

**National Housing Authority
Kingdom of Thailand**

**THE PROJECT ON CAPACITY
DEVELOPMENT FOR PROMOTING
LOW-INCOME HOUSING DEVELOPMENT
IN THAILAND**

**Final Report
Short-term Experts**

March 2008

**JAPAN INTERNATIONAL COOPERATION AGENCY
SEKKEI KEIKAKU INC.**

Abbreviation (in alphabetical order)

Organization	ADB	Asian Development Bank
	BB	Bureau of the Budget
	BMA	Bangkok Metropolitan Administration
	BMTA	Bangkok Mass Transit Authority
	BOI	Board of Investment
	CHSS	Center for Housing and Human Settlement Studies
	CODI	Community Organizations Development Institute
	CG	Central Government
	DDC	Din Daeng Community
	GHB	Government Housing Bank
	GSB	Government Saving Bank
	GTZ	Gesellschaft fur Technische Zusammenarbeit
	JCC	Joint Coordinating Committee
	JICA	Japan International Cooperation Agency
	LA	Local Authority or Local Administrative Organization
	MOF	Ministry of Finance
	MOI	Ministry of Interior
	MOSDHS	Ministry of Social Development and Human Security
	MOST	Ministry of Science and Technology
	NEB	National Environment Board
	NESDB	National Economic and Social Development Board
	NGO	Non-Governmental Organization
	NHA	National Housing Authority
	PWA	Provincial Waterworks Authority
	SRT	State Railways of Thailand
	TOT	Telephone Organization of Thailand
	UCDO	Urban Community Development Office
	UNCHS	United Nations Center for Human Settlement
	UNDP	United Nations Development Programme
	USAID	United States Agency for International Development
Technical Term	BQ	Bill of Quantities
	BRT	Bus Rapid Transit
	BTS	Bangkok mass Transit System
	BU	Building Unit
	CBD	Central Business District
	CP	Counterparts of NHA side
	EIA	Environment Impact Assessment
	EM	Effective Micro Organism for wastewater treatment
	ERP	Enterprise Resource Planning
	HIV	Human Immunodeficiency Virus
	ISO	International Organization for Standardization
	JV	Joint Venture
	MISNHA	Management Information System for the NHA
	OJT	On the Job Training
	PC	Pre-cast Concrete
	PDM	Project Design Matrix
	TOR	Terms of Reference
	RD	Record of Discussion signed on February 27, 2007

Terms in the field of Housing Development

Low-income Housing Development can be categorized as below.

Field	Type of Project
Slum improvement	Upgrading
	Reblocking
	Reconstruction
	Land-sharing
	Relocation/Resettlement
Housing provision	Housing for sale including Hire-Purchase Housing (Construction and Sale of Housing)
	Rental Housing for Public (Construction and Operation of Rental Housing for Public)
	Rental Housing for Government Personnel (Construction and Operation of Rental Housing for Government Personnel)
Preservation (*2)	Support for preservation of traditional-style housings
Housing Loan (*3)	Loan system supporting construction/renovation/purchase of housings

(*1) **Urban Renewal Projects** can be categorized into various types of project shown in above. For example, Urban renewal project on a slum area located in the central urban district can be a complex project of Reconstruction, Housing for Sale, Rental Housing for Public, etc.

(*2) **Preservation system** is to give subsidy/loan for traditional-style construction/renovation of housings not only in urban area but also in rural area.

(*3) **Housing Loan** covers;

(a) Loan to the communities which;

- construct housings or
- loan to the members of the community,

(b) Loan to the individuals who;

- construct or renovate housings in Slum improvement project,
- purchase housings provided by Housing provision project, and
- construct or renovate housings on their own sites.

Formation

This report has been prepared by short-term experts to explain their activities in the Project. The report consists of five chapters written by Japanese experts as shown below, in cooperation with CP and other short-term experts including Mr. Tomihide Chishina and Mr. Ryuji Tsuyuki:

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Chapter 2; Mr. Yutaka Masuda, Short-term Expert, and Mr. Hasegawa

Chapter 3; Mr. Masuda

Chapter 4; Mr. Shinsuke Nomura, Short-term Expert, and Mr. Masuda

Chapter 5; Mr. Hasegawa and Short-term experts

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Chapter 1

Chapter 1 Record of the Project

1-1 Background

< Baan Eua Arthorn Project >

In line with the Government Policy, NHA was implementing Baan Eua Arthorn Project for the purpose of constructing and selling 600,000 housing units for the low-incomes from 2003 to 2006 (original schedule). In the implementation of Baan Eua-Arthorn Project, however, NHA has some difficulties such as:

- The number of houses set as the goal of Baan Eua-Arthorn Project was far beyond the performance and capacity of NHA, and
- There was mismatch between demand and supply, and it caused unsold houses.

< Decentralization >

In accordance with the decentralization policy provided in the Decentralization Act adopted in 1999, NHA determined to conduct the new role of supporting local authorities. NHA recognized, however, NHA's capacity was not enough to support LA.

<Request from Thai side >

From the view of the above background, this Project was requested for the purposes of strengthening NHA's capability in:

- (1) implementing housing development projects efficiently, and
- (2) facilitating capacity building of the staff of LA for promoting and implementing low-income housing development.

<JICA and R/D >

JICA conducted the preliminary evaluation study on this Project in September 2006. After confirming the contents of the request made by the Government of Thailand, JICA and NHA signed the minutes of meetings (M/M) of the study. It included the draft of the Record of Discussion (R/D). Then, R/D was signed on February 27, 2007. This Project was prepared within the framework of R/D, and was implemented in accordance with R/D.

1-2 PDM (Project Design Matrix)

PDM was designed in RD as shown in **Appendix 1-1**. PDM has not been changed through this Project.

1-3 Overall Goal

Overall Goal was set in PDM as shown in below.

The know-how of implementing low-income housing development is transferred to local authorities and local authorities (LA) implement low-income housing development.

“Overall Goal” means a goal to be achieved after this project. The outputs of this Project can be expected to contribute achievement of the Overall Goal set in PDM.

1-4 Purpose

The **Purpose** was set in PDM as shown in below.

The capacity of NHA in;
 - promoting low-income housing development, and
 - supporting local authorities to implement low-income housing development
 is enhanced in Thailand.

And, **Indicator** responding to the purpose was set in PDM as shown in below.

1. At least 2 (two) local authorities request for NHA's support to proceed with their low-income housing programs.

- (1) Phuket Municipality requested NHA to support to forward their low-income housing development programs. Then, NHA supported them with;
- capacity development of Phuket Municipality staff and
 - making a low-income housing development program on two pilot projects of 40 Hong and Luang Poh.
- through OJT of this Project.
- (2) Uthai Thani Municipality requested NHA to support to forward their low-income housing development programs.

1-5 Input from Thai Side

Inputs from Thai side;

- which were set in PDM, and
- which were actually done

are as shown in the table below.

Inputs from Thai side

Inputs described in PDM	
	Inputs as a result of this Project
Input 1: Personnel 1) Project Manager, 2) Counterpart, 3) Administrative Staff	
	1) Project Manager Director of the Department of Housing and Development Studies (At the beginning Ms. Chantana Chanond, from August Ms. Chamnian Duriyapraneet)
	2) Counterpart Core Counterparts were set in RD as shown in Appendix 1-2 . 10 trainers, who joined Trainer Training in Japan, worked as Practical Counterparts as shown in Appendix 1-2 .
	3) Administrative Staff Some of the Practical Counterparts worked as Administrative Staff of this Project.
Input 2: Facilities A part of NHA and Project Office	
	1) Office space, desks, bookshelves, and one set of personal computer were prepared.
	2) Electricity, water supply and air conditioning facilities were provided.
Input 3: Budget As necessary	
	NHA bore a part of expenses.

1-6 Input from Japanese Side

Inputs from Japanese side were set in PDM as shown Input 1, 2, and 3 in the table below.

- (1) As for Input 1, the inputs actually done are as shown in the table below.
- (2) As for Inputs 2, Lectures to Trainers in Thailand (2 weeks × 10 persons) were additionally done beside Trainer Training in Japan (0.7 month × 10 persons) which was set in PDM.
- (3) As for Input 3, the inputs actually done are mentioned in “1-7 Output”.
- (4) As for Input 4, PDM did not mention it. However, JICA bore a part of local expenses in Thailand based on the mutual discussion in proceeding.

Inputs from Japanese side

Inputs described in PDM	
Inputs as a result of this Project	
Input 1: Experts	1) A long-term expert, 2) Short-term experts
	1) A long-term expert Mr. Hasegawa Tomohiro
	2) Short-term experts Mr. Nomura Shinsuke, Mr. Masuda Yutaka, Mr. Chishina Tomihide, Mr. Tsuyuki Ryuji (See Appendix 1-5.)
Input 2: Counterpart training in Japan: Trainer Training (0.7 month × 10 persons)	
	1) Outline of Trainer Training - See 4-1 and Appendix 4-1, 4-3.
	2) Lectures to Trainers in Thailand (2 weeks × 10 persons) - Curriculum and Results (Appendix 4-2) - Texts (These documents and digital data were handed over to NHA on 7 March 2008.)
	3) Trainer Training in Japan (0.7 month × 10 persons) - Curriculum and Results (Appendix 4-3) - Texts (These documents and digital data were handed over to NHA on 7 March 2008.)
	4) Evaluation (See 5-1 and Appendix 4-4, 4-5)
Input 3: NHA staff training in Thailand: Training for the promotion of low-income housing development (0.5 month × 50 NHA staffs)	
	See “1-7 Output”.
Input 4: Budget	
	JICA bore a part of local expenses in Thailand.

Chapter 2

Chapter 2 Housing Policy and Housing Situation in Thailand (focused on the Low-income Housing Development)

2-1 Before 1973 (Before Establishment of NHA)

In the past, there was not raised housing issue as social problem in Thailand because any city or village was not so crowded even in Bangkok. However, in 1940 during the World War II, the Government had established the Housing Division in the Department of Public Welfare under the Ministry of Interior to construct housing in the rural area.

After the World War II that indirectly brought deteriorated houses under the inactive economic circumstances, the people in a mass from the rural areas moved to the capital city for working and obtaining residences, which were not available for the low-incomes because only the private developers started to build housing for the middle or high incomes. Therefore, the low-income people had to construct low price and quality housing by them. Those people made them live closely together and their living areas dense, and it eventually brought a significant number of slums in urban areas than ever.

The Housing Division started to construct housing for hire purchase to solve that problem, however this implementation could not solve it because the quantitative supply of housing was not enough for the demand of the people increasing continuously in the urban area.

The Housing Bureau has been established on July 31, 1951 that was an institute in the Department of Public Welfare to construct housing for rent to low-incomes. It still could not solve the lack of housing because of the limited budget and the increase of land price.

Thus the Government Housing Bank has been established on January 9, 1953, which is a State Enterprise belonging to the Ministry of Finance, in order to support an individual business and the people who want to build their own houses.

In the meantime the slum condition has become worse, and then the Government established the Slum Improvement Office in the Bangkok Municipality on April 30, 1960 to control, renovate, adjust, and demolish the slums.

The coordination work was different operation among those 4 departments because the system of work was separated in the departments and ministries. As the result of the government housing work from the beginning to 1973, the total housing units for rent were 19,659 and still 500,000 people were waiting for the housing supply from the Government.

In the following table, the above movements are shown as well as the background of Thai history between 1940 and 1973.

Table 2-1: Chronological Table on Housing Development in Thailand between 1940 and 1973

Situation in the Region	W.W.II		Mao victory in China, Victory of Vietnam, Victory of Khmer Rouge																
	Indochina War		Domestic Vietnam War					Vietnam War											
Regime	National Capitalist										Capitalism								
Character	dic.		dem.			Li. dic.					dic.		Li. dic.	dic.	dem.				
Year	1940		1945			1950			1955		1960		1965		1970				
Regime																			
Means to be in power	ae	ae	ae	ae	ae	e	e	e	e	ae	c	r	a	a	c	ae	c	e	r
Bangkok Population																			
National Dev. Plan													1	2	3				
Institution established	1940					1951		1953		1960				1973					
	Public Housing Division (Public Welfare Dept.)					Welfare Housing Office (Public Welfare Dept.)		Government Housing Bank (Min. of Finance)		Slum Improvement Office (GMA) for slum clearance		National Housing Authority (Min. of Interior)							
Character of Housing Development	Land, Land and House										Slum clearance with minimal housing		Flats and Complete House (Land and House)						
Housing Policy	Public Housing Division (PHD) was to provide housing to families in the self-help land settlements, mostly in upcountry. It started to provide housing for hire purchase.																		
	Welfare Housing Office (WHO) was responsible for the construction of houses to be rented to low-income families.																		
	Government Housing Bank (GHB) was to encourage the housing production for public by loans.																		
	Slum Improvement Office (SIO) was to protect maintenance and renovate houses and also to demolish slums.																		
	Until 1973, only 11,268 housing units were built for rent or hire purchase, and only 5,431 lots of land were used, while housing need was far more than 100,000 units.																		
Production	In 1950, first project was implemented at soi Rangnam, Din Daeng Yomaraj and Huaykwang in wood construction single and detached houses.										In 1963, flats in Din Daeng Huaykwang and Bonkai were built to replace slums.								

Note: dic.; Dictatorial
dem.; Democratic
Li. dic.; Liberated dictatorship
ae; appointed election
e; election
c; coup d'etat
r; revolution
a; appointed

2-2 After 1973

2-2-1 NHA (National Housing Authority)

(1) Establishment of the NHA

The National Housing Authority is a state enterprise under the Ministry of Social Development and Human Security. It has been established since February 12, 1973 in accordance with the National Executive Decree No.316 dated December 13, 1972.

