

**APPLICABILITY OF LAND READJUSTMENT (LR) IN THE URBAN
DEVELOPMENT OF MALAYSIA - CASE STUDY OF THE KAMPONG BHARU
MALAY RESERVATION LAND (MRL) , KUALA LUMPUR**

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abstract:

The study was undertaken to test the applicability of LR into the Malaysian urban development system. Comparative analysis in the form of literature reviews of the Japanese LR concept, procedures and the existing planning and land administrative system of Malaysia is conducted to understand the similarities and the merits/demerits of the two systems. A case study area was selected as a project area and draft LR development plan was prepared. A simple analysis was then performed by using the contribution ratio calculation as the determinant factor on the project viability. The analysis gives some indication as to the viability of the LR approach for the case project.

1 INTRODUCTION

Malaysia is already experiencing a very fast rate of development and a rapid and strong economic growth as a result of increasing population, a stable political climate and a carefully planned National Development Programs. In the year 2020, it is expected to comprise 65% urban population as compared to the present 59% . *Please refer to Table 1.* The development of towns in the country over the last 35 years has often been much faster than the provision of public infrastructure. As experiences in some countries like Japan, Korea, Germany and similar other countries have indicated that as urbanization spreads, increasing land prices inhibit the acquisition of large tract of land for development by public agencies.

Having seen the success of Land Readjustment (LR) from countries like Japan, Taiwan, Korea and Germany inspires other countries to adopt it. LR is attracting growing interest worldwide and it could provide an effective and sound model for development of urban areas and urban fringe areas. In Malaysia, the LR concept is relatively new. With the land problem becoming more complex and involve many aspects, it is assumed that LR will become a very powerful policy instrument at present and the future. However, there are a number of aspects which need to be investigated and incorporated into the existing planning and land administrative system. The concept is still not widely known and understood in the country, especially at the level of the State and the Local Authorities. Thus, the purpose of this study is to test the applicability of LR into the Malaysian urban system development for a better understanding and acceptance of the concept, method and techniques of its application, especially its viability in solving the development problems of the Malay Reserve Land (MRL). The Malay Reserve Land is gazetted under the Malay Reservation Enactment which is a special enactment to protect the rights of Malay-owned lands.

Table 1 : Population of Malaysia 1957-1991

| Year | Population ('000) | Period | Growth Rate (%) | Urban Population ('000) | Urban Growth Rate (%) |
|-------|-------------------|-----------|-----------------|-------------------------|-----------------------|
| 1957* | 6,279 | | | 1,666 | |
| | | 1957-1970 | | | |
| 1970 | 10,440 | | | 2,799 | |
| | | 1970-1980 | 2.30 | | 4.73 |
| 1980 | 13,136 | | | 4,492 | |
| | | 1980-1991 | 2.64 | | 6.21 |
| 1990 | 17567 | | | 8,896 | |

Date for Peninsular Malaysia
Source : Department of Statistics

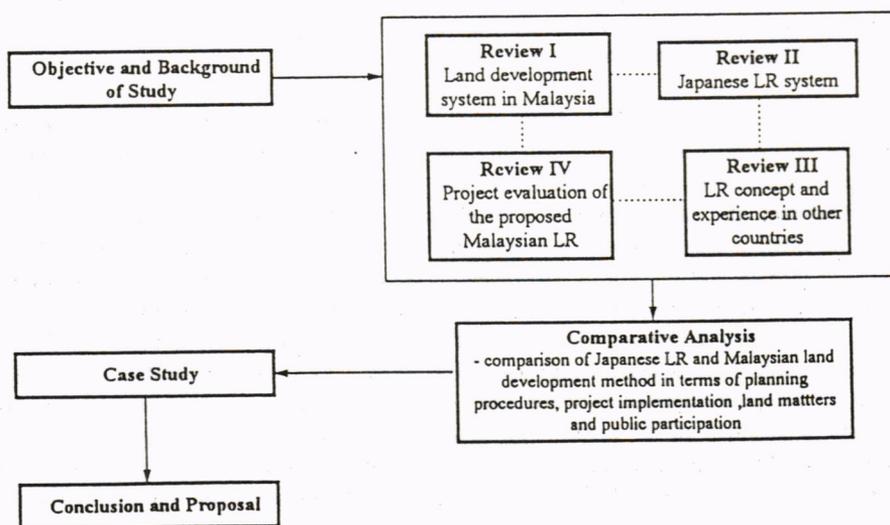
1.1 The Study Approach

The study flow chart as in *Figure 1* shows the subsequent steps of the study.

Literature reviews were undertaken as a background to the study, covering the following aspects;

- (a) The land development system of Malaysia, especially the institutional framework, the existing land development methods and its constraints and problems with reference to the Town and Country Planning Act 1976, National Land Code and other related legislation.

Figure 1: Study Flow chart



- (b) The Japanese LR system so as to understand the City Planning Law and the Land Readjustment Law and the implementation of LR projects to analyze the achievements of its implementation.
- (c) The adaptation and implementation of LR and experience of other countries.
- (d) The proposed Malaysian LR approach.

