Team of the Study on Application Scheme of Land

Readjustment in National Urban Development

Thrust

.

THAILAND

The Study on Application Scheme of Land Readjustment in National Urban Development Thrust

EXECUTIVE SUMMARY

1. GENERAL

In this study, a land readjustment legal system in Thailand was proposed in order that an L/R system should be applied to the development of the New Bangkok Urban Center (CBD) for alleviating current urban problems. The L/R implementation plan was set forth for the implementation of the L/R in the project area of 85ha. In addition, the replotting design for the replotting enforcement in the project's implementation was made with the knowledge and skills transferred to the Thai Government.

2. LAND READJUSTMENT LEGAL SYSTEM

With a purpose to broadly and generally apply an L/R system in Thai society, a legal system of land readjustment was proposed. The system is geared to expanding urban development in Thailand based on the following three important social concepts.

- 1) Concept of Public and Social Welfare (Public project)
- 2) Concept of preservation of private rights and properties (enforcement of replotting)
- 3) Concept of social justice (cost sharing by funding from development profits land contribution).

The legal system was designed to primarily stipulate the power of project enforcement and legal items and procedures based on the above listed concepts. It also included proposed supporting systems such as taxation, financial assistance, and land registration.

In response to the proposals made in the study, the land readjustment committee established in the Ministry of Interior of the Thai Government, proceeded with the drafting of the Thai Land Readjustment Act.

3. L/R IMPLEMENTATION PLAN

At present, Bangkok is plagued with serious traffic congestion, environmental deterioration, and other serious urban problems due to overcrowding in the existing urban center (CBD). For resolving these urban problems, it is suggested that decentralizing the urban center and reorganizing the Bangkok urban structure are needed. Accordingly, the development concept of the new Bangkok CBD in the study area of 800ha will provide a dispersing of the urban central functions and activities. In the study area, 300ha of land was selected as the core of the CBD which should be developed through the application of the L/R system.

Finally, the L/R priority project that consists of 85ha of the project area was proposed with the following implementation plan.

Project area

Huai-Khwang district, Bangkok

Implementing body

Either DTCP or BMA (undecided)

Project cost

8,440 million Baht (exchange rate: \$1=25Baht)

Project period :

5 years (on the condition that all the preparatory work

shall be completed in the first year)

Contribution

29.5~30.7%

4. SOCIO-ECONOMIC ANALYSIS

< Development effects and project economies >

The L/R project proposes to improve urban development and management, through which a great deal of development effects are materialized (land resources and infrastructure management), and makes contributions that improve the financial conditions of the government through increased tax revenues.

An L/R system's development cost is the cost of land contributions (for public land and for reserve land) with development profits comprised of the increased land values of the replots (B/C ratio shows as high as 3.26).

< Social acceptance of project >

Judging from the results of the opinion poll survey, it was concluded that social acceptability of the project is substantial and favorable.

The survey demonstrated that a majority of the landowner respondents are in favor of the project implementation. In this regard, the project will be accepted by landowners with a positive and enthusiastic governmental approach.

However, there are some landowners with negative opinions. Therefore, careful attention must be paid to the minority opinions in the course of the project's implementation.

5. REPLOTTING DESIGN

Even though substantial attention was paid to Thai conditions, the evaluation replotting method seemed more legitimate to this L/R system, and was proposed. This method's application calls for the replot area to be calculated in proportion to the increase of land utility value through the L/R project, and which is measured utilizing the street value evaluation method. The study also presented the indices and coefficients to be applied to the calculation method. However, these must be refined in the actual process of the L/R project implementation in Thailand.

6. PROJECT IMPLEMENTATION

The implementation process of an L/R project is more important than those of other public works because implementation of an L/R relies on the cooperation of landowners and the consensus achieving activities that must be made through all the stages of preparation, implementation, and termination of the project. Accordingly, the organizational capability, human resources, and coordination capability for coping with these tasks, are prerequisites for successful implementation.

7. NEXT STEPS TO BE TAKEN

The study proposed an L/R legal system and an L/R project, and were focused to be feasible. The following measures must be taken for the project implementation.

- 1) Legislation of an L/R Act.
- 2) Establishment of organization and manpower development.
- 3) Secure funding resources
- 4) Final adjustment of Implementation Plan in accordance with consensus among the landowners.

The Study on Application Scheme of Land Readjustment in National Urban Development Thrust

Final Report

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ABBREVIATION

BMA Bangkok Metropolitan Administration

BMR Bangkok Metropolitan Region

CBD Central Business District

CVA Central Value Agency

DDS Department of Drainage and Sewerage, BMA

DTCP Department of Town and Country Planning, Ministry of Interior

ETA Expressway and Rapid Transit Authority

IEAT Industrial Estate Authority of Thailand

JICA Japan International Cooperation Agency

L/R Land Readjustment

MDRA Medium Denstiy Residential Area

MOI Ministry of Interior
MRT Mass Rapid Transit

MWA Metropolitan Waterworks Authority

NHA National Housing Authority

PWD Public Works Department, MOI

SRT State Railway of Thailand

TOT Telephone Organization of Thailand

THAI MEASUREMENT UNITS

 $1 \text{ Wa} = 4 \text{ m}^2$

 $1 \text{ Ngang} = 400 \text{ m}^2 = 100 \text{ Wa}$

 $1 \text{ Rai} = 1600 \text{ m}^2 = 4 \text{ Ngang}$

Part I. Introduction

PART I. INTRODUCTION

1. Background

It is true that urbanization has accelerated in many Asian countries mainly due to economic development and expansion.

However, as urbanization proceeded without an effective city planning and urban development system, serious urban problems such as traffic congestion, environmental deterioration, poor public services, etc., have emerged. Many of the Asian countries have been seeking effective urban development systems to cope with such problems.

In this situation, the Land Readjustment (L/R) system has been highlighted in many countries considering its advantage to overcome current problems such as the difficulty in land acquisition and the financial constraints of governments; barriers to extensive urban developments, including public facility improvement.

In fact, many Asian countries have been trying to apply the L/R system in the territories of the country's land areas.

In Thailand, especially in/around Bangkok, urbanization triggered by rapid economic and industrial development has expanded faster than expected, resulting in serious urban problems. Typically, the worst being traffic congestion.

It appears that as the Thai people have suffered the urban problems stated above, they are beginning to recognise the necessity of improving city planning and accepting effective urban development systems such as the L/R system to solve urban problems. Thailand has become a front runner among the Asian countries in examining the full-scale application of the L/R system with the technical cooperation of Japan.

This is the social background on which the Thai Government launched an application scheme of the L/R.

Accordingly, it must be stressed that this study was carried out in conjunction with the enthusiastic preparatory works of the Thai Government for establishing an L/R system, including creation of an L/R committee in the government (where the administrative arrangements are made), legislative preparation (draft of law), establishment of an organization, information campaign through the mass-media et cetera.

2. Purpose of the Study

This study aims at the implementation of an L/R project in Thailand. To this end, the purposes of the study are set as follows:

- To formulate a Land Readjustment Plan for the first implementation project in Thailand.
- To propose a Land Readjustment System in Thailand.



Figure 1.1-Location of the Study Area

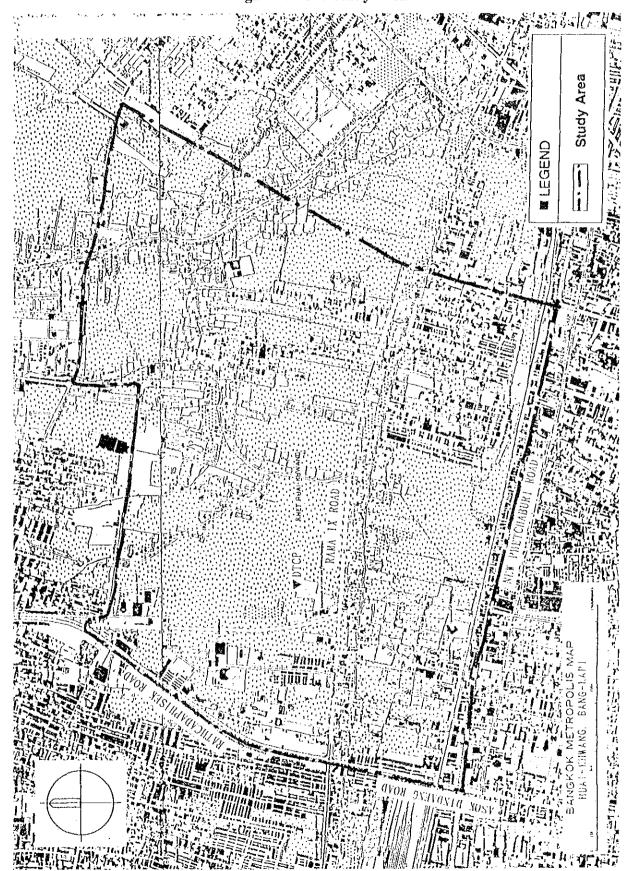


Figure 1.2-The Study Area

3. The Study Area

The study area for the land readjustment plan is set in Huai-Kwang, Bank-Kapi district (apx. 800ha) as shown in Figure 1.1, and Figure 1.2.

4. Methodology of the Study

In an attempt to apply a new system in a society, the usual procedures follow: 1) establishment of a new implementation system; 2) formation of an implementation project; and 3) implementation practice, in this order as shown in **Figure 1.3**.

Figure 1.3-Approach of Application Scheme

Procedure	Study Item	Major Out-put
Establishment of Implementation System	→ L/R System	→ L/R Act and System
Formation of Implementation Project	→ L/R Plan	→ L/R Implementation Pla
Implementation Practice	→ L/R Practice	→ L/R Practical System/Techniques

Following this procedure of an application scheme, this study mainly consists of three parts:

- The study of the L/R System with a targeted out-put of an L/R Act and System;
- The study of the L/R Plan with a targeted out-put of an L/R Implementation Plan; and
- The study of the L/R Practice with a targeted out-put of an L/R Practical System/ Techniques.

Detailed descriptions of the method of this study for each item are given in the corresponding volume of this report.

The Primary concepts of this study are summarized as follows:

(1) L/R System

1) Level of Application of an L/R System

It is apparent that the application of an L/R system will vary depending on the social/economic and cultural system and more importantly, the sophisticated development of city planning.

Some countries have started applications of an L/R within the existing

framework of laws, without any new L/R laws being established, others with corresponding applications of existing laws similar to the L/R law. In fact, Japan began an L/R project implementation via corresponding applications of an agricultural land consolidation law.

As a matter of record, at the beginning of this study there were discussions whether an L/R system could be applied in Thailand, with or without a new L/R law's enactment.

However, the Thai government's enthusiasm and endeavor to arrest urban problems overruled discussion, and launched a full-scale application of an L/R system underpinned by legislative measures.

2) City Planning Approach

L/R techniques are considered one of the only techniques for readjusting or reshuffling the existing lots through such devices as replotting and contribution.