Several government agencies participating in public housing in the past that included the Housing Welfare Division of the Public Welfare Department, the Slum Upgrading Office of the Bangkok Metropolitan Administration and some housing operations of the Government Housing Bank, have been merged into one organization in order to solve the problem of poor coordination and inefficiency among those agencies. A sole responsible establishment should enable the public to own residence more rapidly.

(2) Objectives

1) Objectives in 1973

The main objectives in establishing NHA stipulated in the National Executive Decree No.316 (article 3) has not been changed until now and those objectives are as follows:

- (a) To provide housing accommodation for lease, sale on hire purchase or sale to the public,
- (b) To provide financial support to those who wish to own housing or to any person whose business is to provide housing accommodation for lease, sale on hire purchase, or sale to the public,
- (c) To engage in the business of building housing accommodation or acquiring land,
- (d) To upgrade slum or carry out slum clearance.

2) Current Objectives

Currently NHA prepared the “Concept of the Implementation Plan of Fiscal Year – 2008” in October 2007 (see Appendix 2-8), as introducing its vision that is to construct the housing and develop the city for stable and sustainable living quality. According to the concept of the plan, NHA has emphasized the stability, sustainability and quality of living environment to be improved.

(3) Missions

1) Missions in 1973

NHA has been authorized to launch various operations to achieve the mentioned objectives and according to NHA housing policy, it has operated thorough different projects described in the chapter 3. The main missions addressed in 1973 are as follows:

- (a) To arrange, to construct, to sell, to rent, to lease out, to lend, to borrow or to exchange, to own property or to run business related to the property,
- (b) To deal with financial institutions which offer loan for housing as well as to act as guarantor,
- (c) To supply land and construction materials for housing construction,
- (d) To demolish slum for new housing unit construction,
- (e) To obtain loans from local or foreign financial institutions,
- (f) To issue government bonds or other loan agreement credentials for investment,
- (g) To cooperate with other agencies in running business which will benefit NHA.

The organization can also enter into partnership with companies or be a shareholder in other corporations dealing in real estate business or providing financial aids or acting as financial

guarantor for housing business.

(h) To operate business relating to the objectives of NHA.

2) Current Missions

According to the “Concept of the Implementation Plan of Fiscal Year – 2008”, NHA Missions are described as follows:

- (a) To suggest the policy and plan of housing development and urban development in order to create the living stability and improve the living quality of people,
- (b) To encourage and support the working units, local authority, and community organization to develop the housing,
- (c) To develop and disseminate knowledge about the housing in order to develop housing of the country,
- (d) To set up the fund for housing development for low incomes,
- (e) To develop housing project as the housing community, new town, and urban renewal.

Besides the aspects of stability, sustainability and quality of living environment, the Missions specify the role of NHA as an agency on housing and urban development, such as provision of the policy and plan, supporting the relevant organizations including Local Authority, and the Information Center. In addition, financial assistance for low incomes^{2.1} and wide range of performing fields including community, new town, and urban renewal developments are declared in the Missions.

3) Current Goals

The “Concept of the Implementation Plan of Fiscal Year – 2008” also reveals the 6 main goals in this plan, which are,

- (a) Quality of housing construction and development,
- (b) Forms of housing development;

The Satellite Town and the Housing Development along the Sky Train route, and to support the Suvanabhumi Airport are included.

- (c) Supporting mechanism for local authority on housing management and development,
- (d) Fund for housing development for low incomes by the fiscal year of 2012,
- (e) Center for providing technical information about the housing at the national level,
- (f) Improvement of NHA management structure for NHA new roles and missions.

4) Current Frameworks for providing NHA Implementation Plan

The four major frameworks for establishing the Implementation Plan are described in the “Concept of the Implementation Plan of Fiscal Year – 2008” as follows. However, the detail methods or strategies for Low-income Housing Development are not explained in this Concept of the Implementation Plan.

- (a) Plan for the problem solving of Baan Eua-Arthorn Project in phase 2 – 5
- (b) Plan for emphasis of importance to the participation of local authority and community
- (c) Strategy plan for improvement of the management structure to recover the financial status
- (d) Plan for community management

(4) Trends of Housing in Thailand and NHA Housing Policy^{2.2}

1) Trend of Housing in Thailand

(a) Housing Type

The following figure shows major housing types provided in Thailand, which includes

^{2.1} Low incomes are defined that people are in lower 50% of the total population in the NHA in terms of income.

^{2.2} The data source is from “Housing Situation in Thailand 2007” researched by NHA and Chulalongkorn University Group.

distributions of types in the entire country and municipality area.

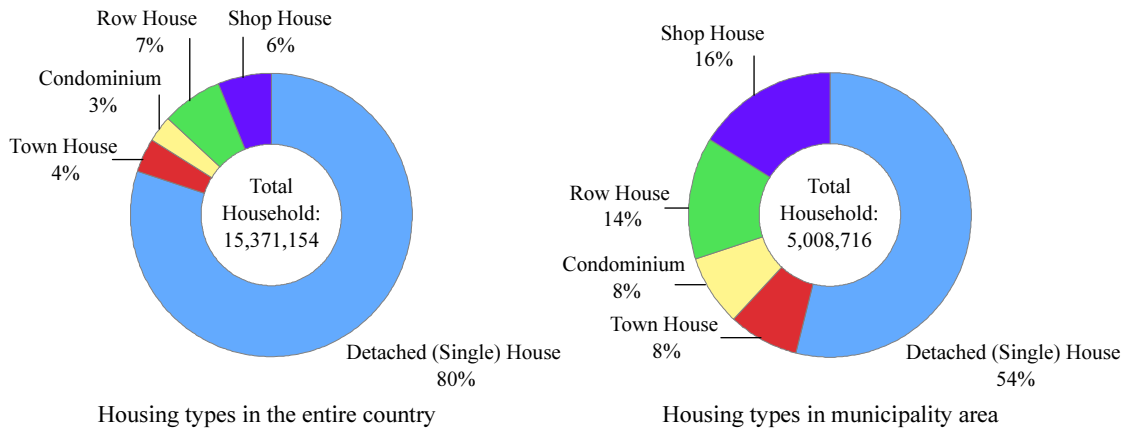


Figure 2-1: Housing Type of Thailand in 2000

The majority of housing type is detached (single) house occupying the 80% in Thailand, while in municipality area detached house is still over 50% and other type ratios such as town house, condominium, row house and shop house are twice as much as in the entire country.

(b) Housing Tenure Security

The types of housing tenure security are different in the entire country and municipality area, as the following figures showing the difference and the type change based on the statistic record in 1976, 1986 and 1996.

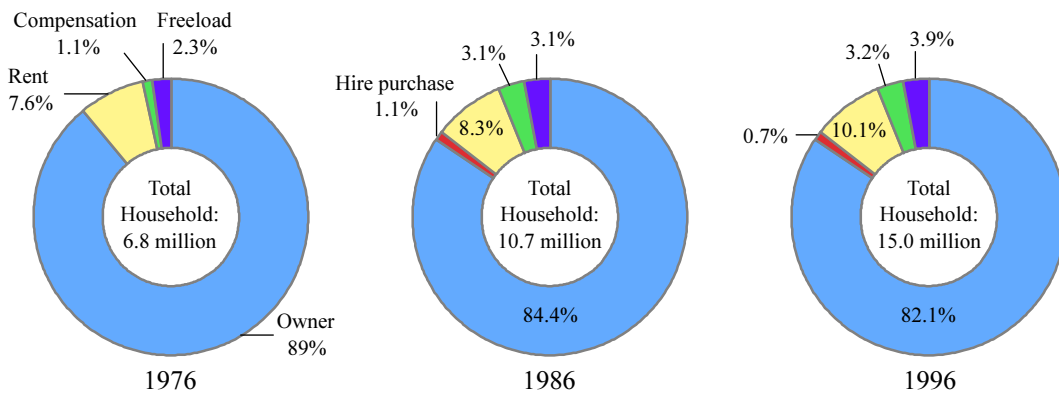


Figure 2-2: Housing Tenure Type in the entire Country

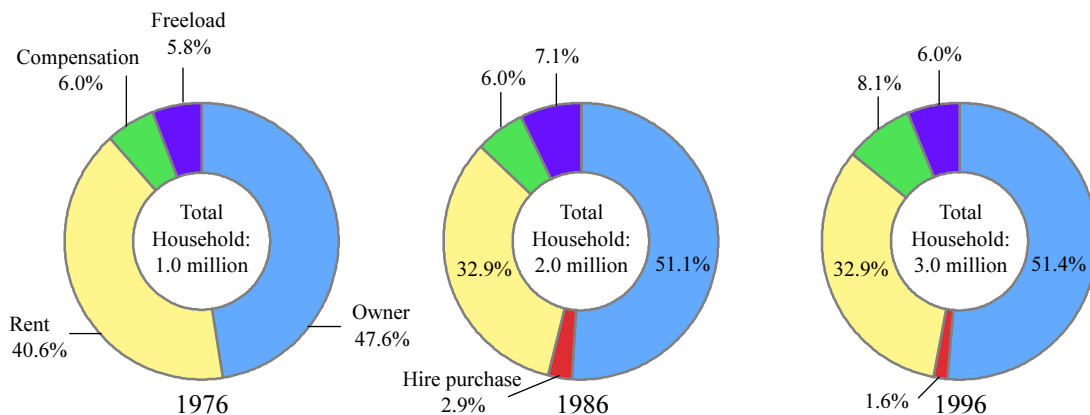


Figure 2-3: Housing Tenure Type in Municipality area

The figures show a similar tendency with the housing types in this country that housing owners count more than 80% in the entire country, while around 50% in the municipality area. And the households rent housing in the municipality area are three to four times as much as those in the entire country. The difference among three years is not significant, however, the housing owner ratio in the entire country has been slightly decreased, while the ratio including household taking hire-purchase system has been increased a little.

(c) Registered Housing Units

The following figure shows the registered housing units in this country between 1995 and 2006.

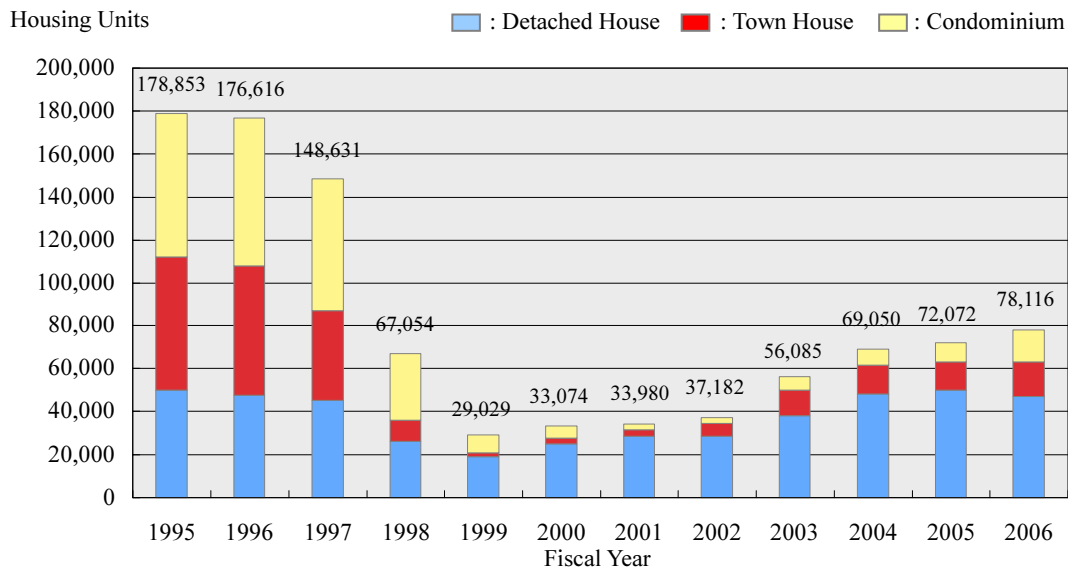


Figure 2-4: Registered Housing Units in Thailand between 1995 and 2006

The number of registered housing units has been changed in accordance with economic situation of Thailand, particularly in those years shown above. Although the number of detached house is not so much different, town house and condominium provided by private sectors have been extremely decreased between 1995 and 2000.

According to the research paper by NHA and Chulalongkorn University, NHA housing supply share is reported that NHA provided 32% of the total registered housing units between 1977 and 1982 but it decreased at 10% between 1987 and 1996, and recovered the normal ratio of 33% between 1997 and 2006.

2) Trend of NHA Housing Policy

NHA has provided various types of housing and development projects according to the government and NHA housing policies, which are shown in the following figure with a chart of registered and NHA constructed housing units, and housing demand of each five years related with the national plan, and the political, economic and financial topics in this country.