Following this is a *comparative analysis* of both the Japanese LR system and the Malaysian planning and land administrative system to understand the similarities and dissimilarities of the two systems.

To better emphasize the findings of the literature review and to give example of the LR application, a *case study* is carried out. Malay Reservation Land has been highlighted as a disadvantageous factor for most development in Malaysia because of various constraints. There is a need for a further investigation to find out a more appropriate development method. The case study will try to assess the feasibility of LR as an alternative approach to the development of such areas and try to establish the advantages of the LR method.

Based on the *findings* from the analysis of the study, possible solutions to improve urban land development and management will be addressed. Being a new concept altogether in the Malaysian development context, the findings will also ascertain a better understanding of the LR concept and its potentially especially in solving the development constraints of the Malay Reservation Land (MRL).

2 THE PLANNING AND LAND DEVELOPMENT SYSTEM IN MALAYSIA

2.1 The Planning and Land Development System of Malaysia

In Malaysia, land is a State matter and the Federal Government has no direct control over land. However, the Federal Government coordinates land matters uniformly through the National Land Council. Following the federal system of government, urban and regional planning is applied to all levels of administration i.e Federal, State and District.

The current system of town and country planning is based on the Town and Country Planning Act (TCPA) 1976 (Act 172). This Act provides for the proper control and regulation of town and country planning in Local Authority areas in the States within Peninsular Malaysia. Matters such as land, forest, agriculture, water, hill, mines and Local Government also fall within the State list. This explicitly empowers the State to play a more significant role in town and country planning than the Federal Government.

The Town and Country Planning Act 1976 introduces the Development Plan which requires consideration to be given to physical , social, economic and environmental issues in preparing the plan. Under this Act, the Local authority is required to prepare 2 types of plans, that is, the Structure Plan and the Local Plan. The Structure Plan is a policy document which provides broad development strategies and informs the public of the Local Planning Authority's intentions for the area for the next 10-15 years. The Local Plan is concerned with the more detailed implementation of the policies and proposals contained in the Structure Plan.

The Structure Plan and Local Plan together provide a comprehensive basis for the whole planning system. The Local Plan also provides a framework to Local Authority for development control. The TCPA 1976 is one of the principal legislation used for endorsing planning approvals for purpose of development control. Other related legislation are;

- (i) The National Land Code (NLC), which is the main legislation governing the approval of all land matters in Peninsular Malaysia, particularly to land conversion application and subdivision.
- (ii) The Environmental Quality Act 1974, requires developers to submit EIA reports for any housing exceeding 50 hectares.
- (iii) Street, Drainage and Building Act 1974, to control buildings construction and management of sewerage and drainage works.
- (iv) Land Conservation Act 1960, to control development of hilly land.

The detailed procedure for development control involves 4 main activities from the initial stage of any proposed development till the development is certified fit for human occupation, that is, (i) land conversion, (ii) subdivision of land, (iii) submission of building plans and (iv) certificate of fitness.

2.2 Land Administrative System

The most significant statute on land currently enforced within Peninsular Malaysia is provided under the National Land Code (NLC) 1965 or Act 56. The current method of land administration in Peninsular Malaysia operates on the premise that land registration of titles can be simplified and at the same time protects land ownership and individuals. The registration of title is a simple proof of ownership of land by an individual whose name appear in the title document.

Although the National Land Code stands out as the main legislation that control land, there are others that in one way or another has some bearing on land. These related legislation are;

- (1) Malay Reservation Enactment - which is principally a system imposing prohibition directed at land held by the Malaysia in order to prevent it from passing into the hands of non-Malays.
- (2) Land Acquisition Act 1960 - introduced for the purpose of consolidating the law relating to the acquisition of land, assessment of compensation to be made on account of acquisition and matters relating to it.
- (3) Urban Development Authority Act 1971 - sets up a corporate body to promote and carry out urban development projects in certain areas in Peninsular Malaysia.

The Malaysian land development methods generally follow the development of the single or adjoining parcels of land held under sole proprietorship or co-ownership where land owners develop their own land or delegate to some one to develop the land on their behalf. The most common method of land development method is the "purchase and develop" method. The developer purchases the land at the market value from a willing seller and submit his application for conversion and subdivision and development is carried out in accordance with

permitted planning standards and development guidelines. Most public projects are undertaken through land acquisition. The existing practice in land development method are;

- a. Land conversion - involves changes of the land uses.
- b. Subdivision of land - piece of land is divided into several lots each under separate title.
- c. Partition - coproprietors of land unanimously apply to partition land under separate titles proportionate to their undivided share of the land.
- d. Amalgamation - proprietor of 2 or more contiguous lots applies to combine them together to be held by him under one title.
- e. Surrender and Re-alienation - an alternative to amalgamation and subdivision.
- f. Compulsory acquisition - State Authority can acquire any land, if necessary, for public use and for benefit of the economic development of the country.