Without a systematization scheme, land readjustment can be observed, in a small scale, though among the landowners in Thailand (for instance the exchange of parts of lots among land owners and contributions of parts of land to road construction, etc.), similar practices are also found among existing agricultural land consolidation schemes and systems.

Given that an objective of an L/R application is to expedite urban development in Thailand, the question is not whether or where an L/R technique is applicable, rather, how to generalize the use of L/R techniques, or the general systematic application of these for urban development.

- To this end, land readjustment must be legalized (institutionalized)
 without dependence on the existing legal system, but also should study
 the transaction of selling and buying with regard to the exchange of
 land and donations.
- In order for an L/R system to be an effective urban development system, L/R techniques on the legal basis of land readjustment as stated above must be systematically applied.

As follows:

- a. Broadly/generally applied (not limited to specific small areas) for extensive and large urban development areas.
- b. Effectively upgrading urban environments and public services.

In other words an L/R system should be established in order to attain the outlined targets and goals.

• Thus, an L/R system to be developed is defined as an urban

development system which can be broadly applied to create a high-standard urban area with appropriate public services based on the application of L/R techniques.

 An L/R system's application will bring about not only technical innovations, but also new dimensions regarding urban development in Thailand. Urban development via an L/R system is the responsibility of city planning concepts, and L/R techniques will systematically reinforce city planning concepts in urban development.

City planning of an L/R system is composed of the following three components.

a. Public concept of urban development.

Traditionally, urban development has been largely viewed as the domain of private interest (subdivision developers with exception of some limited governmental involvement such as housing development, slum up-grading, industrial estate development, and individual public facility construction).

However, an L/R system provides a new concept or idea that urban development is of significant public concern.

As a matter of fact, unlike the subdivision system, an L/R system is designed to equitably benefit the community and all landowners; not just one particular landowner.

A well-developed urban area based on an L/R system can make a significant contribution to the public policies of housing and sites for the socio-economic development of cities, and creation of disaster prevention urban areas.

Based on this premise, urban development based on an L/R system should be defined as an effective measure with which to promote and enhance the public welfare.

Thus, an L/R system that pursues the public interest and welfare, earns the public's support and acceptance, and expands urban development projects.

b. Concept of preservation of property rights

At present, one of the major barriers of urban and infrastructure development is the difficulty of land acquisition. It is a common fact that most landowners are reluctant to sell their lands for the sake of urban and infrastructure development.

In order to overcome this barrier to accelerate urban development, an

L/R system can provide a possible alternative by implementing an urban development project without land acquisition or ejection of landowners.

This is the concept of preservation of property rights, of which an L/R system is based.

Also, an L/R system can solve other problems related to urban development: financial difficulties as there are no longer any needs to raise funds for land acquisition.

c. Concept of refund from development profit

The most significant hindrance of extensive infrastructure construction for an urban development project is the financial constraints of the government.

However, development profits accrued from the construction of infrastructure (such as arterial roads and others) are elusive, and at largely over the landowners along the roads for instance.

It is apparent, that in order to lighten the financial burden of the government for maximizing urban and infrastructure development, there should be a rule that beneficiaries share costs which are equivalent to the benefits.

Based on this concept, a refund system derived from the development profits yielded through an urban development project, is best identified based on a reliable L/R system.

The city planning concept derived from an L/R system is summarized as follows.

- a. Taking into consideration the public benefits of an L/R project, it should be defined as a public project. Thus, under the justification of the public's benefit, massive urban development can be launched.
- b. In pursuit of the public benefit, urban development should be executed with private rights protected (preservation of property rights), and development costs fairly shared by the beneficiaries (refunds from the development profit).

It must be stressed that the general application of an L/R system (as such an urban development system) is heavily dependent upon the social acceptance (in Thailand) of city planning concepts as described above.

3) Peculiarity of an L/R System

One of the special features of an L/R system is its propensity to ambiguity if that L/R project is executed by the power of law; even with the consensus of

the people concerned, especially landowners. In other words, it is to be implemented by a combination of the law and the people. Special attention must be paid to this feature of an L/R system when proposing such a legal system.

It seems probable that consensus is likely to be reached with fewer difficulties if based on the law, and the law is likely to be enforced with fewer difficulties if it is based on the consensus of the people concerned.

4) Integrated Coordinated Approach

Collaboration between JICA and Thai panels is essential to apply such a radical L/R system into Thailand's local society.

Based on Japan's experience, JICA made a proposal for an L/R system in Thailand. The Thai representatives responded based on their knowledge of social/cultural and economic situations for localizing this system.

Also, the Thai representatives proposed an L/R law that was connected to the JICA group for further refining.

In this study, the coordinated approach was employed to compliment the Thai L/R legal system.

(2) L/R Plan

A special study procedure for this L/R plan formulation was taken, reflecting the uniqueness of this L/R system.

1) Two Types of Study and Plan Formulation

In this L/R plan study, two types of studies are to be carried out with the following purpose.

a. L/R Master Plan Study

First, an urban development plan is proposed in the relatively wider range of urban areas. Secondly, to implement such a plan, an L/R project area, specifically an L/R priority project and area, are specified.

b. Project Study

A feasibility study based on the selected project priority is documented with the implementation program presented.

2) Project Study: Three Steps

The project study encompasses the following three (3) steps.

a. Development Concept Plan for the Project Area

Development Concept Plan is consolidated for the project area.

b. L/R Master Plan for the Project Area

Under the framework of the development concept plan set above, a master plan for the L/R project is formulated.

c. L/R Implementation Plan

Upon finalization of conditions for the project implementation, an implementation plan for the L/R project is officially sanctioned.

Special attention must be paid regarding the following during the course of this study.

1) City Planning Approach

As stated before, an L/R project is to be implemented as a public project for the public's benefit and the benefit of landowners.

In this regard, an L/R plan must be formulated considering and in conjunction with Bangkok's city planning.

An urban development project area is projected so as to help alleviate urban problems and make a significant contribution to the future prosperity of Bangkok. To this end, a new CBD of Bangkok was proposed in the study area in belief that it is instrumental for the improvement of urban conditions in the Bangkok Metropolitan Area (BMA).

2) Coordination Process: Social Consensus

An L/R study and planning process is not only a technical engineering venture, but is also a social coordination process whereby L/R plans are elaborated based on a consensus among landowners, and a consensus reached on the basis of the L/R plans.

A consensus must be arrived at based on the three steps of the project study as stated above.

Due to study limitations, only an engineering analysis of planning was accomplished.

5. Study Organization

The Study was carried out by the study team under the supervision of the Advisory Committee organized by Japan International Cooperation Agency (JICA), included several Japanese government officials and was chaired by Mr. Hiroaki OGAWA. The study team, directed by

Mr. Koomi NODA, consisted of thirteen experts and worked closely with counterparts recruited by the DTCP.

The members of the Steering Committee, the JICA Advisory Committee counterparts, and the JICA study team are listed below.

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6. Structure of Report

The structure of this report consists of five parts, and is illustrated in Figure 1.4.

PART I. INTRODUCTION PART II. L/R SYSTEM PART III. L/R PLAN PART IV. REPLOTTING Thai Land Evaluation L/R Legal System Methodology System Concept Plan L/R Supporting Thai Replotting System (800 ha) System Master Plan Taxation (300 ha) Preliminary Replotting for Planning Area Finance Implementation Plan (85 ha) Registration Replotting Design/Plan Concept Plan Master Plan Implementation Plan

PART V. PROJECT

IMPLEMENTATION

Implementation System

Management System

Social Coordination System

Figure 1.4-Structure of the Final Report



Part II. Thai Land Readjustment System

Volume I.
Land Readjustment Legal System
in Thailand

Volume I: Land Readjustment Legal System in Thailand

- 1. City Planning and Development of Thailand: Overview
- 1.1 The Present Conditions and Problems of Urban Development

1.1.1 The Present Conditions of Urban Development

The current upward economic growth of Thailand has comparatively lowered the proportion of rural communities in Thai society, and accelerated urbanization. As Bangkok experienced rapid population growth, an outward expansion of the existing built-up area created a sprawling urban area with a deteriorated environment.

Rapid urbanization resulted in urban problems such as:

- (1) expansion of an over-populated area (slum area).
- (2) traffic congestion.
- (3) poor supply of potable water and electricity, and the over demand of the sewage and garbage system.
- (4) increased pollution.
- (5) flooding.
- (6) unstructured conversion of farm lands into urban areas.

Among others, traffic problems are the most serious, and are attributed to:

- (1) a shortage of road capacities;
- (2) a lack of a systematic road network; and
- (3) a delay in mass transit systems.

The Thai City Planning and Development System is aware of the problems stated above.

The Thai City Planning System consists of a general plan (which includes land use and infrastructure plans such as transportation, telecommunication, and others) and a specific plan which gives details of the general plan.

Land use is regulated through building codes, a subdivision control system, and infrastructure developed by the administrators of each facility.

Regardless of the city planning as stated above, actual conditions observed are as follows:

a. There is a mixed accumulation of buildings with different uses. An imbalance of buildings in terms of size and height.

- b. As for road development, there is a limited amount due mainly to the construction of only arterial roads and expressways.
- c. As for urban land development, land subdivision development with culdesacs or dead end roads connected to arterial roads, resulted in an expansion of poorly planned urban areas.

1.1.2 Measures for Urban Development

Measures for arresting urban problems are summarized as follows:

(1) Prevention of Urban Sprawl

Measures for regulating and guiding urban development must prevent expansion of built-up areas made by poor development planning.

(2) Infrastructure Development Coordinated with a Land Use Plan

Infrastructure must be constructed in coordination with a land use plan in order to develop urban areas in a consistent, planned method.

(3) Systematic Improvement of Infrastructure

Public facilities must be systematically developed in order to expand effective urban activities.

1.2. The Administrative System and Laws

1.2.1 Administrative System of Government

(1) Central Government

The Thai government has a centralized administration system. The central government is comprised of a prime minister's office and 13 ministries.

(2) Local Government

The Local administrative system consists of organizations made up of a prefecture (changwat), county (amphoe), municipality (tambon) and village (muban), which are under direct supervision of the central government (primarily the Ministry of Interior) and the city and ward (thetsaban), sanitary district (sukhaphiban), BMA and Phatthaya special city, which are relatively autonomous.

It should be noted, that the local administration is weak and not empowered to formulate development plans. Self-financing sources are limited. In this situation, the BMA is given special administrative power.

To some extent, the BMA has exercised land use control through building codes prior to city planning control. With limited funding sources, the BMA also constructed roads

and other infrastructure.

1.2.2 Laws in Effect

(1) Laws

Laws stipulate the concepts of what ought to be, and the following idicate the framework of the law.

1) Phrarart Chabanyat (PRB)

This is monarchal rule of law which the King can issue with the advice and agreement of the Parliament.

2) Phrarart Chakamnod (PRG)

This is another monarchal law which the King can issue with the advice and agreement of the prime minister based on the following conditions.