(a) Relation to the Politics, Economics, and Finances in Thailand

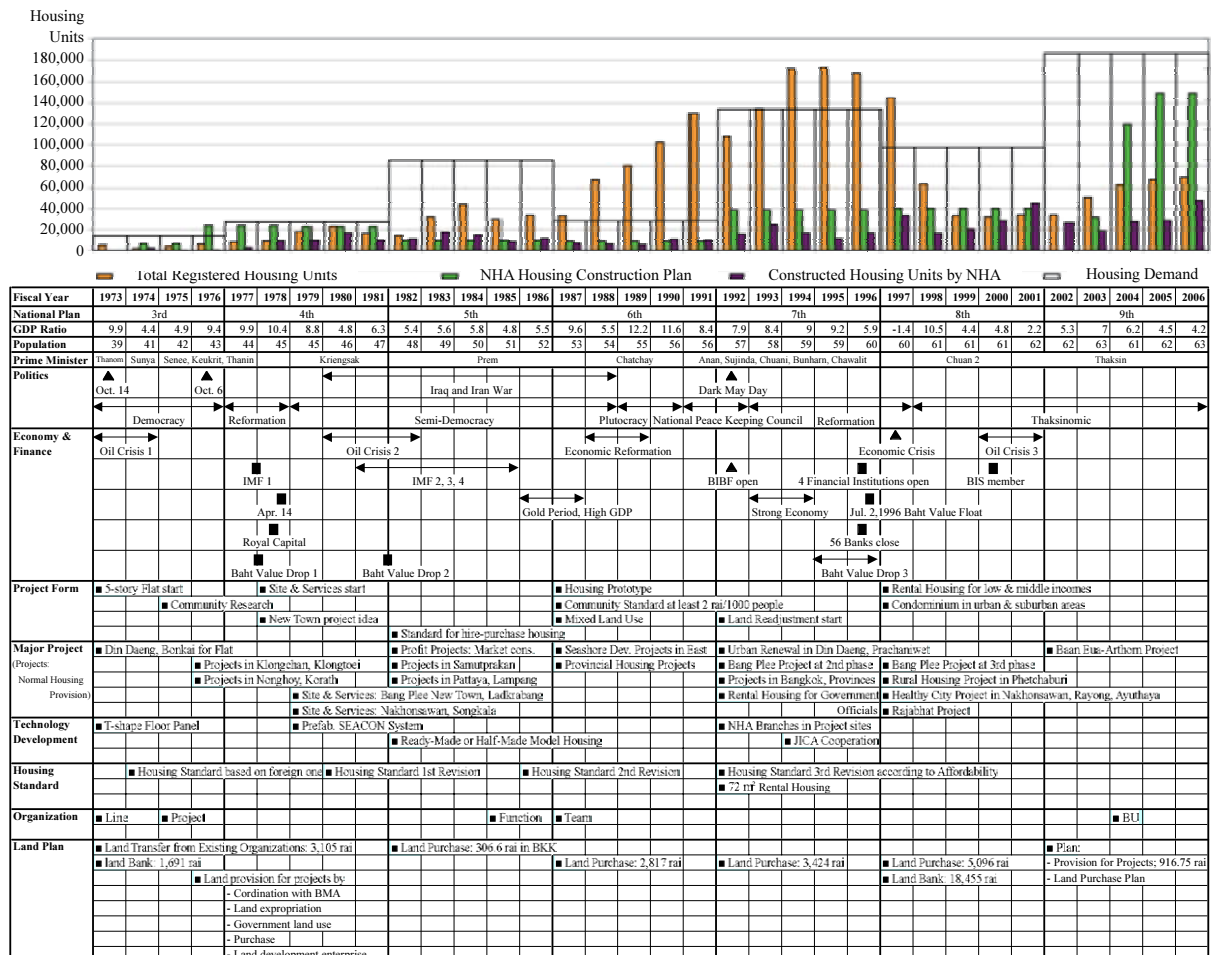
Thailand has been often faced the impact by political, economic and financial movements. In the gold era, which started in 1986 and peaked at the period of 1993 to 1994, housing units also recorded the highest number.

(b) Major movements on NHA Housing

NHA started the projects such as walk-up flat housing in Din Daeng area at the beginning of the establishment in 1973, the community research in 1975, and the site and services in 1979. In major projects on urban development, Bang Plee New Town was started in 1979,

Din Daeng Reneal project in 1992, and Baan Eua-Arthorn project in 2002. In the mean time, the normal housing projects have been operated, and rental housing for low and middle incomes was started in 1997. The movements of technical development, housing standard, organization and land plan are also implemented from the beginning.

Table 2-2: NHA Chronological Table



(5) NHA Strategies for Low-income Housing Development

NHA has introduced two major strategies for Low-income Housing Development such as Slum and Squatter Settlement Improvement and Low-cost Housing Provision for Low-income People.

1) Slum and Squatter Settlement Improvement

(a) Background

There are numerous slums or squatter settlements in Thailand, particularly in urban areas. The recent published statistics indicate that in Bangkok alone more than 243,000 households lived in slums and squatter settlements, while another 250,000 households lived in similar circumstances in other parts of the country.

(b) Outlook of Slum and Squatter Settlement

NHA defines that “Slum” describes an area in which unhygienic conditions prevail, which is crowded, damp or dirty, and not supplied or poorly supplied with clean water.

Such concentration and types of buildings and people may be hazardous to health, hygiene, and safety, and may create a climate for unlawful or immoral acts.

Under this definition, there must be at least 30 buildings per one rai^{2,3} (1,600 m²) in the community, regardless of whether they occupy the land by single owner or not.

On the other hand, squatter settlements have a different aspect besides the physical environment issues that slums are facing all the time.

That is about the land tenure and the living right. “A Squatter” is not simply a person who illegally occupies a land to live but a person who has lived for a long time in a place without certain landowners, or he/she had started to live before the land authority approved the title deed of land.

Condition of squatter settlement is sometimes the same as a slum because the infrastructure such as water and electric power supplies, drainage system and paved roads are not formally provided. This is a matter of human right and a sensitive problem in Thailand so that NHA needs to deal with this project carefully.

(c) Objectives

NHA has established the following slum development policies for planning and implementation under the housing policy and other major policies of NHA.

- a) To develop slums into housing for low-income people in the future
- b) To develop various public utilities and infrastructure to be supported by the Government
- c) To develop economic and social aspects to upgrade the standard of living of those who reside in the slums
- d) To develop land occupancy rights to create security for residents
- e) To act as a core agency in the coordination with government agencies and the public in slum development

(d) Operation Principles

To meet the objectives of slum development and the respond to the reality, NHA has established three principles of slum development.

a) Physical Development

The physical development includes the development of public utilities such as footpaths, sewage and drainage systems, electricity, water supply, garbage disposal services, community environment development and fire prevention.

b) Economic and Social Development

The economic and social development includes the establishment of community committees to represent residents in dealing and coordinating with agencies involved with community development, and to act as a leader in community development by using democratic approaches. Other economic and social projects cover vocational training, community development, mobile medical units, finance for small business, etc. NHA joins with the Bangkok Metropolitan Administration (BMA) and other government and private agencies to accomplish these projects.

c) Development of Land Tenure Security

The following methods are used for development of land tenure security.

- To request cooperation from landowners in signing an agreement to allow residents of the slums under development by NHA to stay on for at least five years,
- To exchange the benefits with which NHA or other agencies involved will develop slums for the security of those communities,
- To administer legislations involved such as Building Control Act, NHA Act, BMA Regulations including other future laws.

^{2,3} Rai is a Thai area unit and one rai equals to 1,600 m².

NHA has established measures^{2.4} for Slum and Squatter Settlement Improvement corresponding to the conditions of communities, as shown in the following table.

According to the table, NHA has implemented Slum Upgrading project and Land consolidation project such as Land sharing, Re-blocking, Relocation, and Reconstruction in the 5th level General Slums such as renting slums or slums with inappropriate living conditions.

Table 2-3: List of the Status of problems and Solutions

Status of problems	Solutions
1 st level Slums with very bad conditions 1. Under bridges 2. Slaughterhouses for hogs, etc.	1. Alleviating immediate problems - running water - electricity - preparation of communities (making list to control number) 2. Solving problems permanently - providing new housing - lower-standard buildings for rent - renting land with public utilities - BMA controls the land to prevent encroachment 3. Economic and social development
2 nd level Slums at risk 1. Next to the railway 2. Godowns, alleys, etc.	1. Land consolidation project - renting land with public utilities - leasing land with public utilities - economic and social development
3 rd level Squatters on government and private land 1. BMA – near canal 2. Fine Arts Department – historical sites 3. Port Authority of Thailand – Klong-toey 4. State Railway of Thailand – Soi Rongpoo 5. Royal Irrigation Department – near canals 6. Private land, etc.	1. Land consolidation project - renting land with public utilities - leasing land with public utilities - economic and social development
4 th level Slums advised of termination of agreement and the expropriation of land 1. Kingpetch Community 2. Wat Phaiton Community 3. Pannee 1, 2 Community, etc.	1. Land consolidation project - renting land with public utilities - leasing land with public utilities - economic and social development
5 th level General Slums such as renting slums or slums with inappropriate living conditions	1. Slum upgrading project - improving footpaths and drainage systems - economic and social development 2. Land consolidation project - land sharing - re-blocking - relocation - reconstruction

2) Low-cost Housing Provision for Low-income People

NHA has implemented housing for low incomes by the following strategies.

(a) Housing Development for Public (Labors)

To fulfill the demand of labor that is to need to live in a standard housing near the job resources and industrial estate or area, renter housing is necessary to provide.

(b) Housing Development for Government Personnel (Officials)

To fulfill the demand of government officials who are low and middle incomes, NHA

^{2.4} “Slum Development” written by Community Development Department, National Housing Authority

provides two types of housing as follows:

a) Housing for government officials in BMA

According to the government policy to encourage the government officials, housing for rent or hire purchase is necessary to provide.

b) Housing as welfare housing

To support government organizations, standard housing to be welfare for government officials is necessary to provide.

(c) Housing Development in general

To respond the government policy for solving the housing demand and trouble of the people and government officials, NHA provides housing with primary and community services such as commercial building, shopping mall or commercial area, and necessary facilities for low and middle-income people. The housing needs to be for rent, hire purchase and purchase with several cost levels and types.

2-2-2 CODI (Community Organization Development Institute)

(1) Organization History

The Community Organizations Development Institute is a Thai government agency formed in 2000 through the merging of the Urban Community Development Office (UCDO) and the Rural Development Fund. CODI is an independent public organization under the Ministry of Social Development and Human Security.

The Urban Community Development Office was introduced in 1992 to address the needs of urban dwellers left behind by the rapid economic growth in Thailand that took place in the 1980s and early 1990s. From the beginning, the Office had a distinctive approach to poverty reduction with multiple loan packages designed to assist in shelter improvements and enterprise development and available to groups that had successfully established local loan funds. The office staff assisted communities to establish savings schemes and during the late 1990s helped to link schemes into networks in order to provide local capacity building opportunities and solidarity. The diverse supports from other countries have made community organizations involve in other activities such as,

- a) A small grants program for community-managed environmental improvement projects with US\$ 1.3 million from the Danish government, which supported 196 projects benefiting 41,000 families, and whose projects strengthened the capacity of community organizations to work together and to work with local government.
- b) A program to help savings groups that faced financial difficulties maintain their loan repayments after the financial crisis of 1997 (with support from the Thai and Japanese governments).
- c) Community Welfare Funds made available to communities for use as grants, loans or partial loans for education, income generation and other welfare (for instance, for school fees, those who were HIV positive, sick or elderly) with support from the World Bank Social Investment Fund.

By 2000, when UCDO work was integrated into CODI, 950 community savings groups had been established and supported in 53 out of Thailand's 75 provinces. More than 100 community networks had been set up. More than 1 billion Baht had been provided in loans and more than half the loans had already been fully repaid.

CODI continues to support UCDO programs but it has its own legal entity as a public organization, while UCDO had been located within NHA. This provided CODI with greater possibilities, for instance, being able to apply for funds to the annual government budget, greater flexibility, wider linkages and new possibilities for supporting collaboration between urban and rural groups.

CODI is also the responsible for implementing the Thai government program to support upgrading and 200 "cities without slums" programs, which is Baan Mankong Project. Upgrading programs at this national scale are only possible if the "infrastructure" of community processes and networks and their savings schemes are in place.

Until 2004, housing loans and technical support has been provided to 47 housing construction projects benefiting 6400 households. Grants have been provided to communities to make small improvements in infrastructure and living conditions in 301 projects benefiting 68,208 families in 796 communities.

Like UCDO, CODI also has a Board that includes representatives from government and from community organizations. CODI has 6 branch offices besides the new head office near NHA in Bangkok and consists of approximately 200 full-time staffs.

(2) Approaches of CODI: as Micro Finance Provider

1) Saving Group

Saving groups, who started saving money not individually but as a group, can be offered loan finance to undertake a range of activities related to land acquisition, housing and neighborhood improvement and income-generation. The development process supported by CODI is not just taking care of the money and ensuring people repay properly. The savings and credit process has social and political implications as it seeks to put in place the social relations needed to find a way out of poverty, because poverty reduction cannot be achieved simply through financial mechanisms. Then they can change their relations with the city managers and with other stakeholders that influence access to resources including land.

The saving before loans is critically important for several reasons that it brings people together, develops their resource base and builds up their collective capacities. It helps to build managerial capacity and management processes within the community

2) Loans

The advantage of offering so many different kinds of loans is that it better supports the entire development in communities through ensuring that they can make choices and move on to address multiple needs. Many groups borrow from CODI and lend to members at a higher interest rate than they pay to CODI by adding a margin of between 2 and 5 per cent to the interest rate. This margin strengthens the group because it provides them with their own financial resources.

With a revolving loan fund, they have the power to make decisions, and they see what they do and what they need to do to secure more benefits. Groups become stronger through their involvement in this process. The loan brings a concrete benefit that motivates the group to work and save more. They see that they secured the results by themselves, and they are familiar with the loan cycle because the group obtained the money.

Three types of loans were offered to capitalize community revolving loan funds, support housing development and improvement, and finance enterprise activities.

3) Community Network

Networks can be enterprise based, for example, those made up of saving schemes in which all the members are seamstresses or taxi-drivers or, most often, they are residence based. The community network is organized for the following purposes such as,

- a) To share their experiences, learn from each other, work together and pool their resources,
- b) To support citywide upgrading programs like Baan Mankong project,
- c) To develop their own community welfare programs,
- d) To reduce the isolation and vulnerability of the urban poor,
- e) To save CODI on administration costs through decentralizing management,
- f) To negotiate with the state agencies those influence their development opportunities.