2.3 Constraints in The Existing Planning and Land Development System

Land development is primarily based on the National Land Code (NLC) 1965 which generally does not allow for group land development method and is a constraint in realizing contiguous urban development. Due to the unwillingness of developers to develop pockets of small and fragmented land holdings within urban areas, in many cases undeveloped land are occupied by squatters. The existing technique of urban development has also resulted in urban fringes rapidly experiencing urban sprawls.

The implementation of the planning and land administrative system in Malaysia is not without its share of problems. The issues and problems can be summarized as follows:

1. Multiple ownership of land - It is common for land to be owned by more than one person, especially if its a hereditary land. Under the present legal system, multiple ownership cannot be avoided. This raises problem as consent from all persons stated in the title has to be obtained prior to developing the land. This also result in the existence of lots too small for any kind of development to be carried out on that land. Thus many such lots are being abandoned and undeveloped by land owners. The procedure for compulsory acquisition to develop area with multiple ownership is also very time-consuming.
2. Absentee landlords - Difficult to trace landowners as such landowners do not notify the authority their change of address. Thus resulted in a delay in processing of land application for subdivision and amalgamation.
3. Effective use of Malay Reservation Land - The provisions of the Malay Reservation Enactment that prohibit ownership, lease, hire, transfer and occupation on Malay Reservation properties by the non-Malays have adversely influenced their market potential, financial accessibilities and values. These prohibitive provisions restrict full exploitation of the market potential of MRL. Thus placing the MR land in the closed market.
4. Lack of integration and coordination in planning - Urban development functions are carried out by a number of government agencies in federal and state levels. Thus lack of integration and coordination in the urban and infrastructure development of the country.

It has been realized that urban planning and development in Malaysia faces increasing difficulties in formulating effective urban development with close integration of adjoining areas. At present, issues regarding the development of Malay Reserve land has been greatly

discussed and highlighted at the National Land Council. The application of the LR concept might be one of the possible method to the development of the MR land.

3 THE JAPANESE LAND READJUSTMENT SYSTEM

Land Readjustment (LR) is the English term probably created by the Japanese in the 1950's in order to explain to foreigners a specific Japanese urban development system, which is called "Kukaku-Seiri" in Japanese. Germany and Japan are regarded as the two origins of LR projects in international perspectives. The technique of LR has already been practiced in the two countries for about 150 years.

Historically in Japan, LR method has been applied to situations like rapid suburbanization, in the urban fringe improvements and reconstruction of earthquake, fire and war-damaged areas. LR is recognized as one of the most effective methods for implementing area development plan. Due to its long history, accumulated experience, flexible applications and achievement record as effective tool for infrastructure construction LR is considered to be synonymous to town planning and has been dubbed "the Mother of Japanese City Planning". This controversial setting really symbolizes the importance and dominance of LR in Japanese urban development and city planning.

LR has numerous definitions. However, basically the concept of LR is the exchange of land parcels with physical development of both public infrastructure and building sites. In its simplest term, LR is a techniques which fosters the redevelopment of land with the existing land owners sharing in the risk and rewards of the effort. Although LR began as simple pooling efforts, it is now (in some countries) a sophisticated land use planning and development tool. As has been observed in Germany, Japan, Australia, Taiwan and Korea are now implementing LR projects as an important urban development technique.

3.1 City Planning Process and Land Readjustment

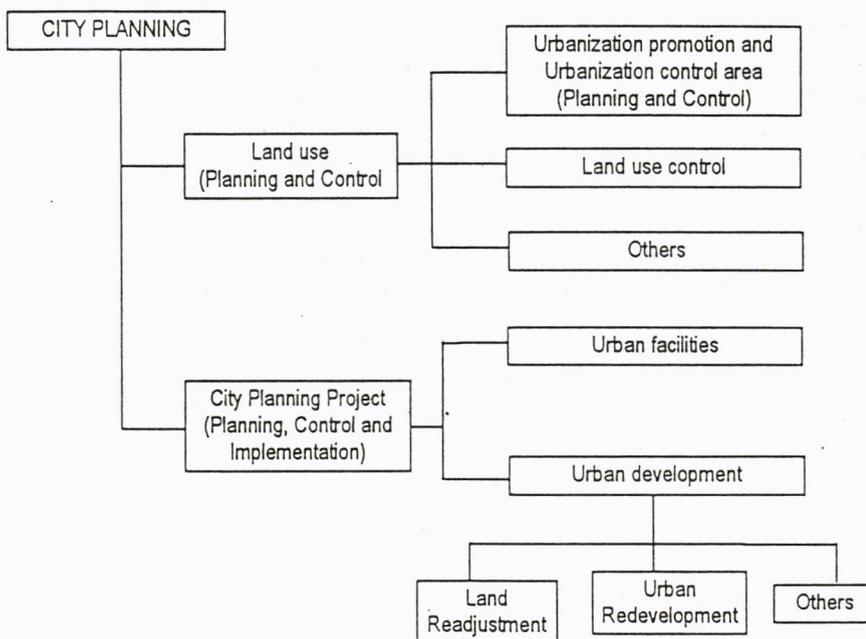
In Japan "town planning" is synonymous with city planing. Urban LR was legalizes by the City Planning Law in 1919. LR projects has been carried out in accordance with various laws. In 1954, the current Land Readjustment Law was enacted. According to the Act, LR is defined as "the public infrastructure improvement jointly enhancing the land utility of a building site through land exchange, amalgamation and/or subdivision".