- a. In an emergency which dangers the nation's security and the public's stability.
- b. Upon immediately convening the parliament.

3) Prakart Kanapatiwat (PKP)

This is notification by a revolutionary government, which has the same legal power as the laws mentioned above. The PKP is empowered to revoke and revise the above mentioned PRB and PRG.

(2) Legal Decree and Ministerial Ordinance

While the laws described above set out the legal framework, the following determine the specific details of the law.

Therefore, it is not until PGS, GT, PGT, and guidelines, described below are enacted that the legal system garners the regulatory power and is established.

1) Phrarartcha Kritsdika (PGS)

This is issued by the Monarch with the agreement and advice of the parliament, and consists of the PRB and PRG (which stipulate the legal details).

2) Kod Krasuang (GT)

This is issued by the Minister who is in charge of the PRB and PRG, based on laws and government regulations.

3) Prakart Krasuang (PGT)

This is issued by the minister in charge of the PRB and PRG based on laws and government regulations.

4) Koh Banyad (KB)

This is equivalent to local government regulations.

Building code, for example, is put into effect by the enactment of the KB in the municipalities (thetsaban), sanitary districts, and the BMA.

5) Others

There are regulations which are accessories and guidelines.

1.3 Outline of the Seventh National Economic and Social Development Plan

The first NESDB Plan was established in 1961, and is currently effective as the Seventh NESDB Plan for the period 1991 to 1996. This is the first National Plan that suggested Land Readjustment System to be implemented.

(1) Purpose of National Development

- 1) To maintain an appropriate economic growth rate while providing economic and financial stability.
- 2) To disperse the benefit of economic growth and income to rural areas.
- 3) Further the development of the country's people and natural potential.

(2) Development Goals

- 1) Economic development goal
 - : annual economic growth rate of 9 percent.
- 2) Economic stability goal
 - not less than 5.5 percent of the annual inflation rate.
- 3) Income distribution goal
 - reduce the number of the lower income group with the targeted group.
 - reduce the disparity of income between regions and professions

- : disbursement of property ownership, specifically landownership of farm workers and the provision of housing for lower income groups.
- 4) Human resources, quality of life, environment and natural resources
 - : population growth rate less than 1.2% per annum.
 - community participation promotion in the development of larger scale, development profit.
 - up-grading the quality of human resources in response to a changing environment.

(3) Policies

Among the policies to achieve the goals, the following are for infrastructure service improvement.

- 1) Administration and management for infrastructure services
 - a. Improvement of budgeting procedures with a view to facilitating infrastructure implementation process.
 - b. Formulation of a five to 15 year Master Plan which can provide the coordination framework for an investment program.
- 2) Development of transport system

The acceleration of construction of arterial and secondary roads; the ring road around the Bangkok area, and diversion roads for major cities.

3) System development for public services

Modification of rules and regulations, and the removal of other constraints and impedance to promote the private sector's role in housing for low income groups.

4) Finance

Practical use of taxation systems to assist and supervise land use activities, and stabilize accelerated increases in land prices due to land speculation.

1.4 City Planning System

1.4.1 Outline of City Planning System

(1) Outline of Town Plan Act

The Thai Town Plan Act, based on the England Town Plan Act, was enacted in 1936, and amended in 1952, and 1975. At present, the 1975 Act (BE 2518) is in force.

The purpose of the enactment is stipulated as follows: public health, comfort, convenience, order, landscape, utilization of property, public security, and the peaceful improvement of the economy, society and environment, and conservation of art, architecture, history, etc.

The town planning act established both the general and specific plans.

The general plan includes plans and regulations which work as guidelines for urban development and preservation. They are enforced by ministerial ordinance.

The specific plan includes plans and programs for urban development and preservation in specified areas. And is enforced by the PRB.

The Act stipulates the following.

- · Formulation of a plan, implementation, and compensation.
- · Authority, responsibility, procedure for enforcement.
- Items to be determined in the plan, approval of a committee, public inspection, and a calculation method for compensation, and an appeal process.

(2) City Planning Practice

By virtue of the Town Planning Act, city plans for all cities and municipalities (about 140) are formulated by the DTCP.

Planning items are largely categorized into land use plans and transport communication plans.

Land use control which is a primry means for plan implementation, is exercised through: (1) a building permission system of municipalities based on the building code; and (2) a subdivision control system of which the Department of Land is responsible. The infrastructure is implemented in compliance with city plans by the corresponding administrators of infrastructure.

As the plan is a long term formulation, projects which are ready to be implemented are likely to appear in the plan enforced by the ministerial ordinance of the Interior.

Consequently, it is not uncommon that the ministerial ordinance which enforces the general plans of the municipalities, includes one article which is obliges the cooperation between concerned agencies.

1.4.2 Issues for Improvement of Thai City Planning System

As urban problems are, more or less, attributed to an existing system of city planning and development, it is necessary to improve this system to arrest or prevent these occurrences.

(1) Coordination of Laws and Ordinances

Various laws and ordinances regarding land are connected to city planning and are in place, and are taken charge of by different agencies.

The laws stipulating a) landownership, b) property tax, c) infrastructure projects, d) land regulation, e) development projects and utilization of public land, etc., must be coordinated for implementation of an integrated urban development plan.

(2) Improvement of City Planning Practices

The following problems in city planning practices are identified and improvements must be made to overcome these.

- The planning agency is not empowered with implementation measures. Accordingly, plan implementation is precariously dependent upon cooperation of different agencies.
- 2) The long term infrastructure plan is likely to be excluded from the general plan.
- 3) The objective of land use control seems to be elusive and less concrete. Consequently, it is difficult to substantially apply land use control.
- 4) Infrastructure is developed by different agencies, thus it becomes difficult to formulate an integrated infrastructure plan.

(3) Improvement of City Planning System

An integrated city planning administrative system must be developed in order to fulfill the requirements to improve Thai city planning. (Technical advancement, expansion of city planning and implementability for example).

To this end, more specifically, "a task-sharing system between central and local government should be established", and technical improvements should be pursued.

The task sharing system should be realized in such a manner that the local government takes charge of plan formulation and implementation, as the central government takes responsibility for the guidance, supervision, and support of the former.

(4) Plan Implementation System

Town plans formulated are to be realized through urban development regulations and specific infrastructure development projects.

It should be noted that though city planning control of the private sector proves insufficient for Thai city planning, positive involvement of the public sector is greatly needed.

Thus, it is recommended that creation of an integrated urban development system must make use of the private sector based on the principles of cost-sharing by beneficiaries, and take into consideration the financial and human resource constraints of the public sector.

1.5 Land and Other Related Laws

1.5.1 Land and Other Related Laws: An Outline

(1) The Land Act (BE 2497)

Matters of landownership in Thailand are covered by the Land Act, the Civil and Commerce Code.

The Act stipulates definition of landownership, certificate of ownership rights, possession and use, and the issuance of certificates and the registration of rights and deeds.

(2) The Subdivision Control Act (BE 2530)

The land subdivision project is a typical development project for serviced land and housing by the private sector in Thailand; whereby land and infrastructure, including roads and others, are developed in large tracts of land, and the land is subdivided for sale.

The basic features of the Subdivision Control Act are enumerated as follows:

- Permission for a subdivision project where more than nine lots of land are developed must be granted by the Ministry of Interior.
- The Act sets forth the standards of land development.
- The size of land tracts are set by land use.
- The right of way must be more than 8 m wide generally, and 12 m wide in commercial areas.
- Public facilities standards are to be constructed as follows:

playground/kindergarten

in proportion of the number of lots subdivision with more

parks/sport ground/elementary

schools

than 2000 lots

junior high school

subdivision with more

than 4000 lots

(3) The Property Expropriation Act (BE 2530)

This Act is employed when and where the government needs to acquire properties for the public interest for the national interest, preservation of natural resources, city planning, economic development, land reform and the like.

The Act stipulates the procedures for expropriation and compensation, including a committee for determining the amount of compensation, and a council for the appeal of complaints regarding compensation.

The amount of compensation is to be calculated based on the land prices on the date when the ordinance (PS) specifying the area of expropriation is placed in effect. Where and when a rapid increase of land prices takes place, the gaps between the amount of compensation and the real land values are likely to widen, thus resulting in an impediment of the smooth implementation of a project.

The Act also includes an article that stipulates where/when the prices of remaining private lands, the amount equivalent to the increased land value shall be deducted from the compensation determined. This article is viewed as one of the factors effecting landowner opposition regarding land expropriation.

(4) The Agriculture Land Consolidation Act

The agriculture land consolidation project aims to increase farm land productivity through an improvement of the irrigation system.

It is different, in terms of purpose, but similar in terms of the implementation system of the L/R project. There are two types of project implementation.

One, is an integrated/unified development project which includes adjustment of land levels, the shapes of farm land, and the construction of irrigation systems. The other is a project for developing irrigation systems along the existing boundaries of farm lots without shape adjustment.

About 260,000 ha. of farm lands have been developed through this system by the irrigation project offices. This act is composed principally of articles stipulating organizations (such as the central committee) which are empowered to decide and approve the implementation plan of projects, the local committee which is in charge of the plan formulation, implementation, and procedure of project implementation including the survey, implementation plan, infrastructure development plan, replotting plan, et cetera.

1.5.2 Basic Features of Related Laws

There appear to be basic features which are common to related laws. These have a bearing on the social system, administrative organization, the exercise of power, and the uniqueness of the Thai legal system.

(1) Expression of Ideas and Framework

The law expresses ideas, sets a framework for an act, and is effectuated by government, ministerial and prefectural ordinance.

(2) Promulgation of Government Ordinances (Royal Decree) Determining the Project Areas

Preparatory work such as surveys, must be made prior to the start of project implementation.

Upon the promulgation of government ordinances determining project areas, the implementing agencies (or officers in charge) are empowered (right) to conduct surveys.

These characteristics can be usually found in the Town Plan Act (article 6), the Property Expropriation Act (article 14), and the Agricultural Land Consolidation Act (article 24).

(3) Stipulations of Organization for Implementing Projects

Another outstanding feature of the Thai legal framework is the inclusion of articles of organization for supervising agencies in charge of determining and approving an implementation plan, compensation, and the deliberation of the complaints appealed, as well as, the agencies in charge of implementing projects.

(4) Power of Expropriation

The legal framework laws regarding land and infrastructure development in Thailand are listed in Table 2.1.1.

Generally speaking, compulsory power can be enforced for projects in response to their national economic/social importance. In this connection, the power of expropriation is duly established as laws for public works, agricultural land reform, agricultural land consolidation, industrial estate development, et cetera.

The structure of the project is not supposed to eject landowners in the course of implementation of agricultural land reform and agricultural land consolidation.

However, the acts do empower implementing agencies to expropriate lands to eject the landowners. This is designed to eject landowners opposed to the project in order to secure completion.