As groups have joined together into networks, some have chosen to link their resources with those of other groups accumulating their funds. As their capital grows, they start thinking they can do more than just be recipients or borrowers. They start being more proactive, for example, some groups are interested in reducing the cost of basic commodities such as rice and fish sauce by buying in bulk directly from suppliers and farmers, and selling at cost to their members.

(3) Key Points for Slum Improvement in Cooperation with People and Community

1) Open, Inclusive and Flexible Process

Conventional development systems and processes are not designed for the conditions of the poor nor are appropriate to the needs of the poor. There are almost always problems when the poor try to fit into these systems. It is necessary for the poor that plans and processes to be better suited to their needs and capacities to determine the conditions attached to projects. In addition, it is also necessary for them, who cannot resolve their problems on their own, that an open and inclusive process engages the many other groups related to development within a process to determine and control by the poor.

2) Capacity Building through Saving and Loan Activities

Community-based savings and loan activities are important because they build community capacity to determine priorities, transparently manage finance, negotiate with other powerful local groups and plan and reformulate their own strategies. Collectively organized savings strengthen the links between community residents and help to ensure leaders are accountable to local members. Collectively managed loan repayments help the community to assess the financial investments that they wish to make and help to ensure that finances are not managed by a group living outside the community.

3) Community Management through Community Exchange

Community exchanges help community organizations to analyze their experiences and modify their plans. More importantly it strengthens bargaining position regarding evictions, plans for land acquisition, and control of family finances

(4) Baan Mankong Project: A National Slum Upgrading Program

1) Objectives

There are 1.14 million households and 5.13 million people, who occupy on public, private or temple lands as squatters, in urban poor communities based on the 2000 survey by CODI.

The program is to create secure tenure and provide basic infrastructure and improve housing in those settlements as a basic right on a nationwide scale, which is alternative to delivering new housing units by delivering comprehensive long-term solutions.

2) Project Outline

The project of secure housing is linked with the larger and more comprehensive process of community development, encompassing economics, environment and public health. And the implementation and execution of the project are to be done by community people and community networks with local development organization support.

This project has implemented Slum Upgrading in 135 communities in the BMA area and 440 communities in 210 local administrative areas until October in 2007.

3) Financial Support

CODI provides Grant and Loan to the community where the “infrastructure” of community processes and networks and their savings schemes are in place. The detail financial support is shown in the following table.

Table 2-4: Financial Support in Baan Mankong Program

Items	Usage Limits	Finance Limits	
Grant (Government Subsidy) to Community Organizations	(1) Regular physical and social infrastructure improvement including land purchase for public facilities in a resettlement project	25,000 baht/household	68,000 baht/household in total
	(2) Local administrative and joint management	Less than 5% of (1)	
	(3) Activities such as capacity building, learning, study trips, meetings, seminars, publicity, linking process, information dissemination, and administration	Depends on (1), (2)	
Loan to Community Organizations	(4) Land purchase or housing construction Example of loan procedure: CODI lends to Community Organizations at 3% interest, then the Organizations lends to the members at 6.8% interest. This margin provides the Organizations with their own financial resources. Those interest rates depend on the situation.	300,000 baht/unit Loan amount depends on a housing type, affordability of household, etc.	

2-2-3 GHB (Government Housing Bank)

(1) Organization History

The Government Housing Bank was founded according to the Government Housing Bank Act B.E. 2496 on January 9, 1953 and opened for business on September 24, 1953, with its mission being to help secure appropriate housing finance for the general public, as a special-purpose financial institution under the Finance Ministry's supervision.

During its first 20 years, GHB operated both as a housing finance provider and as a housing project developer. On February 12, 1973, the Government established the National Housing Authority to take over housing project development for the general public. All the GHB assets, liabilities and rights associated with land and building rents were transferred to NHA. GHB remained in the business of extending short and long-term loans to both housing project developers and long-term financing to the general public wishing to build, buy or secure their own homes.

GHB began offering various deposit account services similar to other commercial banks on January 2, 1974. These deposit accounts served as an important source of fund mobilization, and allowed GHB to become a full-scale bank offering both deposit and loan services.

During the 1979-1981 economic crisis, GHB restructured its operations by dividing its credit section into general credit and housing project credit. At the same time, credit extension procedures were improved to be more flexible. The Bank also established a credit center that reviewed housing project loan applications.

Since 1986 GHB has expanded into the provinces, and currently, the Bank has 30 branches in Bangkok and surrounding provinces and 44 branches in the regions, as 74 branches in total.

(2) Mission

The overall mission in GHB is to provide a complete range of housing finance-related services in line with relevant government policies, benefiting society and improving everyone's quality of life.

GHB has launched its detail missions on Low-income Housing Development such as Children's Savings project to help parents teach young children the virtues of saving at a very young age, helping the disadvantaged and disaster victims to assist victims ravaged by floods in the north and northeast in 2006 and so on. Especially, GHB has cooperated extensively with NHA, the Ministry of Social Development and Human Security and CODI to provide affordable home-ownership to lower-income individuals, and continued supporting the development of Baan Eua-Athorn and Baan Mankong projects.

(3) Current Situation of Support for Baan Eua-Arthorn Project

The applicants for housing provided by the Baan Eua-Arthorn Project has been disqualified for the loan of GHB in many cases although GHB is in charge of the financial support for this project.

Currently, there are three ways for applicants of Baan Eua-Arthorn that they apply the loan of GHB as before, of NHA that is the same as normal housing provision system, and of the Credit Union lending money to the people with membership that anyone can receive after paying small amount of entrance fee.

(4) Other Financial Institutions

There are many financial institutions with different features including GHB in Thailand as shown in the following table.

Although GHB has a 38 percent market share and is the largest single housing mortgage provider in Thailand, the 12 commercial banks, with their large deposit bases, together have a more than 50 percent market share.

In terms of customer for bank, commercial banks do not qualify the people of low-income living in low-income communities or slums as a customer and serve the middle and high-income groups except for low-incomes. That is why the government bank such as GHB and GSB need to take care of the low-income people.

Table 2-5: Key Features of Financial Institutions in Thailand (as of Sep 2004)

Financial Institutions	Operation began in	Total Assets * (Billion baht)	Total Deposits (Billion baht)	Total Credits (Billion baht)	Home Loans (Billion baht)	Home loans to Total Credits (%)
Commercial banks	1888	7,728	5,710	5,073	516	10.18
Government Housing Bank	1953	657	561	392	375	95.52
Government Saving Bank	1949	469	284	314	95	30.16
Finance companies	1969	396	260	266	6	2.20
Life insurance companies *	1929	290**	386	44	N/A	N/A
Credit Fancier companies	1969	2	1	1	.2	17.81
Export-Import Bank of Thailand	1993	56	N/A	49	N/A	N/A
Small Industries Finance Corporation	1992	34	N/A	25	N/A	N/A

Source: Bank of Thailand

Note: *as of September 2004, ** as of March 2004, THB 40 = USD 1

2-2-4 BOI (Board of Investment)

(1) Organization Outline

BOI is a national committee to encourage investments in Thailand and overseas countries, and the committee consists of the prime minister as a chairman, the minister of Industry as a vice chairman, the senior government staffs, the people from concerned private sectors, etc.

BOI aims to help investors in three key ways as follow:

- a) To reduce the risks associated with investment,
- b) To reduce initial investment costs,
- c) To improve the overall rate of return on investment, and to provide support services at all times.

(2) Mission on Housing Development

1) Privileges

BOI will grant the following privileges depending on the specifics of the investment plan, and the exemption from corporate income tax is concerned with the housing development for low-income group by private sectors.

- a) Exemption from rules restricting foreign ownership of companies
- b) Exemption from corporate income tax for up to 8 years
- c) Exemption of import duties on machinery and raw materials
- d) Exemption from rules restricting foreign ownership of land
- e) Exemption from work permits and visa rules
- f) Exemption from rules restricting overseas remittances.

2) Priority Activities

The Board places priority on promoting the following types of projects. The housing development for low-incomes is included in the Public utilities and infrastructure.

- a) Agriculture and agricultural products
- b) Direct involvement in technological and human resource development
- c) Public utilities and infrastructure
- d) Environmental protection and conservation
- e) Other targeted industries

3) Investment Zones

There are three Investment Zones divided by economic factors including level of income and the availability of infrastructure as follows:

Zone 1: High Income and Infrastructure; Bangkok, Samut Prakan, Samut Sakhon, Pathum Thani, Nonthaburi and Nakhon Pathom

Privileges; Corporate income tax exemption for 3 years for projects located within industrial estates or promoted industrial zones, provided that such a project with capital investment of 10 million baht or more (excluding cost of land and working capital) obtains ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year

Zone 2: Moderate Income and Infrastructure; Samut Songkhram, Ratchaburi, Kanchanaburi, Suphanburi, Ang Thong, Ayutthaya, Saraburi, Nakhon Nayok, Chachoengsao, Chon Buri, Rayong and Phuket

Privileges; Corporate income tax exemption for 3 years, increased to 5 years for projects located within industrial estates or promoted industrial zones, provided that such a project with capital investment of 10 million baht or more (excluding cost of land and working capital) obtains ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year.

Zone 3: Low Income and Infrastructure; All other Thailand provinces not mentioned above
Privileges; Corporate income tax exemption for 8 years provided that a project with capital investment of 10 million baht or more (excluding cost of land and working capital) obtains ISO 9000 or similar international standard certification within 2 years from its start-up date, otherwise the corporate income tax exemption will be reduced by 1 year.

4) Project Conditions for Exemption

The BOI requires projects to meet the following conditions to obtain exemption in housing development for middle or low-income people.

- a) Projects must comprise a minimum of 150 residential units in Zone 1 and not less than 75 residential units in Zones 2 and 3.
- b) Area per unit must not be less than 31 m².
- c) Sales price per unit (including land price) must not exceed 600,000 baht.
- d) Blueprints must be approved by the Board.
- e) Projects must obtain building permits under the Building Control Act or other related laws.
- f) Regarding tax and duty privileges, only a 4-year corporate income tax exemption will be granted to projects in Zones 1 and 2 and an 8-year corporate income tax exemption will be granted to projects in Zone 3.

(3) Current Situation

There are housing for middle and low-income people provided by private developers assisted by BOI in urban areas. The private developer share in this field is not much than NHA now, however they might become a competitive player since they know the customer demand and the housing market better than NHA.

2-3 Constitution and National Strategy

2-3-1 Constitution of Thailand

New Constitution of Thailand (**Appendix 2-1**) took effect on 18 August 2007. It has a provision concerned with the right of the Thai people on housing as shown below.

<Article 55 in Chapter 3: The Rights and Liberties of the Thai People>

People are entitled to protection against homelessness. The state is obliged to provide necessary assistance to homeless people.

This provision mentions about homeless people. People living in poor conditions such as people living in slum areas are not directly mentioned in the Constitution.

2-3-2 National Strategy for Housing Development

<Points concerned with Low-income Housing Development>

On 18 December 2007, the Cabinet approved “National Strategy for Housing Development” (**Appendix 2-2**) in principle, which had been proposed by NHA in October 2007. In focusing on the low-income housing development and decentralization, its points are as shown below. The National Strategy mentions about new subsidy system from CG to LA in the field of housing development (See (e) 2)).

- (a) As **Vision**, the National Strategy points out importance of;
- Quantity of housing,
 - Quality of living, and
 - Good community.
- (b) As **Obligation**, the National Strategy provides that;
- Government sector,
 - Private sector,
 - Civil society, and
 - People
- are jointly responsible in this matter.
- (c) As **Objective**, the National Strategy provides that it should be a framework of housing policy not only in short term but also, medium and long term.
- (d) The National Strategy sets **5 Goals** as followings;
- 1) Quantity of housing
 - 2) Stability in living
 - 3) Quality (from the viewpoint of housing)
 - 4) Quality (from the viewpoint of community)
 - 5) Continuity
- (e) The National Strategy sets **7 Strategies** as followings;
- 1) To set up “National Housing Committee” to lead national housing policy
 - 2) Government sector performs land development to support the housing development.
In this strategy, as one of the measures, the allocation of the central budget to LA for;
 - the projects about;
 - new town development,
 - urban renewal,
 - setting up the system of;

- public utility and public assistance connected with Government's housing development project and
- budget concerning with the management of community's environment
is described.

- 3) Government sector promotes the financial and loan systems that support housing possession of the people in every ranges of income.
- 4) To enhance the capacity and participation of every sector in the development and management of housing
- 5) To develop knowledge about housing in every sector of the society
- 6) To upgrade Thai people's housing and living
- 7) To prescribe standard to achieve the quality housing

<Effectiveness and Validity of the National Strategy>

It is said that any specific action plans can be generated after National Housing Strategy has received government approval, and the national strategy will provide every subsequent government with a housing development platform that they can use. (*)

(*) Mr. Paiboon Wattanasirithm, former Deputy Prime Minister and Minister of Social Development and Human Security, addressed at a National Strategy for Housing Development Seminar on April 27, 2007. (Housing Journal, Government Housing Bank, Volume 1, number 1, July-December 2007)

And, as "(c) **Objective**" says, the National Strategy provides that it should be a framework of housing policy not only in short term but also, medium and long term. However, it is not sure whether New Cabinet established in February 2008 succeeds the strategy or makes a change on it.