After 1954, Japan experiences a rapid urbanization change. The City Planning Act 1968 was enacted to deal with these changes. The Act divides the country into city planning area and rural areas. In the City Planning Act, LR was defined as "urban development project" and has been utilized as a major method to develop the urbanization promotion area (UPA) or "shigaika-kuiki". Please refer to Figure 2.

The City Planning Act, unlike the Town and Country Planning Act of Britain or Malaysia, does not cover the whole country. It is only effective in areas known as "City Planning Area" (CPA). Under city planning, when LR projects are identified, the local authority can introduce LR to reorganize the haphazard development of urban areas in accordance to the Land Readjustment Law 1954. The Land Readjustment Act also provides for the participation by

people including the way of participation, and the Act requires that LR projects are carried out according to a democratic procedure.

Figure 2: Status of Land Readjustment in City Planning



3.2 Process of Land Readjustment

There are two key elements in the LR process which increases its potentiality as a tool for land development. These elements are :

- a. **Contribution or GENBU** - Land owners in a project area are required to contribute equitable portion of their land to build public facilities and to create reserve land which is then sold to cover the project cost.
- b. **Replotting or KANCHI** - The replotting method is designed to implement a project while preserving titles of land owners and leaseholders. Although land owners will loss a part of their land/right, but their original property values are maintained through increase in land values.

In any LR, part of development benefits are provided by land owners and leaseholders to an implementing body to finance project costs, not in cash but in the form of "**reserve land**". Necessary land for public facilities are required through the "land reduction" from each land owner and a part of the project costs is recovered by the revenue from the selling of the reserve land.

3.3 Problems and Success of LR

The LR techniques has been widely practiced in urban development and renewal projects. The main reason for the popularity of the LR technique is that it relieves local government of the financial burden of infrastructure provision.

However, LR has certain limitations as follows :

- (i) There is still a need to pay compensation to owners of small lot who may not be able to stay because of further decrease in lot size by land reduction.
- (ii) The implementation body need to spend a long time to obtain full cooperation and understanding of local residents as consensus is important for success of LR projects. This will prolong the project period.
- (iii) Because LR does not involve land transactions except "reserve land", readjusted plots do not necessarily come on to the land market immediately. Land owners continue to hold their readjusted plots in expectation of further increase in land values.

Through the various literature review, we discovered that there are problems as to the implementation of LR. However, there are some advantages of LR which much must be highlighted as an attractive implementation tool for urban development. These factors also encouraged many countries in wanting to adopt the LR concept. They can be summarizes as follows :

1. Through *land replotting*, portion of land under development can be set aside for infrastructure amenities
2. The *financial land* provide means to raise the project finance or funds.
3. The resultant infrastructure can further *enhance value for the land* .
4. Land owners can *remain on their land* and there is no disruption of the community.

In conclusion, we realized that the success of Japanese LR can be attributed to 4 major factors:

- (i) Law - The City Planning Law for city planning and the LR Law for implementing projects. The LR Law provides detail guidelines for project implementation.
- (ii) Organization and Manpower - The Planning and Implementation Division of the City Bureau plays an important role in the successful implementation of LR projects in each city.
- (iii) Development Benefits - In order to justify land reduction, development benefits must be able to offset losses of each owners' lands, if not, they will never agree with the project.
- (iv) Subsidy and other finance - LR Law provide sections on the means and how the project finance can be obtained.

However, it must be realized that because of the widely varying conditions of the cities in the world, in terms of cultural attitudes toward land and in the political and institutional structures, no single form of LR can be said to be universally applicable. The success of any LR projects in any country is essentially determined by the role of three involving parties. i.e the government, land owners and developer.

4 COMPARISON OF JAPANESE LR SYSTEM AND MALAYSIAN LAND DEVELOPMENT SYSTEM

The procedures of the planning process in Malaysia is different from Japan. The comparative analysis of the Japanese LR system against the Malaysian land use system was made with reference to;

- (a) the City Planning Law and Land Readjustment Law in Japan; and
- (b) the Town and Country Planning Act and the National Land Code and other related legislation of Malaysia.

A comparison was made in relation to 6 aspect ,that is;

1. Land Matters
2. Planning Procedures
3. Project Implementation
4. Public Participation
5. Socio-economic and environmental aspect
6. Integrating LR principles with Malaysian town planning.