This land expropriation distinguishes the Thai system from the Japanese L/R system, where compulsory power to involve the landowners in the project implementation instead of land expropriation, is institutionalized to guarantee a project's completion.

Table 2.1.1-Legal Authority and Legal Order

Act	Legal Power	Act	Royal Decree	Ministerial Regulation	Provincial Ordinance	Landowner Consent
Expropriation Act	Expropriation		Lands to be expropriated			no need of consent of landowner
Public Works Act	Expropriation		Royal decree based on Expropriation Act			no need of consent of landowner
Agricultural Land Consolidation Act	Expropriation of land of dissidents		Areas of land consolidation programme Expropriation		·	50% of landowner consent
Town Planning Act	Compulsory	Specific plan		General Plan		no need of landowner consent
Industrial Estate Authority of Thailand Act	Expropriation		Export processing zone	General Industrial Zone		no пeed of consent of landowner
National Executive Council Decree No. 316 (National Housing Authority)	no power to expropriate Expropriation in slum upgrading		National executive council decree • Acquisition of land • Clearance of degenerate settlements	Rules, Procedures Conditions		100% of landowner consent no need of consent of landowner
Subdivision Control Act	no power to expropriate					100% of landowner consent

2. The L/R System in the Context of City Planning and Development

2.1 The L/R Project: City Planning

The city planning systems vary depending upon the country where they are enforced. "City planning" in Thailand is represented by the Town Plan Act (B.E. 2518).

The Act defines that "city planning" is to promote the public welfare and public interest through the improvement of security, economy, community, environment, and preservation of natural resources, artistic/historic structures, et cetera.

To this end, the general plan primarily includes the land use plans; and the public facility plans are to be formulated.

Implementing measures for city planning are generally divided into the following three groups:

- (1) Regulation, such as building control and others for the prevention of disorderly built up areas.
- (2) Individual projects on spot or in line, such as the roads, parks, rivers, water supply and others (outright land purchase).
- (3) Urban area development, including public facility development for the realization of city planning in a certain range of areas.

In Thailand, the following two measures are in force and the urban area development system has been established.

- (1) Regulation and guidance by means of the Town Plan Act, building code and Land Subdivision Act for urban development.
- (2) Individual public facility development projects.

Consequently, Thailand has a need of establishing an urban area development system that includes public facilities development.

In this context, an L/R system is proposed as one of the urban area development systems as the third measure for realizing Thai city planning.

For this, one of the following legal measures will be necessary.

- (1) Inclusion of stipulations in the L/R projects in the town planning act.
- (2) Establishment of a legal linkage between implementation plans and specific plans in the town planning act.

Especially, recommendations for legal relations between a government implemntation of an L/R project and the town planning act, should be established. This appears difficult in the short term, but is realizable in the long term.

2.2 Concepts and Principles of an L/R Law

The Land Readjustment Project is an urban area development project where the shape and the nature of lots are altered with public facilities simultaneously constructed for the purpose of creating urban areas with appropriate land utilization.

The L/R system by which an L/R project was implemented in Japan, and other countries, differ. However, the basic common features of an L/R system are in common and can be identified as follows:

- (1) A certain range of an urban area is developed together with an integrated development of public facilities.
- (2) An implementing body is empowered to make adjustments for existing land. Accordingly, it is supposed to replot the existing lands and to relocate the public lands in lieu of management.
- (3) Without resorting to land expropriation, the new lands that are necessary for constructing public facilities are created through readjustment of existing lands in such a manner as use is made of development profit accrued from the project. An L/R project will reduce the area of lands which individual landowners hold, and increase the unit land value, thus preserving the total land value.

In addition, benefits of this system in real practice can be anticipated as follows:

- (1) Cost recovery is attainable through the sale of reserve lands created by contributions.
- (2) The urban areas are to be efficiently and effectively developed with the use of development profits compared to individual road construction, et cetera.
- (3) Residents within the project area are not ejected, but continue to reside in the area.

From the view point of the public sector in charge of urban development, and the people who live in the community, the merits of an L/R system are enumerated as follows:

For the public

- (1) Public facilities and land (alteration of shape and nature) can be more efficiently developed in an integrated manner through urban area development of an L/R.
- (2) Financial burden can be minimized.

• For the community

- (1) It is apparent that the living environment and convenience will improve.
- (2) Property values will increase.

Consequently, it may safely be said that benefits of an L/R system can be found not merely in land value increases, but improvements in such various areas as conveniences, the environment and in safety (disaster prevention).

In practice, the appreciation and cooperation of landowners in the project area is indispensable for the project implementation since it is implemented through the participation of many landowners. It can be safely said that an L/R system is viable only on the basis of the people's consensus.

Finally, it must be stressed that an L/R project with the features as described above, is structured by important concepts. An L/R system is designed along rules and principles which are derived from the concepts.

And, L/R projects that are institutionalized as one of the measures for realizing city planning, are related by the following three concepts.

(1) Concept of City Planning

An L/R system originated as an effective measure for realizing city planning in the pursuit of public welfare. In other words, an L/R system is to be part of the city planning system to strengthen and expand it.

In this regard, an L/R system is for the public's interest and in pursuit of the public's welfare through an improvement in the urban environment.

The concept of city planning forms one of the logical bases for institutionalization and enforcement of an L/R system. In this respect, an L/R system is distinguished from land subdivision development.

(2) Concept of Preservation of Private Property and Rights

In pursuit of increasing the public welfare or attaining public interests through enforcement of an L/R for improvement of the urban environment, private property and civil rights must be safeguarded and preserved.

An L/R system is unique for implementing urban development with the property rights of the number of landowners not changing, unlike the land subdivision project.

Technically, a new land (replot) is to be designated for each of the existing lots.

(3) Concept of Cost-Recovery by Refund from Development Profit

Construction of public facilities such as roads and others, will yield development profits (such as increased land values around them). For urban development, development profit of the project must be used for the project. This is an institutionalized concept of cost recovery by refunding from the development profit.

Accordingly, a portion of private lands in proportion to the increased land value should be contributed for construction of public facilities, and reserve of land for financing the project cost.

2.2.1 The Concept of City Planning

One of the goals of Thai city planning and development is to plan urban development expansion for significantly large urban tracts. To attain this goal, serious efforts must be made by the public and private sectors.

The private sector must have the positive participation of citizens and encourage consensus building efforts. The public sector should be executed by virture of the law regarding an urban development project.

An L/R system is applied to two (2) kinds of urban development.

- (1) Community development to be executed by the resident citizens (landowners).
- (2) Urban development to be executed with government initiatives in the city planning system.
 - a. Positive participation of citizen

For expanding the positive participation of citizens, establishment of a development system where groups of citizens take responsibility and can promote and complete urban development in the community. In the development system, "majority rule" must be applied so that landowner consensus can be realized in such a manner to arrest opposition by a few landowners. This is a system of implementation by association (where by agreement of more than a certain percentage of landowners they can implement an L/R) by means of involving the few opponents in the association, and project implementation.

b. Government initiatives

The government has not been directly involved in many urban development projects except for the NHA. Government projects for the construction of urban infrastructure have also been stagnated. In this situation, an L/R is proposed for government initiatives and the direct involvement in urban and infrastructure development (based on the principle of public precedence over the private right of landowners).

It appears certain that city planning and development would not make any progress without the strong direction and initiative of the government based on the principle of the public interest over the private interest of landowners.

An L/R system (especially a government initiated L/R project) can pave the way for the government, to represent the public welfare of all citizens and urban dwellers by implementing an urban development project by means of compulsory power derived from public principles.

As very strong compulsory rights (powers) are given to government initiatives of L/R projects, they must be strictly limited to such projects as those which are significant for national interest, city planning, and urban development.

The government's L/R project is designed for the public welfare without causing damage and/or benefiting particular landowners as these properties and rights are preserved as stated in section 2.2.2.

Although the L/R law stipulates that an L/R project can be forcibly implemented by the authority derived from democratic majority rule and/or the precedence of the public interest over private interest of landowners as stated above, concern for and the cooperation of landowners and other concerned persons are prerequisites for the law's proper function.

One of the major tasks throughout the projects implementation (from preparation to completion) is "consensus achievement" for deriving the concern and cooperation of landowners and other concerned persons.

It is true that at the preparatory stage of the project, explanatory meetings and research meetings consisting of representatives of the community and experts are held repeatedly to discuss many issues concerning the project. For example, what the community's development should be, and the draft of the urban development plan (including land use plans and trasportation plans, et cetera).

This is in line with the consensus building activities that also include the issues agreed upon and are included in the implementation.

At the implementation stage, a series of activities, including a preliminary survey, formulation of a draft and execution, are explained as matters of direct individual interest (such as replotting - individual lots allotted after the project in relation to the original lots), the removal of buildings for the replotting, site preparation works, etc., and so as to adopt as many opinions and suggestions of individuals as possible for the project implementation.

As all opinions cannot be adopted, it is significant to establish an organization composed of third party representatives which are responsible for decisions and judgements.

Consequently, there should be an L/R system based on the premise of consensus building activities of the implementing body (or expected implementing body, or consultants entrusted) throughout the project implementation, rules and principles as previously documented should be realized.

Reference:

Agreement of landowners as a condition of project implementation.

- Thai agricultural land consolidation project
- a majority of the landowners

Japanese L/R project

more than two thirds in terms of an association of implementation number of landowners and lease holders respectively and sum-up of the owned and leased land

2.2.2 The Concept of the Preservation of Private Property and Rights

According to this concept, an L/R system will preserve landownership, and other vested rights.

The implementing body is empowered to readjust lands (or lots). Therefore, preservation of private property and the civil rights of the citizenry is a prerequisite for the readjustment of lands.

(1) Ways of Preserving Property and Civil Rights

There seems to be two methods of land preservation before and after project implementation.

1) Pooling System

The existing lands are to conceptually be pooled as one tract of land and be redistributed to the landowners after the project's completion.

2) Continuation System

The property rights of existing lands are to continue to the new lots after completion.

It appears difficult to apply a pooling system to a project covering large tracts, primarily due to the work volume required to dispose of all of the rights, including debt before land pooling action.

In the continuation system, the property rights on existing lands are to be relocated to the new lands considering the scale and location of the existing lands before the project.

(Reference)

The Thai system for consolidation of agricultural lands which is equivalent to the original land in terms of land values are returned after the project. Accordingly, land rights, other than ownership, must be liquidated in order to keep landownership before and after the project.

(2) The Basic Concept of Replotting Lands

The basic concept of replotting lands based on the mtehods of preserving property rights is summarized as follows.

For the case of a pooling system, "the replot" is those lands which are to be given in

exchange of existing lands; relationships between existing lands and the replots, are kept in a manner that the same land value, and landownership of the existing lands are secured during the replot.

For that case of a continuation system, "the replot" is placed on the spot, where not only the land value, but also the utilization valuem are kept the constant throughout the project's implementation.