<National Housing Strategy Committee>

The idea of the establishment of National Housing Strategy Committee is one of the strategies set in the National Strategy. The draft of the structure of the National Housing Strategy Committee (**Appendix 2-3**), which had been proposed by NHA in October 2007, says that the Committee determines and considers the budget covering all related activities concerning with every housing development activities. The structure and roles of the Committee is under discussion.

2-4 Decentralization

2-4-1 Present LA Activities

< Regional administration organizations under CG >

The Central Government has regional administration organizations all over the country.

Regional administration organizations under CG (December 2007)

Province (Changwat)	75
District (Amphur)	877
Sub-district (Tambon)	7,255
Village (Moobahn)	74,944

<Number of LA>

LA (Local Authorities / Local Administrative Organizations);

- which have assemblies of which members are voted, and
- of which governors are elected by the assemblies,

consist of;

- 76 in provincial level including BMA,
- 1,277 as a municipality including Pattaya, and
- 6,500 in Sub-district level.

LA (Local Authorities / Local Administrative Organizations) (December 2007)

Provincial Administrative Organization (Oh-Bo-Cho)	75
Municipality (Thed-saban)	1,276
City Municipality (Thed-saban nakhon)	23
Town Municipality (Thed-saban moeang)	129
Sub-district Municipality (Thed-saban tambon)	1,124
Sub-district Administrative Organization (Oh-Bo-To)	6,500
Special Local Administration (BMA and Pattaya)	2

<Low-income housing development projects implemented or financially provided by LA>

Except rental housing projects for Government personnel, there are few physical projects that;

- LA implemented low-income housing development project with its own budget or subsidy from the CG, or
- LA provided some portion of the budget for low-income housing development project.

Table below shows one of few examples.

LA / Year	Project
Chiangrai Municipality / Year of 2007	Roy pra puttabat (Resettlement project by Baan Mankong) Slum community people moved to nearby sites. Chiangrai Municipality bought the land used as a community park and its access road in the new site.

MBA, which has many capable staff and large amount of budget compared with other LA in Thailand, is the most possible LA to implement low-income housing development. But MBA has implemented few projects because NHA and CODI implemented many projects in Bangkok area.

<Revenue of LA>

LA income is classified into the left column in the figure below (Details are shown in **Appendix 2-4**). And LA revenue which LA can allocate their budget can be classified into three types as

followings (or the right column in the figure).

Type-A: Usage of these incomes is fixed by the **related Law**.

Type-B: Usage of these incomes is fixed by the **CG** when CG distributes the budget.

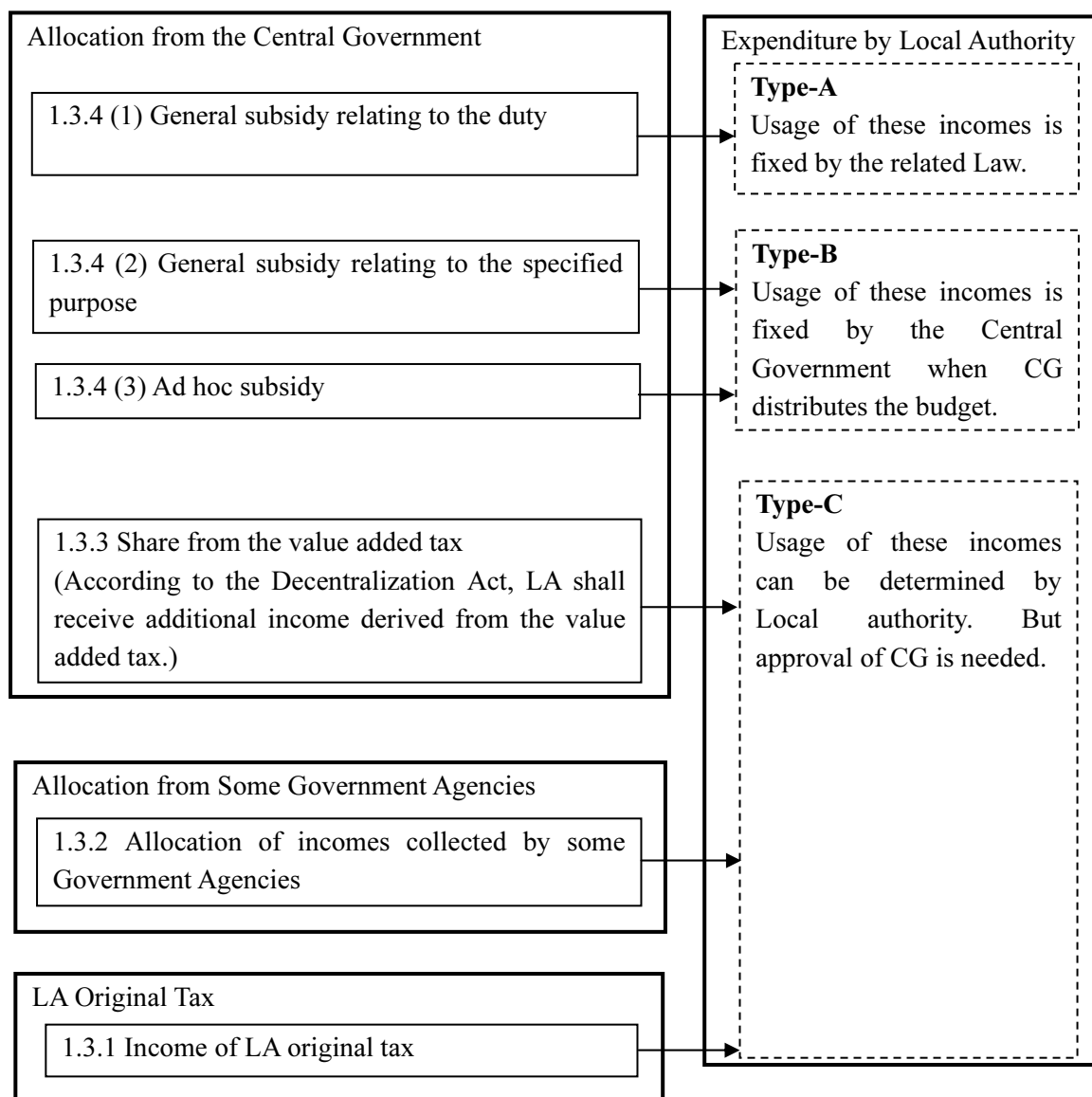
Type-C: Usage of these incomes can be determined by **LA**. But approval of CG is needed.

In existing system, when LA would like to allocate some budget for housing development,

- (a) LA can not allocate the Type-A budget to housing development because the related law already fixed the usage.
- (b) LA can not allocate the Type-B budget to housing development because there is no subsidy-menu for housing development.
- (c) LA can allocate the Type-C budget to housing development, however, LA must reduce other budget instead.

In considering (b) and (c), there is a possibility that NHA propose CG to establish a new subsidy-menu for slum improvement projects by LA.

Revenue Outlook of LA



<Cooperation projects between NHA and LA>

In these years, NHA conducted cooperation projects with LA as shown in **Appendix 2-5**. Cooperation projects except rental housing projects for Government personnel are the technical support to LA.

<Existing Problems in LA>

Most LA recognize;

- (1) There is a problem that many low-incomes live in bad conditions, and
- (2) The problem is caused by;
 - high density of population in the urban area,
 - high cost of land in the urban area,
 - Inconvenience of transport from suburban area to central urban area
 - limited affordability of Low-incomes
 - disorderly-developed housings for low-incomes including formation of slum area,
 - small dormitories, as a result of the increasing number of students coming into the city.
 - week land tenure of low-incomes
- (3) Therefore, it is needed;
 - to supply infrastructure necessary to guide appropriate housing development,
 - to negotiate with the land-owners. Some of them belong to loyal property and temples.
 - to implement Low-income housing development.

There are some obstacles when LA is willing to tackle the problems above.

- (a) Obscure system of Government's or CODI's project
 - The project method is not clear, especially in the matter of fund/budget system. If it becomes clear, LA would be able to cooperate with the project easier.
 - Policies and plans are always easily changed. As a result, LA can not work continuously and the people get confused.
- (b) Limited budget
 - There is less chance that LA will spend budget on low-income housing development because of the limited budget.
- (c) Lack of ability of staff
 - Municipality staff members already have loads of tasks. When additional tasks are assigned to them, they do not want to do.
- (d) Limited allowance of activity regulated by the Act
 - Decentralization Act and Municipality Act do not allow LA;
 - to construct and sell housing for sell,
 - to construct and operate rental housing for public,
 - to allocate its budget for the project on the private land.

2-4-2 Decentralization Policy

(A) Section 16 of Decentralization Act (Appendix 2-6)

It lists up the roles of municipalities from (1) to (31).

(A-1) The role of “improvement of the slum area and management of slum community” is listed up as one of the roles of municipalities in (12) of Section 16.

(A-2) The role of “Housing provision” is not listed up in Section 16.

(B) Judgment of the Council of State (the Juridical Council) on 20 March 2007

According to the judgment of the Council of State on 20 March 2007,

(B-1) LA is not allowed to construct and sell housing.

<Judgment of the Council of State>

(a) Land allocation and housing construction for sale are not public service, which LA has authority to perform.

(b) It might be regarded as an opposing to the tradition of government which prohibits public sector to compete selling with the private sector. This is because it is the performance beyond its authority and it might be dishonest to the government position.

(C) Municipality Act

Municipality Act says that LA is not allowed to provide its budget for the physical project on a private land. Therefore,

(C-1) in case of Slum improvement projects on the private land, LA is not allowed to construct roads, give subsidy or loan, etc.

(D) Implementation Plan issued by Decentralization Committee (Appendix 2-7)

Decentralization Committee issued an implementation plan in accordance with the Decentralization Act in 2000. A part providing an implementation plan for NHA says;

(D-1) In the field of Slum improvement, LA is expected to implement slum improvement projects, and NHA is expected to support them, and

(D-2) In the field of Housing provision, NHA is expected to implement housing provision projects, and LA is expected to manage public facilities after NHA constructed them.

CODI is out of scope of the Act.

(E) Instruction from the Office of Decentralization Committee and Department of Local Administration

The project team has got some instructions from the Office of Decentralization Committee and Department of Local Administration as shown in below.

In considering (A-2) and (B-1),

(E-1) LA is not allowed to construct and operate rental housing excluding rental housing for their personnel.

The provision of (D-1) does not prohibit NHA from implementing Slum improvement projects. It means;

(E-2) NHA is allowed to request the budget for slum improvement projects to CG and to implement slum improvement projects.

In case where NHA transfers the management of public facilities to LA after a housing provision project in accordance with (D-2),
(E-3) NHA should make some agreements with LA before the project starts.

In case of the Department of Rural Roads, for example, all tasks on the rural roads were set to be transferred to LA at the beginning. But it was recognized that some tasks such as a broad rural road connecting two regions need to be remained in the Department. Then, the decentralization policy was improved.

(E-4) If there are some problems such as a lack of ability of LA staff and it is difficult for them to implement housing development projects, NHA can propose improvement of the decentralization policy in the field of housing.

2-4-3 Possible Roles of NHA and LA under Decentralization Policy

In considering (A) to (E) in 2-4-2, “possible roles” of NHA and LA under the existing decentralization policy are as shown in the table below.

In this text, “Possible roles”;

- means that NHA and LA are allowed or expected to do these roles, and

- does not mean that NHA and LA must do every items of these items.

Field	NHA		LA (Local authority)
Slum improvement	<Case 1>		
	To give subsidy and loan for the projects. (In this case, new system must be approved.)	↔	To cooperate with NHA.
	-----<Case 2>		
	To give loan for the projects. (In this case, new system must be approved.)	↔	To give subsidy for the projects. (*2) (New subsidy menu should be established; otherwise it would be difficult for LA to prepare the budget.)
Slum improvement	-----<Case 3>		
	To support LA without subsidy and loan.	↔	To give subsidy for the projects. (*2) (Loan system should be considered.)
Slum improvement	-----<Case 4>		
	To support LA without subsidy and loan. (Some projects that NHA facilitated became CODI projects.)	↔	To facilitate the project with NHA, and ask CODI to adopt the project.
Housing provision	Housing for sale	↔	LA is expected to; - cooperate with NHA in planning, and - manage public facilities after construction.
	Rental housing for public	↔	LA is expected to; - cooperate with NHA in planning.
	Rental housing for Government personnel	↔	LA can request NHA to construct and lease to LA.
Preservation	To give subsidy and loan for the projects. (In this case, new system must be approved.)	↔	To cooperate with NHA.
Housing Loan	To give loan to the community or individuals. (In this case, new system must be approved.)	↔	To cooperate with NHA.

(*1) CODI is out of scope of decentralization policy.

(*2) LA is not allowed to construct roads, give subsidy or loan, etc. in case of Slum improvement projects on the private land.