The most important aspect in the adaptation of LR into the Malaysian system is in terms of land matters and this is being emphasized in the study.

The concept of "replotting" in LR is very close to the concept of "amalgamation-subdivision" as spelt out in the National Land Code because in both concepts original land title is issued. However, the procedures are different from each other. *Figure 3* outlines the comparison on the land matters between Japan and Malaysia.

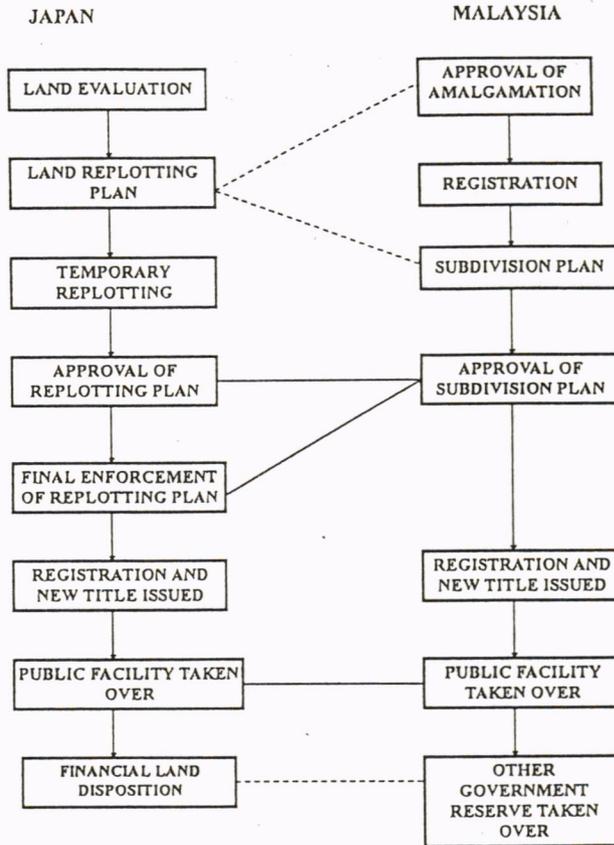
A summary of the difference between the two system is best summarized in the following Table 2.

Table 2 : Comparison on the Land Matters of Japan and Malaysia - A Summary

| JAPAN | MALAYSIA |
|---|---|
| <p><u>A. Land Replotting</u> - Method to subdivide land fairly and equally among land owners.</p> <p><u>B. Financial Land</u> - Reserve land sold by implementation body to recover project cost.</p> | <p><u>A. Amalgamation-Subdivision.</u> - Before subdividing lots must amalgamate first. - A proprietor of 2 or more contiguous lots must apply to combine them altogether to be held under one titles.</p> <p><u>B. Other Government Reserve Taken Over</u> - Land owners required to surrender the land for public facilities and Government reserve. - Not available for financing project but retained by respective agency/department who are responsible for construction of the related facilities.</p> |

Two important difference factor existed between the 2 system. Firstly, in the Japanese city planning system there is only the City Planning Law for city planning and the LR Law for implementing projects. The LR Law, in particular, provides guidelines for implementing body, layout plans and replotting plans, financial land, project procedure etc. Rights of land are managed and these right shall be controlled and protected exactly under the LR Law. Secondly, there is a difference in the decision making procedures. The role of municipalities has become more and more important in

Figure 3 : Land Matters - A Comparison



the recent years. The development programs in Japan is a "bottom up" type i.e from the people to the government. In Malaysia, development plan preparation system, the TCPA allows for public inquiries and objection to the Structure Plan and the Local Plan after it has been prepared by the authorities. Development programs tend by nature to be "top down", carrying a presumption the people for one reason or another is unable to meet their own needs.

5 THE CASE STUDY

To better emphasize the findings of the literature review and to give an example of the LR application, a case study was undertaken. A Malay Reservation Land (MRL) has often been highlighted as a disadvantageous factor for most development because of its various constraints. A suitable approach for its development is necessary as MRL has great potentials for development. The Federal Government is very much concerned for the development of these areas. For the case study area, the Kampong Bharu MRL, located within the city of Kuala Lumpur is chosen due to these factors;

- (i) It has the highest development potential compared to the rest of the Malay Reservation Land within Kuala Lumpur Metropolitan area,

- (ii) A draft local plan for the area has been formulated for redevelopment but until today the project failed to get off the ground due to disagreement from the land owners on the compensation.

We think that LR or a variation of the LR approach could be an alternative approach to the redevelopment of Kampong Bharu. This is because of its advantages, especially that which concern the land owner not losing their land after the project has been completed.

5.1 What is a Malay Reservation Land?

Kampong Bharu was established under the Land Enactment 1897 (Malay Reserves Land Enactment 1913). This Enactment was formed by the British during the colonial era in 1900. According to the provision of the Enactment ,

" No land included within a Malay reservation shall be leased or otherwise disposed off to any person not being a Malay "

The rationale for the introduction of the Enactment are :

1. To protect the Malay land owners from selling their lands to non-Malays.
2. To benefit the community against individual who might be tempted by the high prices offered for land to dispose his holdings.