Because the utilization value is kept the same for both the original land and the replot in spite of differences in the location, land area, shape, etc., landownership and rights other than ownership of the original land can be transferred onto the replot without any changes.

Under this rule, all the rights vested in the original land can be moved onto the replot after the land readjustment. Based on this premise, the landowner of the original land can legally claim that the replot is their personal property.

Note:

The remarkable feature of an L/R rests in the principle of the continuation of land rights, which is realized through administrative measures called "Replotting Disposition". For this reason, an L/R system is defined as a system of replotting dispositions.

2.2.3 The Concept of Cost Recovery in the Pubic Use of Development Profits

In an L/R project, development profits are yielded in terms of land value increases, and development expenses are carried in the form of land contributed by landowners.

According to the concept of cost recovery by refund from a development profit (in returns from development profits for land value increases), the landowner must bear the development costs in the form of land contributions which are to be used for new public facilities land development, and the reserve lands are to be sold for the financing of construction. It seems apparent, that the areas of land to be contributed are within the range of increased land values.

(1) Cost Recovery Methods

There are several methods for obtaining cost recovery for an urban development projects. Among others are 1) taxation system; 2) cost sharing system; and 3) a land contribution system. An L/R is characterized as a project in which employs the land contribution system.

This is the principle of land contribution by which cost recovery is made through the contribution of lands for public facilities and for the reserve of lands for the financing of construction.

(2) The Distribution of Development Profits

Land contribution is a form of the public use of development profits. In this respect, an equitable rule of distribution of the development profits must be established for an L/R system. In other words, it must be determined how the development profit is to be fairly

distributed or shared between the public and private sectors (namely the government and landowners).

Originally, public facility construction was the responsibility of the management authority. However, in practical terms, it is financially difficult for an authority to construct all the public facilities.

Thus, it is expected that lands for public facilities are to be provided through the land contribution of an L/R project. However, it must be discussed and decided upon what kinds of public facilities should be constructed through land contribution by landowners under an L/R system.

The standards for public facilities to be constructed may vary depending on the regions and communities. However, it can be stated that the following two conditions must be complied with for the construction of public facilities based on an L/R land contribution project at the cost of the people (the landowners).

- 1) Public facilities that directly serve and meet the needs of the community.
- 2) The public facilities can be constructed at the cost of the people within the range of the land value increase.

The public facilities which fall within the first category are streets, parks, green areas, rivers, canals, and others - transportation and disaster prevention facilities; in the second category, schools, hospitals, nurseries, government offices, education, and other service facilities.

Accordingly the first category reveals the broad range of public facilities, and the second gives the limitations. For actual project implementation, public facilities that are to be constructed are specified in response to the land use plan.

It is surmized, that the public facilities serving the broader areas (for instance the urban arterial roads) are constructed in an L/R project area. The construction of these public facilities threatens to impose on landowners burdens which exceed proper amounts of direct benefit to them.

It may be justified to establish a system of shared defrayment of public facilities by the management authority. That is, where the management authorities in charge of the public facilities will finance the total of costs.

3. A Proposed Skeleton of an L/R Legal System in Thailand

3.1 An L/R Legal System

The Thai legal system is composed of acts (PRB), government ordinances (PGS), ministerial ordinances (GT), ministerial notification (PGT), and provincial ordinances.

The establishing of an L/R legal system requires that the important matters (such as those empowering the L/R project's implementation) and the basic items for the project

implementation should be stipulated in an act and the procedures are detailed in ministerial ordinances, et cetera.

3.2 An L/R Legal System: Proposed Skeleton

Considering the analyses results presented in the preceding sections, an L/R legal system in Thailand is proposed in this section. Note, an L/R system may be beyond Thai legal practices or legal structures.

Considerable detailed stipulations are included in the L/R legal systems in the countries where L/R projects have already been put into practice. If the Thai L/R legal system is to be set up, one certainty is the complications that will follow. There seems to be three alternatives for setting up an L/R legal system.

- (1) A legal basis for implementing an L/R projects shall be founded on existing related acts.
 - Included are the stipulations regarding purposes, implementing bodies and definitions of L/R projects. However, it appears to be difficult to implement projects in reality, without government notices stipulating operations and procedures.
- (2) While the minimum conditions necessary for an L/R project's implementation are to be set up in an Act, ministerial ordinances and others, currently procedures are to be detailed in government notices.
 - Considering the experiences of project implementation in Japan, and the systems of other development projects in Thailand, government notices should be progressively changed to ministerial ordinances through the practical experiences of an L/R system in Thailand.
- (3) Referring to L/R legal systems in advanced countries, and considering other existing legal systems in Thailand, objectives and procedures necessary for an L/R project's implementation are to be included in an L/R Act and ministerial ordinances, et cetera.

Note the following: :

1. The Second Alternative - Essential Rules

Country	Basic Act	Ordinances for Implementation
Indonesia	Land act	Ministerial Order
Colombia	Urban Reform Act	Under study for rules of establising detailed implementation
Sweden	Joint development act	

2. The Third Alternative - Comprehensive

Country

L/R Legal System

Germany

Building code article 45 - 79

Taiwan Japan¹ L/R Act and Enforcement Act

an L/R Act

L/R Act and Enforcement Act with detailed rules for

implementation

Korea

L/R law

Note¹: Japan started with a corresponding application of an agricultural land consolidation act under the guidance of basic laws regarding city planning acts, and proceeded to the second alternative, and then the third alternative.

The establishment of an L/R legal system is urgently needed in Thailand, as early implementation of an L/R projects is expected from the standpoint of city planning.

Taking into account this situation the second alternative is recommended. The legal stipulation of the second alternative is categorized into the following two groups.

3.2.1 The Stipulation Necessary for the Implementing an L/R Project

(1) Project and Organization

1) Types of L/R(s)

L/R(s) can be grouped into two types dependent on the project and implementation authority.

a. Public organization and L/R implementation

Government agencies are expected to implement locational urban development projects for the purpose of developing urban areas and public facilities.

b. Semi-public organizational L/R implementation

Citizen organizations are expected to implement urban development (community development).

A group of landowners establish an implementing organization and all the land holders should be involved in this organization.

Because the organization is for implementing an L/R project for the public's benefit, it must be classified as a property owners' public organization.

It will be necessary to derive a methodology for qualified persons or agencies to utilize organizations responsible for the financial and technical support of the project's implementation.

Taking into consideration the actual conditions in Thailand, it is recommended that the public organization should understand an L/R project's implementation, and after a designated practical system of operation for project's implementation is developed, an L/R application should be expanded to cover the projects to be implemented by semi-public organizations of landowners.

It must be noted that the L/R system is applicable in any area, including built-up areas and surrounding locations where disorderly urbanization began, and open lands for new development with different purposes of development.

For further reference:

The implementation authorities in the Japanese L/R system.

- a. Public agencies Administrative agencies of the government, local public agencies, housing and urban development corporations, housing authorities, et cetera.
- b. Semi-public agencies L/R associations (consisting of more than seven land holders), and individual implementors (less than six land holders).

Selection of an authority in relation to the character of an L/R project. an implementation body is selected depending upon the character of the urban development projects as follows:

- a. Public agencies are supposed to be the implementing bodies for the project, with the purpose to develop urban areas and public facilities.
- b. Semi-public agencies are the implementing agencies for an L/R project whereby the citizens (landowners) express a desire for improving their living environment.

However, the following exceptions are likely to occur.

- It happens that public agencies displace semi-public agencies if/when there are few land right holders in favor of a project, or there isn't an appropriate leader for the semi-public agency to be found among the land right holders.
- It also happens that at the request of land right holders, semipublic agencies displace public agencies for implementing L/R projects, including important public facility construction projects.

2) Entitled Power for Enforcement

It is apparent that the implementing bodies must be empowered with at least the minimum powers necessary for project implementation.

The authority includes enforcement of replotting and contributions of lands.

The implementing body must be empowered to readjust the existing lands in terms of location and shape, and reduce their land areas for enforcement of replotting.

Furthermore, it must be empowered to make the necessary rearrangement of existing public lands - abolition or relocation - for the newly public land created through the replotting.

The contribution of lands resulting in reduction of the land area of landowners, consists of contributions for public lands and contributions for reserve lands to be sold for the financing of the construction costs of public facilities.

3) Obligatory Participation in an L/R Project

It is true that an L/R project could not be implemented unless all the land right holders in the project area agree with its implementation. However it is commonly understood that it is almost impossible to gain unanimous agreement of land right holders on any item of development. If unanimous agreement is a condition for implementation, it is impossible to develop an urban area. Therefore compulsory power should be entitled for the following cases only:

- a. A majority of landowners are in favor of the project. (community development)
- b. Development of land and public facilities which are important from the point of view of city planning.

In these cases, landowners are to be involved in the project implementation.

This obligatory participation of land right holders is derived from democratic rules of the majority and precedence of the public interest over private interests.

Land expropriation is a compulsory measure for securing completion of a project. Compulsory participation in an L/R will force a few opposition landowners, if any, to participate in the project implementation rather than eject the opposition through land expropriation.

Obligatory participants could be among the following categories of land right holders.

- a. landowners
- b. lease holders (those who have the right to use lands)
- c. mortgages (debt pawn)

Among others, landowners could be the land right holders participating in the L/R projects.

Leaseholders should also be included if/where the land use right is in effect in the society.

Mortgages should be included because they remain intact and are transferred to the replot.

4) Establishment of an organization in charge of granting approval for an L/R project

An L/R project is supposed to readjust the lands of individuals and construct a variety of public facilities in lieu of the management authority of those facilities. Official confirmation of an L/R implementation plan with the policies and programs of public facilities of the government, and the responsibility of the government to operate and manage public facilities after the completion, and the cooperation of other agencies concerned with the project's implementation, must be made before starting L/R projects as characterized above.

In this regard it is necessary to establish an organization that consists of agencies that are responsible for granting approvals of projects after a confirmation of an implementation plan.

(2) Items to be Stipulated

1) Implementation Plan

The implementation plan is designed to describe the complete picture of the project implementation. It usually contains the project area, an outline of the L/R design, the financial plan, the project period, etc., so as to illustrate the project outline.

The implementation plan reflecting the opinion of the landowners is officially determined and upon its approval is disseminated through notification. Naturally, the project is to be implemented in accordance with the implementation plan, which may be changed if/when it is proven to be necessary.

2) Implementation Articles

Implementation articles are to be set forth to regulate the implementing body and landowners participating for the smooth and fair project implementation.

The articles specify scope of project, cost allocation, disposition of reserve land et cetera. More importantly, matters regarding board members of the implementing body and matters which should be decided in the general meeting of landowners, in case of implementation by a private implementing body, are specified.

The implementation articles accompanying the implementation plan are subject to general inspection.

3) Replotting Plan

Replotting disposition is enforced in accordance with the replotting plan.

Upon the enforcement of replotting dispositions, replots are put into effect in place of the original lots.

In the replotting plan, pairs of original lots and replots are specified with adjustment payment which should be paid or collected if/when there is a difference in land value.