Chapter 3

Chapter 3 NHA Performances

NHA has operated various activities since 1973. These activities are described in three sections, Project Performance, Academic and Social Tasks, and Analysis of NHA Performance in this chapter. NHA performances are conducted in the following organization system:

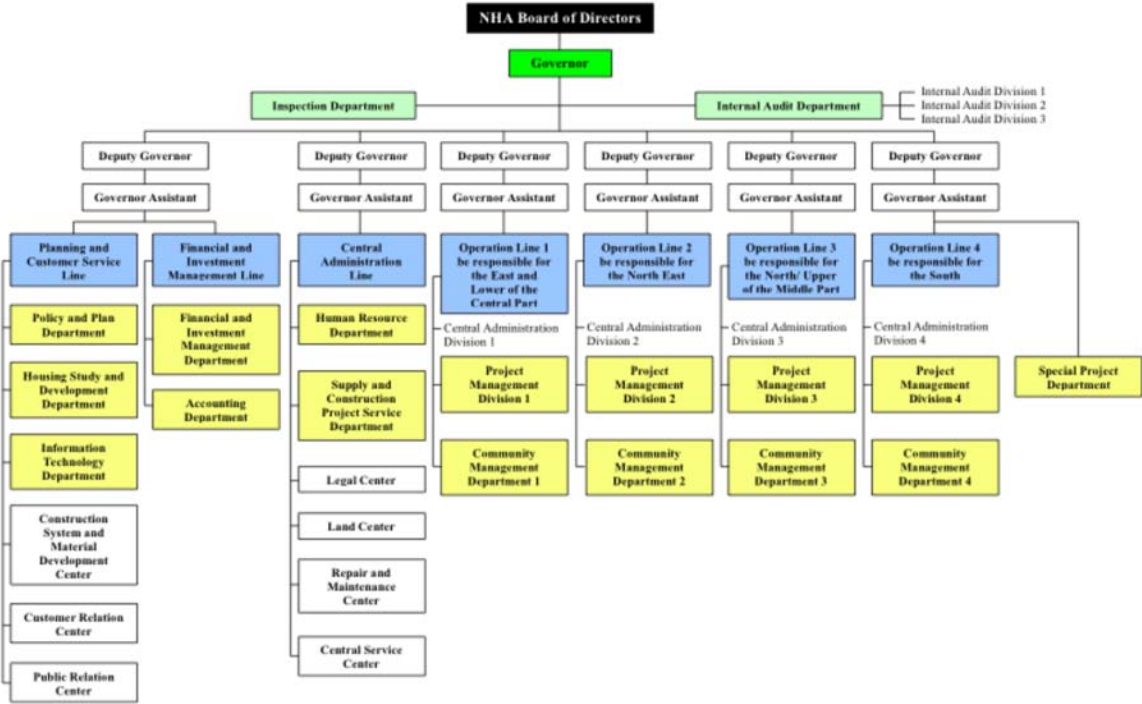


Figure 3-1: NHA Organization System

3-1 Project Performance

In this section, the five sub-sections describe the major projects, as explaining each method, workflow^{3.1}, good practices, analysis, and points to improve the project:

1. Transferred Works from Predecessor of NHA
2. Slum and Squatter Settlement Improvement Projects for Low-income People; Upgrading, Re-blocking, Reconstruction, Land-sharing, and Relocation and Resettlement
3. Low-cost Housing Provision for Low-income People; Rental Housing for public, Rental Housing for Government Personnel, Normal Housing Project, Baan Eua-Arthorn Project, and Site and Services
4. Urban Development; New Town and Urban Renewal
5. Rural Housing

(1) Project Aspect

NHA has performed many projects such as Community Housing, Special and Community Service, Government Personnel Housing, Victim Support in South, Property Crisis, Baan Eua-Arthorn, Rajabhat University Dormitory Construction, and Slum Improvement, and

^{3.1} General Project Workflow of NHA is shown in Appendix 3-1.

implemented Academic and Social Studies on housing development since 1973. The following table, quoted from NHA Annual Report as of November in 2007, shows the NHA project performance during a period from the fiscal year 1976 to 2008 (until November 2007). The number of housing units shown in this table is recorded in the each construction completed, including constructed housing units by the housing provision and housing units belonging to the communities implemented by Slum Improvement Project.

Table 3-1: NHA Project Performance List

Fiscal Year	Community Housing Project		Special/Community Service		Government Personnel Housing Project	Victim Support in South Project	Property Crisis Project	Baan Eua-Arthorn Project	Rajabhat Univ. Dorm. Project	Sub Total Housing Unit	Slum Improvement Project			Sub Total Slum Housing Unit	Total Housing Unit
	New site (Growth Pole City*1)	Other	New site (Growth Pole City)	Other							Exisiting Land Improvement	Resettlement & Relocation	Environment Improvement		
1976		588								588					588
1977		2,818								2,818					2,818
1978		8,000			1,106					9,106					9,106
1979		4,744			4,013					8,757	568			568	9,325
1980		10,700			1,306					12,006	4,476			4,476	16,482
1981		4,505			1,968					6,473	3,280			3,280	9,753
1982		3,267		33	2,472					5,772	5,213			5,213	10,985
1983		7,108		19	3,925					11,052	6,507			6,507	17,559
1984		6,738		12	174					6,924	7,843			7,843	14,767
1985	3,503	180		179						3,862	4,197	231		4,428	8,290
1986	898	3,243		66	48					4,255	7,245			7,245	11,500
1987		359			530					889	5,214	951		6,165	7,054
1988		608		30						638	4,981	412		5,393	6,031
1989		726		160	1,206	557				2,649	2,816			2,816	5,465
1990		2,427			704	119				3,250	6,306	1,057		7,363	10,613
1991		645		79	280					1,004	6,746	2,096		8,842	9,846
1992	1,728	3,939			3,371					9,038	4,580	1,841		6,421	15,459
1993		13,086		236	6,758					20,080	2,131	2,715		4,846	24,926
1994	3,440	5,013			1,256					9,709	3,423	3,171		6,594	16,303
1995		2,653	35	51	2,486					5,225	2,453	3,614		6,067	11,292
1996	3,124	10,485		64	1,231					14,904	1,692			1,692	16,596
1997		8,328	218		1,656					10,202	11,078	12,324		23,402	33,604
1998		5,638			1,231					6,869	5,431	3,958		9,389	16,258
1999	318	9,460		1,804	1,543					13,125	3,751	3,961		7,712	20,837
2000	485	1,281		560	300					2,626	19,747	6,415		26,162	28,788
2001		4,296		434	12,162					16,892	23,264	4,825		28,089	44,981
2002		1,464			40					1,504	23,524	1,677		25,201	26,705
2003		2,940					258	112		3,310	13,184	2,326		15,510	18,820
2004		151						1,893	840	2,884	1,750	880	20,957	23,587	27,687
2005		698				169		4,851	1,470	7,188		110	19,633	19,743	26,931
2006		240			78			40,475		40,793			5,597	5,597	46,390
2007		289			384			30,905		31,578			4,606	4,606	36,184
2008					70			11,371		11,441			4,916	4,916	16,357
Total	13,496	126,617	253	3,727	50,298	845	258	89,607	2,310	287,411	181,400	52,564	55,709	289,673	577,084

Note: *1; Growth Pole City is a name of promotion project for new town but its promotion was over a decade ago.

In the list, NHA categorizes various projects into several groups:

1) Community Housing Project:

Normal Housing, Rental Housing for Public, and Site and Services are included. The housing units are recorded separately according to the site in a New Town or a new community.

2) Special and Community Service:

This is not a regular project like the Community Housing Project but deals with the same performance.

3) Government Personnel Housing Project:

Rental Housing for Government Personnel

4) Victim Support in South Project:

This project mostly covers the area damaged by Tsunami.

5) Property Crisis Project:

This project is for the area with significant trouble in property.

6) Baan Eua-Arthorn Project:

This project is categorized separately due to the project scale.

7) Rajabhat University Dormitory Construction project:

This is a special project in NHA.

8) Slum Improvement Project:

a) Existing Land Improvement:

This project includes improvement of infrastructure and housing, such as Upgrading, Re-blocking, Reconstruction and Land-sharing

b) Resettlement and Relocation

c) Environment Improvement:

This project includes Public Facility Improvement and Provision, and EM Installation.

The following figure shows the trend of the number of constructed housing units: the total number; units constructed by the Housing Provision Project of NHA; units constructed by the Slum Improvement Project of NHA during a period from fiscal year 1976 through fiscal year 2008 (until November 2007).

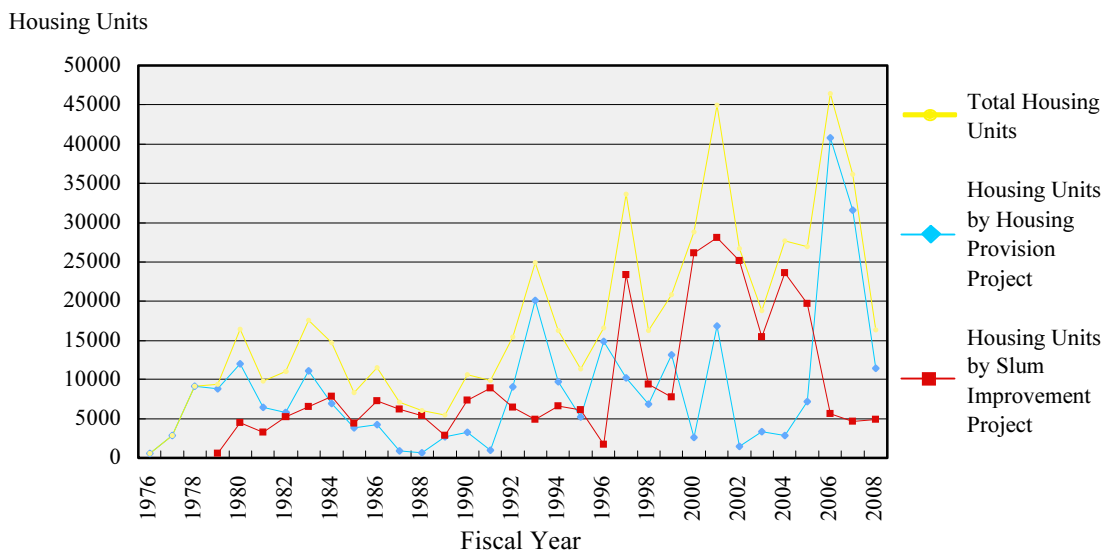


Figure 3-2: Housing Units provided by NHA

According to the above NHA Project Performance List, some projects such as Community Housing in New Town, and Special and Community Service Project, have not been implemented after 2003, while the Baan Eua-Arthorn Project, which is a national housing provision project has provided a large number of housing units since then. The total number of housing units also has increased a little after 2003. The difference between the housing units constructed by the New Housing Provision and those dealt by the Slum Improvement Project is not so much.

On the other hand, in Slum Improvement Project, Existing Land Improvement such as Upgrading Re-blocking, Reconstruction, Land-sharing has been suspended because the Government cut the budget for the Slum improvement project under the Decentralization Act, and the Community Organization Development Institute (CODI) started the Baan Mankong Project in 2003. The Resettlement and Relocation Project also has not been recorded since 2006.

However, NHA has started the Environment Improvement Project, such as Public Facility Improvement and Provision, and EM Installation since 2004 that has been supported by the members of Parliament.

Regarding the Academic and Social Studies on housing development, there is no quantitative performance list in NHA. However, the achievement of project performance represents the accomplishment of those studies.

(2) Financial Aspect

1) Housing Types for Low incomes

NHA estimates affordable housing types for low-income people in accordance with their incomes as shown below. However, these are not a qualification standard for applicants but a guideline in NHA. (See more details in Appendix 3-2)

Table 3-2: Housing Type for Low incomes

Income Group	Affordable Housing Type	Income Percentile
Lower than A	Upgrading (No proper type)	Lower 0-10% 10-20%
A	Rental housing	20-30%
	Housing for hire purchase 1-story row house	30-40% 40-50%
B	2-story row house	50-60%
C	Semi-detached house 1-story detached house	60-70%
	D	2-story detached house Shop house

 Low incomes regarded by NHA

2) Subsidy System

The Government prepares subsidy for low incomes that rent or buy under the hire-purchase method. For rental housing, subsidy covers 60 to 100% of the construction cost, while for housing for hire purchase, around 15 to 30% of construction cost are covered by subsidy. The rent for 20 years of contract period is estimated within 15 to 18% of income. The following table shows the estimated budget of rental housing for low incomes in 2002. (See Appendix 3-3)

Table 3-3: Estimated Budget Plan for Low-income Housing

Rental Housing	Average income (baht)	Expense for Housing	Total Rent/ Month	Rent/ Month (baht)	Capital (baht)	Subsidy		Community Adm. Fee (baht)	Health Service Fee
For Low-incomes - Bangkok/Vicinity - Region	11,600	15%	1,700	1,100	380,000	220,000	58%	600	-
	8,000	18%	1,400	800	380,000	260,000	68%	600	-
For Labors - Bangkok/Vicinity - Region	8,500	18%	1,500	900	300,000	180,000	60%	600	-
	7,200	18%	1,300	700	300,000	200,000	67%	600	-
For Elderly	4,200	15%	600		340,000	340,000	100%	600	500

3-1-1 Transferred Works from Predecessors of NHA

(1) Background

When NHA was established in 1973 as a sole responsible agency by merging four departments in different organizations, NHA took over the works, such as all the work, assets and liabilities of the Welfare Housing Division of the Welfare Housing Office under the Public Welfare Department, the work of the Slum Department Office under the Bangkok Municipality, and works related to the welfare housing of GHB.

(2) Housing Projects transferred from Predecessors of NHA

NHA has managed the housing in the projects that had been already completed by those departments. These are shown in the following table. Most of these housing units are still in use.

Table 3-4: Housing Projects transferred from Predecessors of NHA

Region	Units	Project Type		Housing Type								
		Rent	Hire purchase	1-story row house	2-story row house	2-story semi-detached house	1-story detached house	2-story detached house	Shop house	Flat	Shop	Wooden row house
Bangkok and Vicinity	9,394	6,601	2,793	20	337	524	4	1,608	627	6,200	45	29
North	120	120		61	12	12	3			32		
Eastern North	197	197			30	82	8	77				
East	56	56			24			32				
West	66	66			46	4	2	14				
Central	255	255		70	112	6		34	33			
South	152	152		12	34	2	16	58				
Total	10,240	7,447	2,793	163	595	660	33	1,823	660	6,232	45	29

3-1-2 Slum and Squatter Settlement Improvement

The Slum and Squatter Settlement Improvement includes Physical Development, Economic and Social Development and the Development of Land Tenure Security as mentioned in “Section 2-2-1 NHA”.