In short, the Malay Reservation Enactment was enacted "to protect land which had been handed down from generation to generation of Malays".

Constraints to effective use of MR land can be summarized as follows:

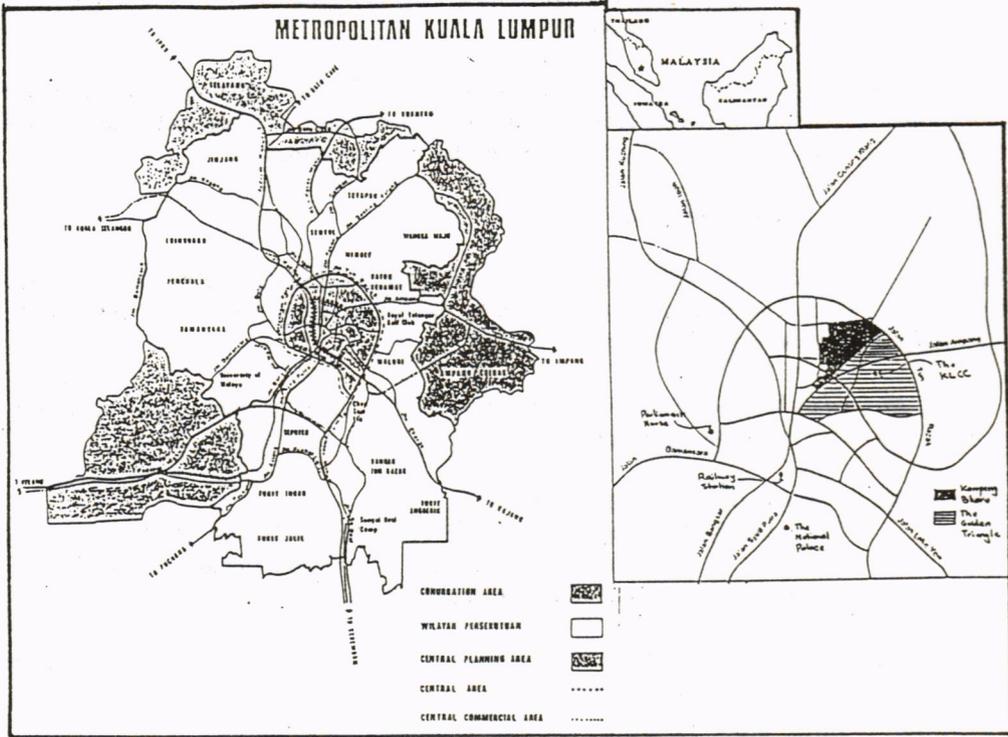
- (i) Multiple ownership making land too small for development.
- (ii) Lack of economic strength and the know-how of land owners to develop their property. This is because majority of population in MR land are engaged in public sector and they have inadequate capital to develop their properties.
- (iii) Lack of concerted effort and absence of an organization to facilitate development.
- (iv) Prohibitive provisions of the Malay Reservation Enactment influences their market potential, financial accessibilities and values.

The key issue that hinders the development of MR land, including the case study area, is the implication of the legal provision. Another possible reason for the failure in the redevelopment is the fear of the people that the development will result in the place losing its identity and the people will be displaced.

5.2 The existing condition of Kampong Bharu MRL

The Kampong Bharu MRL is located adjacent to the Golden Triangle of Kuala Lumpur. The contrast in the built environment is very startling as the Golden Triangles consists of blocks of skyscrapers. Kampong Bharu, next to this business and international hub of Kuala Lumpur, consists of low rise wooden buildings interspersed with low rise concrete flats, small roads and disorganized arrangement of buildings and generally unkempt and unpleasant environment. However, its location, as shown in *Figure 4*, within the Central Planning area gives it a very good

Figure 4 : Location of Kampong Bharu, Kuala Lumpur



accessibility and being in close proximity to the urban opportunities of the City Center gives tremendous potentials for commercial and high-class residential developments.

5.3 Assessment on the Applicability of Development Approach

Due to the size of Kampong Bharu MRL, only a small section of the whole area will be analyzed as a case study for the viability of the project. The development proposal will take into account the existing condition of the site and will include the proposals of the Kampong Bharu Local Plan. The area is proposed for commercial along the main road of Jalan Raja Abdullah and the interior is meant for residential. The plot ratio for the commercial area is 1:3.9 +30%, while the residential area will have a density of 300 person per acre. The existing road network will be widened from the existing 10m to 12m. An open space/park area of about 0.3 acre/0.1 hectare is also proposed. This rough layout plan will be used as a basis for the analysis.