The replotting plan in which the landowners have direct interest must follow the same procedure as the implementation plan.

4) L/R Council

In the case of implementation by public authority, the L/R council is to be established for discussions to attain fair replots (which are the primary concerns of landowners regarding an L/R council) is a venue where/while the landowners are in a position to express their claims. The implementation body can learn the views of the landowners for providing acceptance of the project implementation. Thus the council is of benefit to the landowners and the implementing body.

Composition of the L/R council, consisting of the representatives of the landowners, experts and government officials, etc., should be elaborated in the Thai context.

(3) Procedures to be Stipulated

1) Enforcement of Replotting

A new city appears after the construction of public facilities and relocation of the existing buildings following the designation of provisional replotting. However, the land rights are still kept as existed before the project implementation. In short, the old cadastral map is not changed in accordance with the development.

It is the legal enforcement of replotting that makes the land rights (cadastral map) tally with the physical developed lands after the project.

Upon enforcement of replotting, the replot designated in the replotting plan can be legally identified with the original lot before the land adjustment. In other words, all the vested rights are to be transferred to the replot.

This legal enforcement of replotting also will officialize equity payment, ownership of public land and acquisition of reserve land by the implementing body.

2) Transfer of Public Facilities to Management Authorities

In lieu of the authorities for public facilities, an implementing body undertakes construction of the public facilities, which the implementing body should be empowered to transfer to the management authorities.

The public facilities are placed under the management of the responsible authorities the day after the enforcement notification of replotting. Even before this date, the authorities may proceed to management when the works on such public facilities are completed.

3.2.2 Stipulations Necessary for Successful Project Implementation

As the stipulations necessary for implementing an L/R project are described in the preceding section, the following items of stipulation are necessary for successfull L/R project implementation.

However, it must be stated that these are not necessarily included in or limited to the law. Accordingly, only desirable items included in the law if possible are shown as follows.

(1) Continuation of Rights from the Original Lands before the Project to the Replots after the Project.

The difference between the original lots and the replot appear in the following areas.

- 1) Locational change
- 2) Reduction of land area
- 3) Increase in land utility

Judging from the differences, the replots appear to be different from the original lots. However, a unique character of an L/R is the establishment of a system of continuation of the rights from the original lots onto the replots.

Without this system, the following practical questions may be raised during the actual implementation.

- 1) What happens to the lands sold during the implementation period (between the start of construction work and the enforcement of replotting) without the system of land right continuation?
- 2) What happens to those who have the right to use the land without the system of land right continuation?
- 3) What happens to the lands associated with debt and pawn without the system of land right continuation?
- 4) What happens to the buildings to be relocated without the system of land right continuation?

These questions are adequately resolved if the existing land rights continue throughout the implementation period and are transferred to the replot after the completion of the project.

Land rights are the right of ownership and use of the land. Accordingly, it consists of the right to own (landownership) and the right to use (existing lease holding).

The existing activities on the land, and the existing land use (including buildings), are based on the right to land use.

In order to relocate the existing buildings, the right to use not the right to own, must also be relocated; in order to construct roads the existing right to use must be abolished.

This is a provisional replotting system where only the rights to land use are transferred to the replot while the rights to own land remain with the original lots.

Finally, on the enforcement of replotting after the construction work is completed, the ownerships are transferred to the replot, thus transferring all the existing land rights to the replot.

Figure 2.1.1 - Continuation of Land Title by Designation of Provisional Replotting System

		Original lot	Replot	
Existing Rights	Right to own			
	Right to use			
Provisional Replotting	Right to own		Relocation of Building	
	Right to use	Road construction abolished	transferred	
Enforcement of Replotting	Right to own	::::::::::: ⇒		
	Right to use		transferred	

Based on this premise a land system of an L/R is established so that the original lands can be identified with the replot.

It is a major characteristic of an L/R that all the existing activities and land use should not be interrupted; rather, these activities should be continuously maintained.

In this regard, these remain continuously on the provisional replot.

During the transitory period of provisional replotting, land sales remain practical as land registration as the result of selling/buying of the provisional replot is made in the title of the original land. All the rights vested in the original land are to be transferred upon the enforcement of replotting.

The system of designation of provisional replotting and enforcement of replotting is subject to coordination between the agencies concerned because it is also related to other systems such as the taxation and land registration.

(2) Adoption of General Inspection System

Many landowners will participate in an L/R project concerned with individual property rights. In this respect, an open system of information to the public and opportunities for a democratic method of participation must be secured.

Accordingly, a system of general inspection of an "implementation plan", indicating a general plan of an L/R project, and the "replotting plan" which is directly concerned with individual rights and interests, must be established within the L/R legal system.

(3) Relocation or Removal of Buildings

The relocation or removal of buildings must be accomplished following the transfer of rights of use by provisional replotting.

The relocation or removal may possibly be categorized as compensation in Thailand. However, it is advisable to empower the implementing body to relocate or remove existing buildings.

(4) Construction Work

Construction work of an L/R project includes the public facility construction and site preparation, and is more specifically defined in the implementation plan. There are two cases of public facility construction.

- 1) The L/R implementation body takes charge of construction of public facilities.
- 2) The management authorities take charge of construction of public facilities such as roads, parks, canals, and others, in their charge.

3) Combination of 1) and 2)

a. Shared works

While the management authority takes charge of construction of the public facilities which are to serve the broader area beyond the project area, the L/R implementing body takes charge of the construction of the public facilities which are to serve the project area.

b. Two step works

Firstly, the L/R implementing body constructs the minimum public facilities necessary to use the lots for the present time and then the works are completed in phases.

The selection of cases is dependent upon the utility increase of the public facility construction.

Taking into consideration the public benefit of the project, and the necessity for early completion of a high quality urban area development the first case is recommendable as long as the cost of construction works is within the range of fair cost sharing in comparison with the development profit.

(5) Collection/Payment of Equity Imbalance

It happens that the replots are not exactly the same as the original lots in land value. Equity payment is collected or paid in order to close this gap. The implementing body is empowered to collect or pay the equity imbalance. For collection/payment of more than a given amount of money, installments are adopted.

(6) Registration of Land

Location, shape of the land area, and other characteristics. of the original lots change during an L/R project implementation. Application is made for changing the old registration in accordance with the replotting plan. This is a system of the L/R registration which the implementation body applies by virtue of enforcement of replotting. In addition, public lands and reserve lands are registered.

Land registration must be made immediately after all the replots are ready for use and the replotting is enforced, based on the replotting plan agreed upon by the land right holders.

It is desirable that the implementing body makes a collective application for all the replots so that land registration is correctly made.

In Thailand, the land registration system has already been established. However, the system is not prepared to respond to changes of lands in location, shape of the land areas which are different from traditional combination/subdivisions, and exchange of lands, because, the changes of the lands like those of an L/R have not previously occurred.

Consequently, it is subject to consultations with the concerned agencies.

(7) Disposal of Reserve Land

Reserve land is to be sold to raise funds for financing the project. Upon designation of provisional replotting, the planned reserve land is placed under the management of the implementing body, and upon the enforcement of replotting, the landownership of the reserve land belongs to the implementing body.

However, it is advisable to establish methods such that the planned reserve land can be sold after the designation of provisional replotting. This is of great help to improve the the financial conditions of the project which is implemented on loans being repaid by the disposition of reserve land.

In this case, the planned reserve land may be sold by the contract that "the right to use" which is gained by the implementing body upon the designation of provisional replotting is to be transferred to the buyer. This occurs on condition that the ownership of the property which is gained by the implementing body upon the enforcement of replotting, is to be transferred to the buyer.

After the enforcement of replotting, the reserve land is registered under the name of the implementing body. Then the implementing body can transfer the landowner to the buyer.

3.3 Draft of L/R Legal System

There are three alternative methods for establishing an L/R legal system as previously discussed.

3.3.1 Basic Composition of an L/R Legal System

An L/R is a new project and system in Thailand. Taking this into consideration, it is recommended to establish an L/R law which can be supplemented by ministerial ordinances and others. The L/R law should include the following items.

(1) Project and Organization

To identify the development project which can be implemented under this law, an organization should be established which can implement the L/R project.

(2) Administration Measures and Powers

To specify the administrative measures and powers necessary to effectuate transfer and the continuation of rights between the original lot and replot, reserve land, and the landownership of newly developed public lands.

(3) Legal Items and Procedure

To specify articles and procedures for the project implementation.

3.3.2 The L/R Law: Skeletal Structure

The minimum Thai L/R legal structure is presented in Table 2.1.2.

This attempts to describe an overall framework for the L/R law. Accordingly, it must be noted that all items are not necessarily included for completion of an L/R project implementation. It is reasonable to institutionalize the L/R legal system through ministerial ordinances and others.

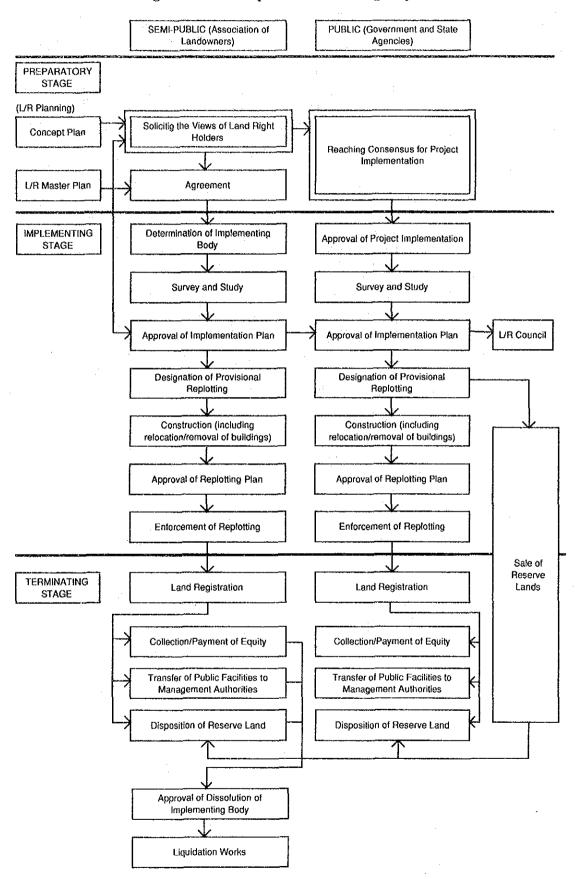
Table 2.1.2 - Thai L/R Law: Minimum Structure

lter	Items to Establish the L/R Legal System		Remarks		
1.	Project and Organization	(1) Purpose and definition of project	 Public and semi-public (association) organization 		
		(2) Organization capable of implementing project			
		(3) Organization approving project			
2.	Items and procedure to be stipulated (1) Items	Public organization implementation			
		(1) Implementation body	To determine implementing body		
		(2) Implementation plan	 To show the overall outline of the project including project area, outline of L/R design, financial plan and others 		
		(3) Implementation articles (Provincial ordinance)	To set up basic rules for project implementation		
		(4) L/R council	To check the replotting plan so that views of person and consensus are properly reflected and fair judgements are made		
		(5) Replotting plan	To determine the individual replots and equity payment		
(2	(2) Procedure	(1) Approval and notification of project	To determine implementing body so that it can start survey for formulating implementation plan		
		(2) Public inspection of implementation plan	To reflect the opinions of land right holders in the implementation plan (design and financing) so that their rights are protected		
		(3) Application approval and notification of implementation plan	To empower the implementation body to implement the project		
		(4) Designation of provisional replotting (administrative	To locate lands which can be provisionally used		
		measures)	To locate the lands which shall be designated as the replot in future		