NHA had provided Slum Upgrading Project as Physical Development, and Re-blocking, Reconstruction, Land-sharing, Relocation and Resettlement projects as Development of Land Tenure Security. These are described in this section. The Economic and Social Development is also introduced later in “Section 3-2-3 Economic and Social Development Programs for Community.”

In this sub-section, although NHA has not operated each project on the Slum and Squatter Settlement Improvement since 2005, the implementation organization and the budget resource for each project include NHA because NHA has not finalized its role that is to be completely transferred to Local Authority.

(1) Criteria and Process for Slum Upgrading Project of NHA

1) Criteria

- (a) Slums that are not in a situation of encroaching other’s land. This means that they have rental agreements with landowners, and the owners allow development. In addition, there should be no indication that the land can be used for other productive developments such as shopping centers or be expropriated for any project related to the development of the national infrastructure.
- (b) Slums with a deteriorated environment. For example, more than 30% of the footpaths in the community are in disrepair, the drainage system is poor or does not serve the entire community, water supply is either intercepted or unreliable, or there is no garbage disposal system in the community.
- (c) There are either no individual meters for electricity and running water, or they are installed to less than 30% of the total community households.
- (d) Public organizations will cooperate in economic and social development with private organizations, NHA and local authorities.

2) Process

The general process and responsible organizations of slum upgrading project are shown in the following table:

Table 3-5: Process and Responsible Organizations of Slum Upgrading Project

Work Item	Activity	Responsible Organization
Data Collection	- Survey of information & site map	NHA (or CODI), Local Authority
Negotiation with Landowners	- Making agreement on slum development	NHA (or CODI), Local Authority
Project Preparation	- Design, drawings and cost estimation	NHA (or CODI), Local Authority
Coordination with Community	- Public relations for the development - Request for removing obstacles	NHA (or CODI), Local Authority
Construction	- Construction of footpaths, drainage, water supply and electricity systems	NHA (or CODI), Local Authority
Community Development	- Promotion of economic and social development activities	NHA (or CODI), Local Authority, and Private Organizations

(2) Criteria and Process for Development of Land Tenure Security

1) Criteria

- (a) Slums that are in trouble due to fire or natural disaster.

- (b) Slums that are being evicted under the expropriation project by the Government.
- (c) Slums that are evicted by private landowners, or encroaching on government lands. Both government and private landowners must participate in the project as follows:
 - a) NHA administers the project or is allocated with the budget to provide new land for residents.
 - b) The owners pay appropriate demolition fees to compensate to residents so that they will be able to find new housing.
 - c) The owners pay demolition and removal fees.
 - d) The owners allow long-term leasing of land at a fair price.
- (d) Residents are responsible for repayment of rented buildings, rented or leased land, and housing.
- (e) For economic and social development, public organizations will take the lead, with support from NGOs, NHA and local authorities.

2) Process

The general process and responsible organizations of development of land tenure security are shown in the following table:

Table 3-6: Process and Responsible Organizations of Development of Land Tenure Security

Work Item	Activity	Responsible Organization
Project preparation Data Collection	- Survey of Information & site map - Information Analysis - Community Prioritizing - Establishment of resident groups	NHA (or CODI), Local Authorities, Public and Private Organizations
Negotiation	- Participation in negotiations with landowners	NHA (or CODI)
Land Acquisition	- Appropriate land provision - Survey, measurement, boundary verification - Construction cost estimation	NHA (or CODI), Local Authorities
Feasibility Studies	- Location price, financial structure, design, drawings, and proposal for approval	NHA (or CODI)
Project Implementation Construction and Coordination with Responsible Organizations	- Provision of contractor for construction - Drawings, lot arrangement - Construction of roads, footpaths, drainage, water supply, electricity and sewage systems, etc.	NHA (or CODI), Electricity and Water Works Authorities
Relocation	- Right consideration - Move coordination - Move into lots	NHA (or CODI), Public and Private Organizations
Housing Construction	- Design and approval - Material support - Advice on construction - House registration	NHA (or CODI), Local Authorities
Management	- Contract preparation - Money collection, debt follow-up, public utility maintenance	NHA (or CODI), Local Authorities
Community Development	- Promotion of economic and social development activities	NHA (or CODI), Local Authorities, Private Organizations

(3) Project Selection Flow

In the Slum and Squatter Settlement Improvement, the NHA selects an appropriate approach among several projects to improve target communities. The project selection will take the flow shown in the following figure.

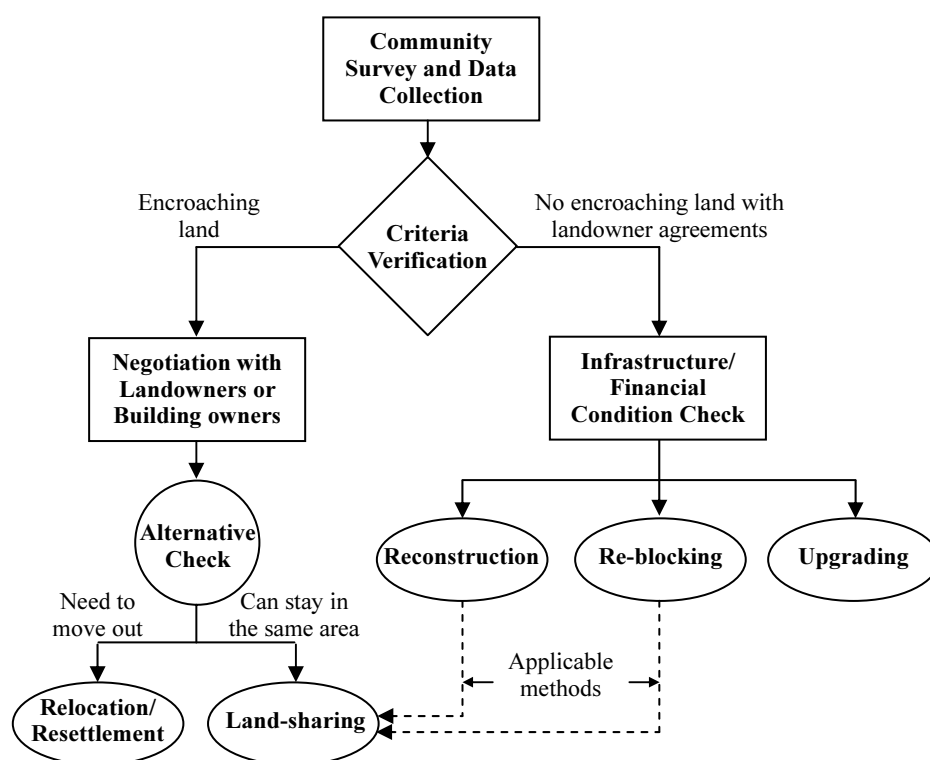


Figure 3-3: Project Selection Flow

(4) Current Relations of Implementation Organization and Financial Resources

The current relations of the Implementation Organization and Financial Resources of each project on Slum and Squatter Settlement after NHA focused on only the Slum Upgrading project are shown below:

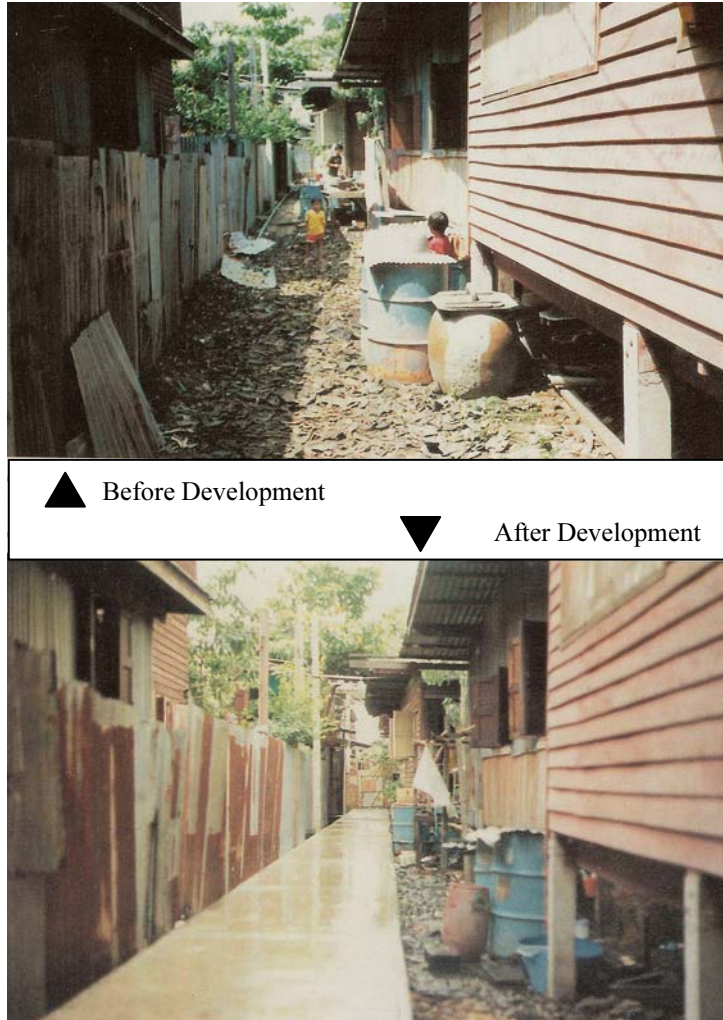
Table 3-7: Current Relation of Implementation Organization and Financial Resources

Project Type	Implementation Organization		Financial Resources for Project	Note
	Landowner: Public Organizations	Landowner: Private Sectors		
- Upgrading - Re-blocking	(NHA until 2004)	(NHA until 2004)	- (NHA budget until 2004)	Normal case until 2004
- Reconstruction - Land-sharing - Relocation and Resettlement	CODI	CODI	- Subsidy for infrastructure improvement from the Government - Loans for housing from its own Fund	Normal case
	Local Authority (supported by NHA)	N/A	- Allocation of General Subsidy from the Government	Rare case (will be normal case)
	NGO	NGO	- Donation	Rare case

[On-site Project]

The “On-site Project” described in this section means a project implemented by NHA in an existing community or for an existing housing.

3-1-2-1 Upgrading



Upgrading

(1) Method

In an upgrading project, NHA will aim to improve the existing infrastructure in the community and to implement the economic and social development as well. The infrastructure improvement consists of paving roads, providing drainage along roadside and installing septic tanks for housing and so on. In addition, the community people sometimes execute renovation or rebuilding of the existing houses along with the infrastructure improvement work.

The responsible division for the Slum Upgrading project of NHA is the Physical Environment Improvement Division, which previously was the Slum Improvement Division, under the Special Project Department.

The project budget for infrastructure improvement comes from (NHA), the Government, local authorities controlling the communities, or CODI that has funds to invest 68,000 baht per unit in this improvement.

And the project implementation organization will be (NHA), local authorities, CODI, NGOs, or the community. Examples are Huarotchak Tuekdaeng Project, Wat Prayakrai II Project, and

(2) Workflow

The project implementation period varies from 2 years to several years according to the situation of a concerned community and financial resources for the project. The following description explains a typical process of the Slum Upgrading Project of NHA that takes approximately 2.5 to 3 years, as shown in the following workflow figure.

At first, a project team, composed of social analysts, architects, engineers, economists, technicians, and lawyers, visits the community several times to survey the existing situation and defines it to be implemented as an upgrading or re-blocking project. The main activity at the beginning of this project is to collect information on the economic and social aspects, the community demands, and the physical conditions through field surveys, communications, and meetings with the community people. After analyzing the information, the project team shows a future vision to the community people with estimated budgetary amount. If the people agree with a proposal prepared by the project team, this project can be moved to the next stage of implementation. Therefore, reaching to an agreement among the community people is a very important process in this project.

Secondly, the team prepares the budgetary funds and documents for a project and selects the contractor through the bidding process. After the planning phase, the contractor starts the construction works such as infrastructure improvement and building restructuring, and completes the works for a period of 6 months to 1 year.

In the process of the project, the team needs to contact with local authorities regarding social, financial, and physical planning to solve the problems in the community.

The community development will start after the completion of physical improvement that is social and economic improvement such as general social services, public health services, small business loan, vocational training, etc.

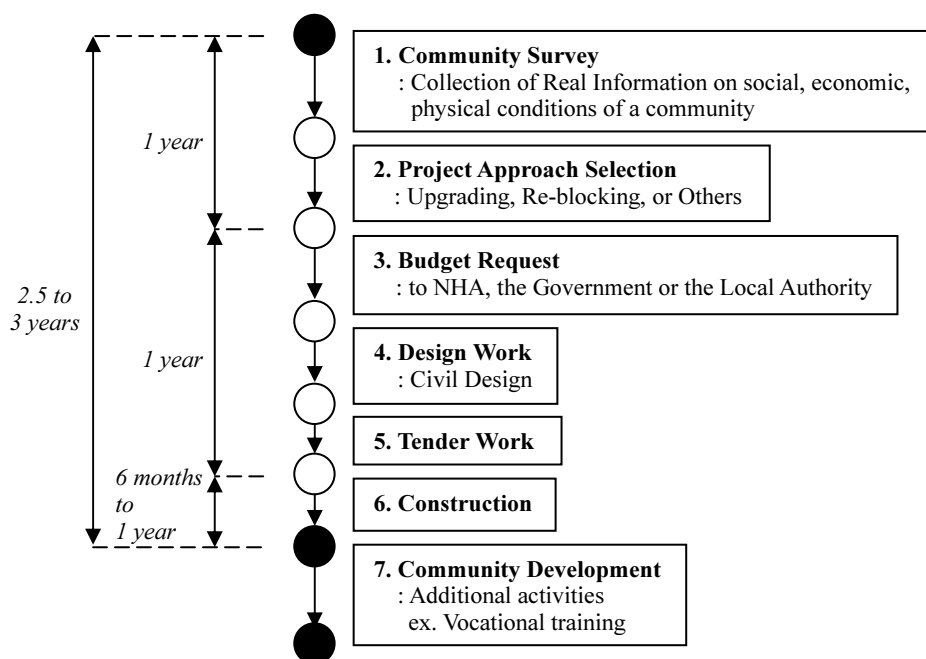


Figure 3-4: Slum Upgrading Project Workflow

(3) Good practices



<An improved road at the community>

1) Project Name: Ruam Poon Pol-1 Project in Phuket

2) Project Outline

This slum upgrading project was implemented by NHA in 2002 for the Ruam Poon Pol community in Phuket. NHA improved the existing roads in the community by paving and widening to 6m. Along the roads, there were mainly single story houses and some two story ones for mixed use purposes, such as for commercial and residential. The total number of housing units was approximately 300 in the Pol-1 area.