1. The Land Readjustment Approach

The basis financial mechanism of LR consists of ;

- a. expenditure (cost) i.e construction cost and the compensation cost,
- b. income i.e from the sale of financial land

To find out the viability of this project, we try to adopt the analysis method in the preparation of the "pre-pre-implementation plan" that was used in the Implementation Manual prepared by JICA (Japan International Cooperation Agency). The factors that is taken into consideration are ;

- i. project cost (rough estimation)
- ii. financial land / land value estimate - to cover the project cost
- iii. contribution rate (determine the project viability)

The analysis of the calculation are shown as follows :

| | | | |
|---|---|---|--|
| # | Total Project Cost | = | RM 27.0 million (estimated value) |
| # | Total Project Area | = | 41570.5 sq.m |
| # | Public Facility (PF) Land (from layout plan) | = | 2720 sq.m - before LR |
| | | = | 4744 sq.m - after LR |
| # | Value of Financial Land after the project is estimated | = | RM 1615/sq.m or RM 150/sq.ft |
| | To cover the project cost i.e how much Financial Land is required ; | | |
| | | | $RM\ 27.0\ million \div RM\ 1615/sq.m$ |
| | | = | 16718.27 sq.m |
| # | To determine the contribution rate ; | | |
| | * existing land use (before) : | | |
| | Private Land (A) + PF Land | = | Project Area |
| | 38850.5 sq.m + 2720 sq.m | = | 41570.5 sq.m |
| | * future land use (after) : | | |
| | Private Land (B) + Financial Land + New PF Land + Existing PF land | | |
| | 20108.23 sq.m + 16718.27 sq.m + 2024 sq.m + 2720 sq.m | = | 41570.5 sq.m |
| | There fore : | | |
| | Contribution Rate = (A-B) ÷ A | | |
| | | = | 48.0 % |

From the result of the calculation, we conclude that by assuming there are no direct subsidies from the Government to implement the project, a contribution of 48% must be borne by the land owners. Consensus of land owners in terms of contribution is of utmost importance and the lower the contribution rate, the more it would be acceptable to land owners. In this case, a contribution rate of 10%-20% will be more acceptable to land owners.

Another important element that need to be considered is the Financial Land (FL) which is an important element of the LR approach. The Financial Land which is contributed by the land owners is to be sold to provide the necessary capital for the implementation of the project. The land is however, held under the Malay Reservation title. This may effectively reduce the eventual selling price to cover the project cost. Due to this limitation, another alternative method is proposed for the development of the case project.

2. *The Redevelopment Approach*

LR is only concerning land. To develop Kampong Bharu, LR alone cannot solve the limitations of the Malay Reservation Enactment. A joint-development approach i.e a combination of the replotting of LR and the building construction through redevelopment a-is another alternative method.

In this case, the land owners are given the choice to participate or not to participate in the project area. For those who participate in the redevelopment project, integrated replotting of their land will be carried out. Those who do not participate in the redevelopment project, a designated temporary

replotting site outside the redevelopment implementation site is allocated for them. Redevelopment will be carried out in the project area.

In the case of the Japanese redevelopment method, the funds required for construction of new buildings and the development of industries or commercial units will be provided by sale of excess floor space (reserved floors) saved by the high-intensity utilization of land to new residents to move in. As a result of the deal; the local residents will receive as an asset a part of the building floors equivalent on worth to their previous lands and building floors.

The basic financial mechanism of redevelopment involves;

- i. revenue or income - from the rental/sale of the floor spaces
- ii. expenditure - the construction cost, maintenance cost, loan interest, tax etc.

We will now apply the concept of this redevelopment method to the case project area. A simple cost estimation of the project is calculated as in Table 3.

The simple income and expenditure principle, have indicated that this alternative approach could be adopted in the project area as the rental from both commercial and residential could in some way cover the project cost. The land owners could benefit from the +30% of the commercial floor space as it can be converted to the reserved floors, not to be sold, as it has a Malay Reservation title but for rental purposes. This could eventually be an asset to the land owners . To make the project a success, the land owners must have common consensus and have good cooperation with implementation body. They must also be prepared to leave the area during project construction and return upon completion of the project.

6 FINDINGS AND PROPOSALS

From the literature review, the comparative analysis and the case project study, the following could be summarized :

1. Japanese LR concept cannot be adopted fully into the Malaysian planning system because :
 - a. Malay Reservation Enactment restricts replotting and sale of land from Malay to non-Malay.
 - b. Land and building are normally integrated in Malaysia. Current law requires constructions of buildings within 3 years after acquisition of land.
 - c. High planning standard i.e for social and physical infrastructure practiced in Malaysia will result in high contribution ratios.
2. It is a fact which cannot be ignored or denied that the application of basic LR method alone in Malay Reserve land has some restrictions if the provisions of the enactment is to be fully enforced.
3. Important to have a good legal basis as part of urban planning regulations or a special one for LR particularly to create a homogenous basis to implement LR.
4. Getting 100% consensus from land owners to participate in the LR project may not be possible.