Items to Establishe the L/A Legal System		Remarks		
		To be decided at the general meeting of association		
	(5) Relocation/removal of buildings and	To empower to relocate or remove buildings for construction works		
	construction works	To develop public facilities and sites		
	(6) Public inspection of replotting plan	To seek views of persons concerned with the individual replots and equity payment		
	(7) Application approval notification	To confirm the fairness of the replotting and equity payment		
	(8) Enforcement of replotting (administrative measures)	 To transfer the land rights from the original lot to the replot Finalization of equity To legalize the acquisition of reserve land and transfer of public land 		
	(9) Collection/payment of equity (10) Land Registration	To preserve properties and correct replotting imbalances		
	(11) Disposition (sale) of reserve land	 To register lands designated as the replots To sell newly created lands through L/R for financing the project 		
	(12) Transfer of public facilities	To transfer the public facilities developed through L/R to each management authority		
3. Items and Procedure to be Stipulated	2. Semi-public (association)			
(1) Items	(1) Organization (association) •Legal status corporate	 To set up organization of implementing body for operation, decision and inspection for implementing project. 		
	Participation of person other than the member into the association			
	(2) Implementation plan	 To show the overall outline of the project including project area, outline of L/R design financial plan and others. 		
	(3) Implementation articles	To set up basic rules for implementing project under the association		
	(4) Replotting plan	To determine the individual replots and equity		
(2) Procedures	(1) Agreement of landowners on project implementation	To make judgement on possibility of project implementation		
•	(2) Application approval notification of setting up association	To make it possible to carry out survey for formulating implementation plan		
	(3) Public inspection of implementation plan and articles	To reflect the opinions of land right holders in the implementation plan and articles		

Items to Establishe the L/R Legal System		Remarks		
	(4) Application approval and notification of implementation plan	To empower the implementing body to implement the project		
	(5) Designation of provisional replotting	 To locate lands which can be provisionally used 		
	(administrative measures)	To locate lands which shall be designated as the replots in future		
	,	To be decided at the general meeting		
	(6) Relocation/removal of buildings	To empower to relocate/remove the existing building for construction works		
	(7) Public inspection of replotting plan	To seek views of people concerned on the individual replots and equity payment		
	(8) Application approval and notification of replotting	To confirm the fairness in the replotting and calculation of equity		
	(9) Enforcement of replotting (administration	To transfer the land rights from the original lands to the replots		
	measures)	To finalize the calculation of equity		
		To officialize the acquisition of reserve land and transfer of public facilities		
	(10) Collection/payment of equity	To preserve properties and correct imbalance of replotting		
	(11) Land Registration	To register lands designated as the replots		
i	(12) Disposition (sale) of reserve land	To sell newly created land through L/R for financing the project		
	(13) Transfer of public facilities	To transfer the public facilities developed through L/R to each management authority		
	(14) Approve notification of dissolution of association	To dissolve the association upon the completion of project		
	(15) Liquidation work	 To do liquidation work for dissolution of association under the other laws related to corporations 		
	(16) Account report	oo, portationo		

Figure-Basic Composition of L/R Legal System



Part II. Thai Land Readjustment System

Volume II.
Supporting System for Land
Readjustment Implementation

Volume II: Supporting System for L/R Implementation

1. Taxation System For L/R Project Implementation

1.1 Taxation System in Thailand

1.1.1 Overall Taxation System

The Thai taxation system has a legal base in the Revenue Code and customs law/customs tariff proclamation.

National and local taxes are outlined in Figure 2.2.1.

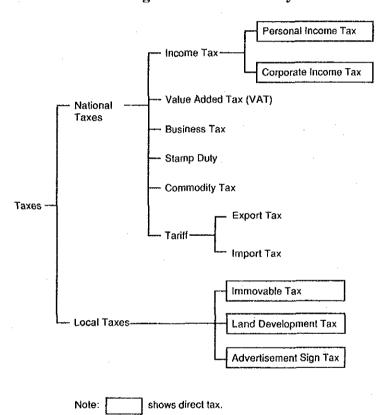


Figure 2.2.1-Taxation System in Thailand

Taxation, which is the responsibility of the central government, is administered by the Ministry of Finance.

More specifically, the Revenue Department is in charge of the collection of income taxes and special business taxes. The Excise Department for the collection of value added taxes, commodity taxes, and and the Customs Department of export/import taxes.

The percentages of direct and indirect taxes are 31.5% and 68.5%, respectively for 1992 budgetary basis.

1.1.2 Major Items of Taxation

(1) Personal Income Tax

This is imposed on persons living in Thailand. A progressive taxation (5 classes ranging from 5% to 37%) on the net income after deductions is employed in accordance with annual revenue.

(2) Corporate Income Tax

The Thai corporate tax is paid on net profits gained in the fiscal year (regardless whether earned in Thailand or abroad).

Foreign corporations are to pay a corporate income tax on net profits gained through business in Thailand in a fiscal year.

30% is imposed on net profits as a standard.

(3) Value Added Tax (VAT)

VAT is imposed on a broad range of commodities and services provided in Thailand.

7% is on individuals and corporations, where sale amounts exceed 600,000 baht.

(4) Selected Business Tax

This is imposed on a businesses when it is not appropriate to apply VAT, such as those of banking, insurance, real estate, and others.

Taxation rates vary ranging from 0.1 to 3.5%, depending on the kind of business.

(5) Building and Land Tax

Building and land taxes are among local taxes, and divided into the following:

a. Land with buildings

Land value (termed annual land price) which forms the basis for tax calculation, is set at the monetary amount equivalent to the possible annual rental fee which could be earned on average if the building was rented out. The tax rate is 15% of the annual land price.

b. Land without buildings

Land value (annual land price) for tax calculation basis is set at one twentieth (1/20) of the market price of the land. The tax rate is 7% of the annual land price.

(6) Local Development Tax

This is also among the local taxes collected and imposed on persons who own the land from the beginning of January of each year.

a. Land value for tax calculation basis is set at the "medium value". The medium value is set at an average of at least three selling prices of the nearest lands during the past one year (exclusive of building and vegetation).

Without the past data, current selling prices in the vicinity should be applied.

Without either data as stated above, average market prices are applied.

1.1.3 Taxation System Concerning Real Estate

Taxation on real estate (land and building) is summarized as follows:

- (1) Income Tax (Individuals and Corporate)
 - a. Tax on income accrued from property leasing

Fixed tax rates are applied to the net income which is calculated in such a manner so that the actual income is deducted according to the standard expenditure rate.

b. Tax on property transfer

Tax on property transfer is calculated in the same manner as tax on income from leasing - standard deduction method.

In such cases as property transfers at cheaper prices, donations or grants, the officer in charge can determine the selling price of the property according to the market price at the date of the property transfer. No inheritance tax is imposed on ownership or holding, or holding right of properties inherited.

Inheritance tax became a major issue of discussion as a part of an income distribution policy in the Seventh National Plan.

(2) Building and Land Tax

As stated in the preceding section 1.2.5.

(3) Local Development Tax

As stated in the preceding section 1.2.6.

(4) Administration Fee

Either principal or proxy must go to Land Department to have the rights and legal deed

related to lands registered. They must pay 2% of the buying price as an administrative fee for registration of landownership, 0.2% of land value for registration of transfer of rights due to inheritance, 1.0% of value of mortgage for registration, and 1.0% of total value of lease during the lease period for registration of the land lease.

1.2 Taxation System Supporting L/R Implementation

In connection with the proposal of the Thai L/R system, attention must be paid to possible conflicting elements within the Thai taxation system. If there are conflicts, necessary arrangements must be prepared.

1.2.1 Tax in L/R

(1) Tax on the Replots

The following differences may appear between the original lots and the replots.

- a. Locational change
- b. Reduced land area
- c. Increased land utility

Because of these differences, the replots are likely to be categorized as traditional land transactions - buying and selling. For this reason, taxation may be imposed on the replots.

It is true that landowners are unwilling to participate in the project if the financial burdens from increased taxation, thus causing a set-back in the implementation of an L/R project for the public benefit.

Consequently, tax exemption for replots should be sought for the following justifiable reasons.

- 1) Their lands are to be transferred not by their will but by the legal power entitled to the implementing body.
- 2) The replots can be identified with the original lots upon the enforcement of replotting. Accordingly, it is legally interpreted that there is no change in land rights through replotting, hence no transaction of land. There should be no taxation where there is no transaction.
- An L/R project is established for the public benefit, with positive social and economic effects as discussed in the previous volume of this report. In this regard, participants in the L/R project should be free from taxation under the justification of their contribution to the social development and promotion of the public welfare.
- 4) An L/R project will increase land values after completion. The increased land value boosts the revenue from taxes (such as property tax, special business tax on he real estate business, et cetera).

It is commonly understood that increased government revenues is large enough to offset the losses caused by tax exemptions.

(2) Taxes on Equity Payment

As previsouly discussed, equity payment is made to the landowners who are given the replots that are worth less than the total value of the original land.

If this equity payment is considered taxable by the authority in charge, (it may be categorized as personal income through the selling of a part of their lands) this action could threaten landowner compliance.

Although it is important to design the replotting so that the equity payment is minimized, special arrangements for tax exemptions or reductions should be sought in coordination with the concerned authorities as stated in the preceding section.

(3) Taxes on Compensation for Building Relocation and Removal

In an L/R, a certain amount of money is paid as compensation for building relocation and removal as is necessary for the construction works of the L/R.

In Thailand, necessary arrangements for tax exemptions and reductions are established, following the compensation standards stipulated in the property expropriation law.

It is recommended that the compensation standards similar to those in the property expropriation law be employed in the L/R implementation system. However, it is subject to coordination with the concerned agencies.

(4) Administrative Fee for Issuance of Certificate of Title

It is not uncommon that administrative fees be paid for insurance of new or renewed certificates of land titles.

An L/R project also necessitates the change or renewal of old certificates of land titles upon the enforcement of replotting.

For the same reasons stated before, an exemption from the administrative fee for registration due to an L/R project implementation should be granted.

As a matter of fact, administrative fees for issuance of modified or renewed certificates of land title in implementing the agricultural land consolidation project, and agricultural land reform project, are exempted.