Table 3 : Redevelopment Method - Cost Estimation

| | |
|--|--|
| A. <u>REVENUE</u> | |
| 1. <u>Commercial</u> : | |
| # Project Area | = 10200 sq.m (1.02 hectare/2.52 acre) |
| # Plot ratio | = 1:3.9 +30% |
| # Total Floor space | = 51714 sq.m (including 30%) |
| # Revenue from the rental of floor space @ RM38/sq.m | |
| a. Monthly | = RM 1.97 million |
| b. Annual | = RM 23.6 million |
| 2. <u>Residential</u> : | |
| # Project Area | = 31370.5 sq.m. (3.13 hectare/7.75 acre) |
| # Density | = 300 person/acre |
| # Population | = 2325 person (1 unit = 5 person) |
| # No. of residential units | = 465 units |
| # Housing allocation ; | |
| (a) 30% low-cost unit @ RM40000/unit | |
| - rental @ RM400/month | |
| (b) 70% medium-cost @ RM55000/unit | |
| - rental @ RM700/month | |
| # Rough estimation of revenue from rental of residential units ; | |
| a. Monthly | = RM 283500 |
| b. Annual | = RM3402000 = RM 3.4 million |
| 3. <u>Total Revenue/Income</u> : | |
| # Monthly | = RM 2.25 million |
| # Annual | = RM 27.0 million - (A) |
| B. <u>EXPENDITURE / COST</u> | |
| 1. Total Construction cost | = RM 12.1 million |
| 2. Total interest on loan | = RM 6.0 million |
| 3. Land purchase cost (10% move-outs) | = RM 6.7 million |
| 4. Contingencies | = RM 2.2 million |
| 5. Total Expenditure | = RM 27.0 million - (B) |

5. Need to educate the public to understand and accept LR concept . Thus skilled personnel who have knowledge of LR and its procedures is necessary to educate the public.
6. No single form of LR can be said to be universally applicable. This because of the widely varying conditions in the cities in the world.

To overcome the problems and to improve the application of LR to be incorporated into the Malaysian town planning system, the possible approaches that could be undertaken are :

1. The Malay Reservation Enactment need to be further reviewed to enable LR to be used effectively. One possibility is the inclusion of the powers of the Ruler in Council to alienate the replotted land to non-Malay land owners who have surrendered their land in exchange for the replots. This a radical move which might have a strong objections and as such further detail study is needed with regard to Malay Reserve in LR project areas.
2. To redevelop a Malay Reserve Land, as in the case project area, a joint-development approach of LR and redevelopment has a better possibility for its application. A combination of the replotting of LR and the building construction of redevelopment projects is proposed. The reserved floor spaces and residential units could be rented or leased for the project cost instead of selling the financial land. The land owners could benefit from the asset in return for their land and buildings.
3. For better acceptance of the LR concept the whole process of consensus building and consultation among land owners must be geared towards their acceptance of the contribution rate. The whole idea of contribution and the expected benefits must be carefully explained to land owners. The lower the contribution rate the more it would be acceptable to land owners.
4. Replotting methods can confirm to conditions for approval of amalgamation and subdivision. It is proposed that a survey must be conducted on the land owners getting their opinion and preferences as to how they want to be replotted.
5. In cognizance of the difficulty of securing consensus of land owners to participate in the LR projects so that replotting can be carried out.. In such situations, there is still a need for compulsory acquisition of the lands of those who persist their refusal to participate, despite negotiations. However, compulsory acquisition will be only used as a last resort when negotiations and other methods of securing the agreement of those land owners who do not want to participate fail.
6. In cases of multiple ownership and absentee of landlords who do not reside on the land, will make the task of getting consensus of the land owners in the project very difficult. The land could be acquired through land acquisition and the compensation for the land could be handed to a Public Trust and the development project could be carried on.

7 CONCLUSION

From the observations and the analysis of the case study, it can be observed that the LR method is capable of solving problems pertaining to lack of insufficient individual development fund. However, in solving the problems of developing the Malay Reserve Land, the basic LR method alone has some restrictions.

LR has great potentials but if it is to be implemented in Malaysia, the method need to be improved and must conform to the country's socio-cultural-economic-political structure. The social value system between Japan and Malaysia is different. In Malaysia, there is the existence of different value system between the multiracial society. There is also a strong attachment to the land and house among the people. An outstanding attitude among the people is that land should not be given away easily for purposes of development even there is compensation involved. Because of this, any form of development that would involve the land could be a very complicated matter. Just as in the redevelopment of the case study area of the Kampong Bahru Malay Reserve Land.

A long term legal framework is necessary when more projects are to be implemented. It is important to realize that the success of any LR projects is essentially determined by the role of three involving parties i.e the government, the land owners and the developers. Being a new concept altogether in the Malaysian development context, there is a need to introduce the concept explicitly and provide explanation of the procedures to enable better understanding of the concept. This study is an attempt to provide the basis of better understanding of the applicability of the LR method as one of the alternative tools to develop the Malay Reserve Land. However, the formal adoption of the system for the long-term by the Malaysian government has to be preceded by a successful completion of at least one pilot project.

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