In the belief that an L/R project can be socially and legally categorized as social improvement projects (like the above mentioned projects), financial burdens such as administration fees on the L/R project participants should be exempted or reduced. However, again it is subject to coordination with the authorities (such as the Department of Land, and others).

1.2.2 Conclusion

In is predictable that complicated issues related to the taxation system may take place during implementation of the L/R project.

The following points should be stressed.

- (1) Taxation could be one of the major factors impeding successful implementation of an L/R project for the public benefit and social welfare.
- (2) It is hoped that responsible government officials pay equal attention to the effects of an L/R project in promoting the public welfare and social benefits attained through the implementation of the project, and more importantly, social unity for the community and national development, as well as to the enlarging of the government's financial capability through a strict and effective taxation system.

(3) Other Important Aspects to be Considered

As land prices in/around the project will increase due to the L/R project implementation, review of land valuation on which building and land tax, and local development tax are calculated, must be made.

Time factors must be examined. There are two points in time for making this decision - at the start of using land upon designation of provisional replotting, and at the end of the project implementation. The latter is recommended because it is more effective to review the land value of all the lots correctively so that forthcoming complications regarding project implementation can be avoided.

2. Financial Supporting System

2.1 Outline of Financial Supporting System in Japan

The Japanese system consists of (1) national government subsidies, (2) loans, (3) financing, and (4) local government financial support system.

(1) National Government Subsidy

In this system, an L/R project is to be subsidized by the national government in accordance with the following formula.

The amount of national government subsidy

= I (TC - RL) < = C

(not more than)

: a certain ratio

TC: total L/R project cost

RL: revenue from sales of reserve land and others

construction cost of city planning roads with more than 12 m. of right of

way in the project area supposing it is developed by the out right

purchase of lands

(2) Shared Defrayment of Public Facilities by the Management Authority

When/where the important public facilities such as arterial road, river, parks and others are constructed in the L/R project area, those who are due to be management authorities of the facilities are to share in a part of the costs (not more than the amount which is equivalent to the cost of land purchases for them).

(3) Loan

Major revenues for the L/R association were mostly from the sales of reserve land. However, a financial support system for loans with no interest charged was created for the following reasons.

- Construction of important public facilities (such as arterial roads proposed in city planning and others) was included in many associations implementation of L/R projects. Therefore, public financial aid was needed even for an L/R association type project.
- 2) It took several years to complete construction works before reserve land could be sold. In this situation, long term and low cost loans are necessary to maintain the financial feasibility of the L/R project.

2.1.1 Finance

This is a governmental institute of finance for an L/R association and individual implementors.

2.1.2 Local Government Subsidy

It often happens that the association of an L/R project faces financial shortages, especially a lack of necessary fund before the establishment of the association.

There are also, some L/R projects which fail to meet the conditions and standards for the national government subsidy.

For rescuing these projects, local governments provide the following aid, depending on the policies and financial conditions of those local governments.

(1) Technical Support

- 1) Study, survey, design and others necessary before the application of approval for establishing the L/R association.
- Guidance in management and techniques for implementing the association type for the L/R project.
- 3) Other technical assistance.

(2) Financial Support

- 1) Fixed rates or amounts
- 2) Financial support is not more than the amount of the construction costs of the public facilities (such as roads and others, with more than a certain standard of improvement supposing these are to be developed through outright land purchase).

C. Grant

- a. subsidy
- b. loan
- c. supplement for interest of loan

2.1.3 Others (subsidy for L/R study)

The subsidy system for an L/R study was established with the view to expediting and smoothly promoting the L/R project implementation. This is duly considered necessary to cope with disorderly urbanization around major cities.

Public agencies are in charge of the study with one-third of the study cost subsidized.

The range of the study formulation of the conceptual plan to the implementation plan, and public relation activities for the landowners.

2.2 Proposed Financial Supporting System

2.2.1 Outline of Public Works

The Department of Highway under the Ministry of Transport and Communications in charge of construction and management of special highways, national roads and provincial roads, while the Department of Public Works under the Ministry of Interior is in charge of local roads, municipal roads and sanitary district roads, except for major municipalities such as Bangkok, and others.

As stated above, all the public works of municipalities, except for the major ones, are under the national budgetary framework and there aren't any financial supporting or subsidy systems that have been established.

2.2.2 Proposed Supporting System

It is understandable that too many things cannot be expected in the financial supporting system for the L/R considering government financial constraints.

However, it is also true that a considerable amount of social benefit or effects can be expected through the L/R project, and it is very difficult to pursue project implementation supported by the landowners without any other financial aid.

(1) Proposed System of Shared Defrayment of Public Facilities by the Management Authority

It is proposed that shared defrayment of public facilities by the management authority shall be effective for financially supporting L/R projects whether with or without an L/R project, as the government is responsible for the construction of public facilities in the government programs.

If/when such government public works as stated above happen to be included in an L/R project, it seems reasonable that the government is to finance the cost of the public facilities which are to be constructed as part of the L/R project.

On the other hand, the L/R project area benefits also from the construction of the government public works.

Taking this into consideration, the development benefits accrued from the project require an appropriate cost sharing system should be established between the government and the L/R implementing body.

For example, there is a sharing system where the government (or public agencies) finances the funds which is equivalent to the cost for land purchase of the public facilities since the land is to be created through land contributions of the L/R project.

If all the cost of land purchases cannot be shouldered by the government, a certain percentage of it should be shared by the government.

Finally, it must be noted that government public works are diversified in their kind, and a cost sharing system must be streamlined.

(2) Proposed System of Financial Support for Setting Up L/R Project

It is arguable who should bear the cost required for setting up the L/R project before the start of project implementation (especially before government approval of the project)

As introduced in Japan, two aid systems were established - local government support for L/R study and support extended by national government.

It is hoped that a supporting system for the L/R project in Thailand is established. It is believed that the national government subsidy will be the most effective method of financially supporting the L/R project. However, loan systems with no interest are proposed so as to avoid accusations by landowners outside the project area that government money is used as a subsidy to give benefits to a few exceptional landowners.

3. L/R Registration System

3.1 Purpose of L/R Registration

It is apparent that differences take place between the existing lands registered and the replots in terms of location, land area, shape and others.

Accordingly, changing the registration of the existing land in accordance with the replotting is necessitated.

The L/R system is to make it possible to replot the lands and remove the buildings by the legal power of the implementing body. At the same time, it is necessary to establish an L/R land registration system where land registration following the enforcement of replotting can be made under the responsibility of an implementing body.

(1) Registration of Land

The necessary items of the L/R land registration are;

- 1) Registration of replotting (private lands)
- 2) Registration of public land
- 3) Registration of reserve land

(2) Registration of Buildings

While registration of the buildings on the original lands shall be revoked, registration of new buildings on the replots shall be made on the traditional system of registration.

If/when it is necessary to change the address in the course of land registration of the replots, L/R building registration shall be applied.

3.2 Outline of Thai Land Registration System

All matters regarding land registration in Thailand are defined in the Land Act. Land registration is the responsibility of the Department of Land under the Ministry of Interior.

The land registration system in Thailand is outlined as follows.

(1) Certificates of land title are to be issued to private lands.

Lands for roads, rivers, national forests, lands of the nation's legal family and ordinary properties are lands without certificate of land title.

- (2) First registration of land ownership is made with certificate of land title being issued.
- (3) Certificate of land title is produced based on the cadastral survey and cadastral map is attached to it.
- (4) Two copies of the certificate of land title are produced, one of which is kept in the office.
- (5) The registration of transfers of landownership, subdivision, combination of lands, is made on the certificate of land title with the history recorded.
- (6) Land rights used as mortgage lease and others can be registered with the contents recorded on the certificate.

3.3 Land Registration in the Existing Development System of Thailand

(1) Agricultural Land Consolidation Project

This project is quite similar to the L/R project (especially in the implementing system of land exchange division and combination of land) in spite of the differences in purpose and development items.

The conditions regarding rights of lands in this project are defined as follows.

- 1) Prohibition of land selling during the period of five years after the declaration of the project area in principle.
- 2) Prohibition of transferring landownership though mortgages.
- 3) Disposition of Buy Back Rights.
- 4) Issuance of new certificates of land title by the Department of Land upon officialization of replotting plan (The old certificate is voided.).

Consequently, the procedure regarding land rights in this project is summarized as follows:

First, any rights other than landownership, are cleared upon the start of the project's implementation, and land buying/selling is prohibited.

Upon the completion of the project new certificates of land title are issued by the Department of Land, following officialization of the replotting plan, and simultaneously the old certificate is closed.

(2) Land Subdivision

Land subdivision project is due to be implemented under the land subdivision control law.

The procedure of land registration in this project is illustrated as follows:

Sellig of Official Construction Process of Land approval of works subdivided project purchase lands implementation project Sellig of Transfer of Registration of Procedure of Consolidation transfer of subdivided ownership of lands ownership lands registration

Figure 2.2.2-Procedure of Land Registration

As soon as the subdivided land is sold upon the completion of the project, new certificates are issued. (It is unique that one of the subdivided lots of which landownership is lastly registered is registered on the original certificate of land title.

3.4 Proposed L/R Land Registration System

It is predicted that as the replotting involving the land rights of many landowners is quite different from the traditional transaction of land and right, special arrangement must be institutionalized to accommodate land registration necessitated by the replotting.

(1) Legal Characterization of Replotting

What kind of registration system should be applied to the L/R project is dependent upon the characterization of replotting.

In the L/R system it must be established that the original lot is identified with the replot.

There seem to be two ways of maintaining the identity of lands between the original lots and the replots as follows.

- 1) All the existing rights continue from the original lands to the newly developed land of replot.
- 2) All the existing rights vested on lands are at once terminated before the project implementation and all the same existing rights are to be revived on the new replot after the completion of the project.

It is apparent that a different land registration system must be prepared for these as follows:

- 1) The existing certificate of land title continues to be valid with only change being registered in location shape and land area.
- Issuance of new certificates of land title along with abolition of the old certificates being issued.

Either modification method of the existing certificate or issuance of new certificate can not be accommodated in the existing registration system, thus necessitating establishment of a new L/R land registration system.

(2) Variation of Replotting

The land registration must be prepared to be responsive to the following variation of replotting.

1) One existing lot to one replot



2) One existing lot to many replots



3) Many existing lots to one replot



- (3) Outline of Proposed L/R Land Registration System
 - 1) Purpose

Special arrangements for land registration in L/R project and procedure shall be defined.

- 2) Registration of land
 - 1. Application
 - Items to be described, documents and maps to be attached
 - Description of land to be registered
 - Description of reserve land and public land
 - 2. Lands to be registered
 - Replot
 - Reserve land, public land
 - 3. Others (If necessary in relation with establishment of L/R legal system in Thailand)
 - Registration method for the variation of replotting
 - Registration measures for the existing lot for which no replot is designated

3) Registration of buildings

Application of change of building address in registration

- Applicant the implementing body
- Collective application