3) Evaluation

The infrastructure improvement created the better living environment that is, easy walk on rainy days due to paved roads installed with drain, smooth passing caused by wide roads, etc. After the completion of this project, the people in this community put some flowerpots and artistic objects on the porch of houses or the front roads to decorate, which eventually helps to enrich the living environment. This activity toward the community proves that the project succeeds in upgrading the original poor condition of infrastructure, improvement of the community environment and empowerment of the ownership of the community people.

(4) Analysis: Advantage and Disadvantage

In this project, communication skill, social and legal knowledge, and various practical work experiences are necessary to work well with the community people. In addition, the project team is required to have staffs with technical or engineering knowledge, and skill on physical research and planning. In most of the project sites or communities, there is no certain information and document to refer before starting. The project team might need to find or research information in both the local authorities' offices and the community. In a case of a project without a site map of a concerned community approved by local authorities, the team has to measure the site by themselves or utilize GIS data if available.

Thus this project is quite different from the Housing Provision Project in which the basic information is prepared before starting a project and a project team does not need to make an agreement of the community for integrated opinions regarding to the people's social, financial, and physical problems and satisfy each family's requirement for housing.

(5) Points to improve the project

1) Utilization of time saving tool

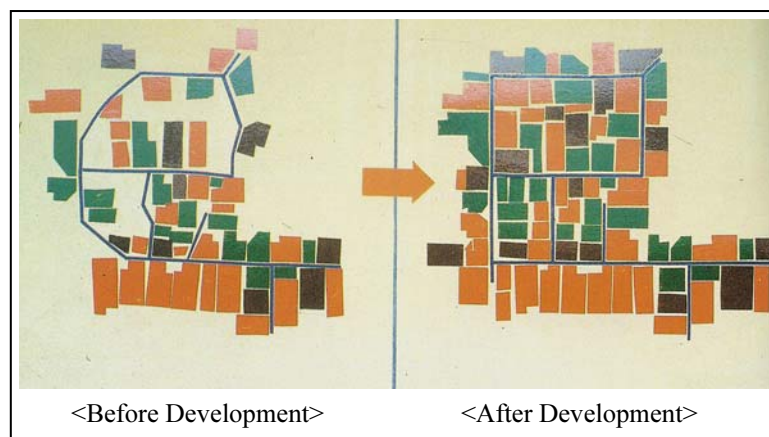
In general, NHA needs to utilize GIS and other technical tools to reduce the time for physical surveys in a community since it takes one year to prepare for a project. But this does not mean to reduce the time for communications with the people.

2) Measures for urgent projects

Since projects plans are usually set up according to the fiscal year budget of NHA, it is

difficult to respond urgent projects, such as upgrading of the community suffered from flood or collapse. So, the community needs to wait until a project is approved for implementation in a certain fiscal year. NHA may save some reserve funds for urgent project for Slum and Squatter Settlement Improvement in the special budget of NHA.

3-1-2-2 Re-blocking



Re-blocking

(1) Method

For those communities that face problems related to land occupancy, or those who want to adjust the conditions of land usage for new communities, NHA will act as a liaison body so that residents will gain rights to the land through purchase from landowners, long-term lease, or rental. After that, NHA will divide the land into plots and award occupancy rights to residents based on where they are, or make minor adjustments when necessary to minimize conflict. Then, NHA will improve public utilities and infrastructure as well as give advice on designs, develop housing, and undertake economic and social development. Residents can pay for the installment land fees to NHA or financial institutes that support the project.

The responsible division of NHA for the Re-blocking project is the Physical Environment Improvement Division under the Special Project Department.

The resource of project budget comes from (NHA), the Government, local authorities controlling the communities or CODI, and the project implementation organization will be (NHA), local authorities, or CODI. Examples are the Soi Srinam-ngern Project and Wat Paiton Project.

(2) Workflow

This project's workflow is similar to the Slum Upgrading in NHA as shown below. In general, project implementation period depends on the situation of a concerned community and financial resources for the project, which usually takes about 3 years.

The project team, as the same as the Slum Upgrading project, comprises social analysts, architects, engineers, economists, technicians, and lawyers.

At the beginning of this project, a project team surveys the existing situation in a community and defines it whether to be implemented as an upgrading or re-blocking project. The main activity is to collect real information on the economic and social aspects, the community demands, and the physical conditions through field surveys, communications, and meetings with the community people. After analyzing the collected data, the project team presents a future vision to the community people with estimated budget for making the people agree with and moving to the next stage of implementation. In order to have the agreement, NHA prepares a re-blocking map showing the arrangement of infrastructure and housing according to the various demands from all the stakeholders concerned the project. This is the most important work in this project as well as the Upgrading project.

In the process of the project, the team needs to contact with the local authority on social,

financial, and physical planning to solve the problems in the community.

After that, the team prepares budget and documents for the project and selects a contractor through the bidding process. Then, the contractor starts the construction works, such as infrastructure improvement and building restructuring and completes them for a period of 6 months to 1 year. In terms of building restructuring work, old housing demolishing, moving, rehabilitating, and rebuilding are included.

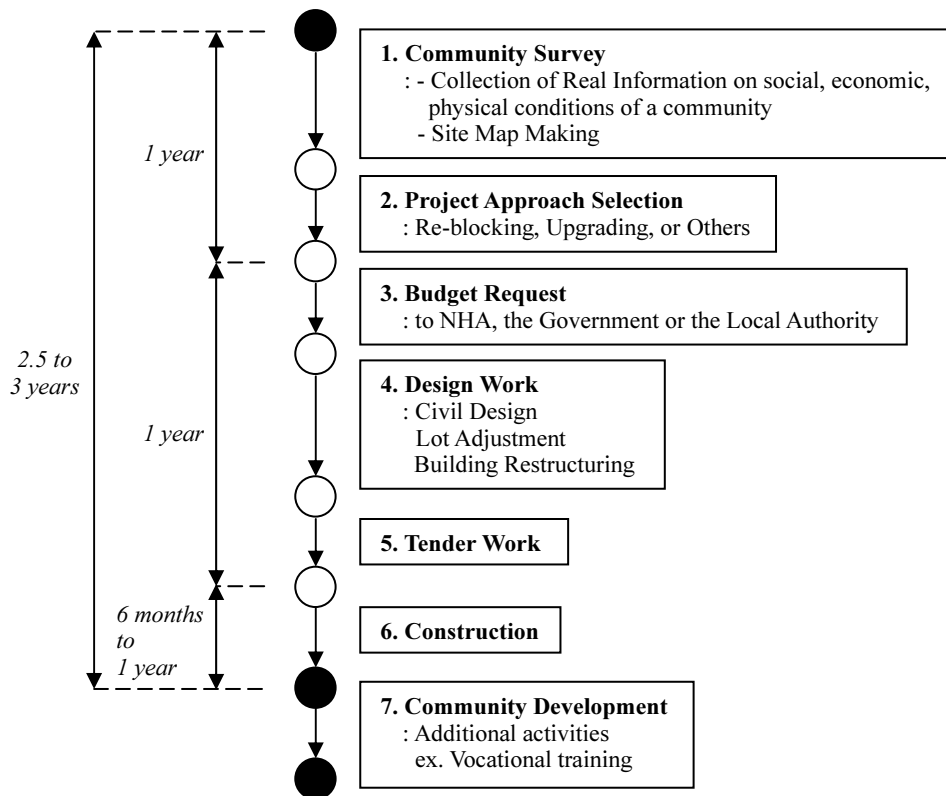


Figure 3-5: Re-blocking Project Workflow

(3) Good practices



<Bird's eye view the community>

1) Project Name: Soi Srinam-ngern Project in Bangkok

2) Project Outline

Residents had been living on a land where the owner was forced to mortgage and as a consequence they were evicted. NHA supported the purchase of this piece of land under the name of the community residents. NHA re-blocked the land to make it more appropriate and similar to the original condition, and also undertook physical, social and economic development as it did in other projects.

As a result of the implementation of this project, 63 families can live in the original site with

suitable supporting environment, and they can own the land through the repayment of installments to GHB.

3) Evaluation

This is a good practice of re-blocking project that the community people could stay at the original site without eviction, own the land where living environment was improved, and manage the community organization as well as social and economic development.

(4) Analysis: Advantage and Disadvantage

In this type project, as well as the Upgrading, communication skill, social and legal knowledge and various experiences are necessary to work well with the community people. Technical or engineering knowledge and skill on physical research and planning are also essential. In the case of a project without a site map of the community approved by the local authority, the team must either measure the site by themselves or utilize GIS data. Especially the team needs to study the dimensions of each housing unit and the demands for housing from each resident in order to renovate or rebuild the existing houses.

Thus, a project team needs to make an agreement with a concerned community, in which residents' opinions regarding their social, financial and physical problems are integrated in order to satisfy each family's desire for housing and to realize comfortable environment for the community.

The re-blocking plan depends on the situation of each community. However, if the project will not include the original feature in the community, the applied re-blocking plan may cause a loss of community identity.

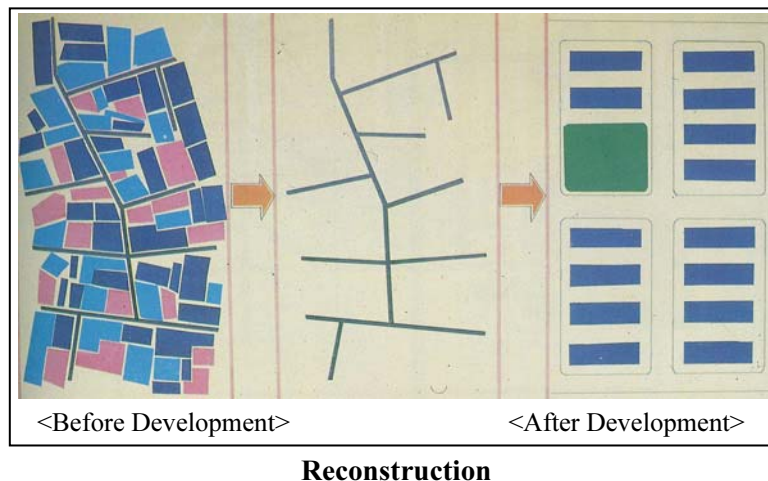
(5) Points to improve the project

In this project, the general points are the same as the other projects under the Slum and Squatter Settlement Improvement.

Besides those, the project needs to suit to the city development plan and the vision of local authorities. Since this project attempts to restructure an existing community for the purpose of environment improvement, it has to suit to the physical system of surrounding area and city.

Therefore, the project team needs either to study the master plan at city level in a local authority or establish a master plan with a local authority. Otherwise, the project might improve only the covered site and might create other types of problems on land use, transportation system, etc. to the entire areas in the city.

3-1-2-3 Reconstruction



(1) Method

This is a slum community development through the demolition of existing housing and development of new housing on the same site. Conditions of existing buildings are found to be beyond economical repair or renovation, and are proposed to carry out complete demolition and reconstruction. However, it is not easy to carry out the reconstruction project that needs not only agreement among the tenants, the building owners and the landowners, but also adequate financial resources. Because of the considerable pressure and the effective land use for shelter of urban areas, the Reconstruction Project is not merely a rebuilding project but a combination project with Re-blocking or Land Readjustment work in many cases. Residents are given rights to lease or rent on a long-term basis.

It will be necessary to organize a cooperative for community to implement and negotiate with all of stakeholders as the representative of the community in most cases. The cooperative also will act as a saving group to prepare the development.

The responsible division for the project is the Physical Environment Improvement Division, and the resource for project budget comes from (NHA), the Government, local authorities controlling the communities or CODI, and the project implementation organization will be (NHA), local authorities, or CODI.

Examples are Samyod Project, Rama IV Project and Sengki Project.

(2) Workflow

The project implementation period varies from 2 years to several years according to the situation of a community and financial resources for the project. The workflow is similar to the other slum improvement project. NHA takes approximately 4 to 8 years in a typical process of the Reconstruction Project, as its workflow shown in the following figure.

NHA will act as a non-profit facilitator to mediate among the landowners, banks, local authorities, contractors, developers and the community. NHA also will lead the cooperative to be a responsible organization for the development. NHA and local authorities will survey financial resources based on the Government subsidy for the infrastructure improvement.

On the other hand, the community will prepare the fund for new housing construction by itself. The transfer of land ownership will be discussed among the stakeholders. In a case when the community purchases the land, the community may need to take a long-term loan for repayment into consideration along with the building loan.

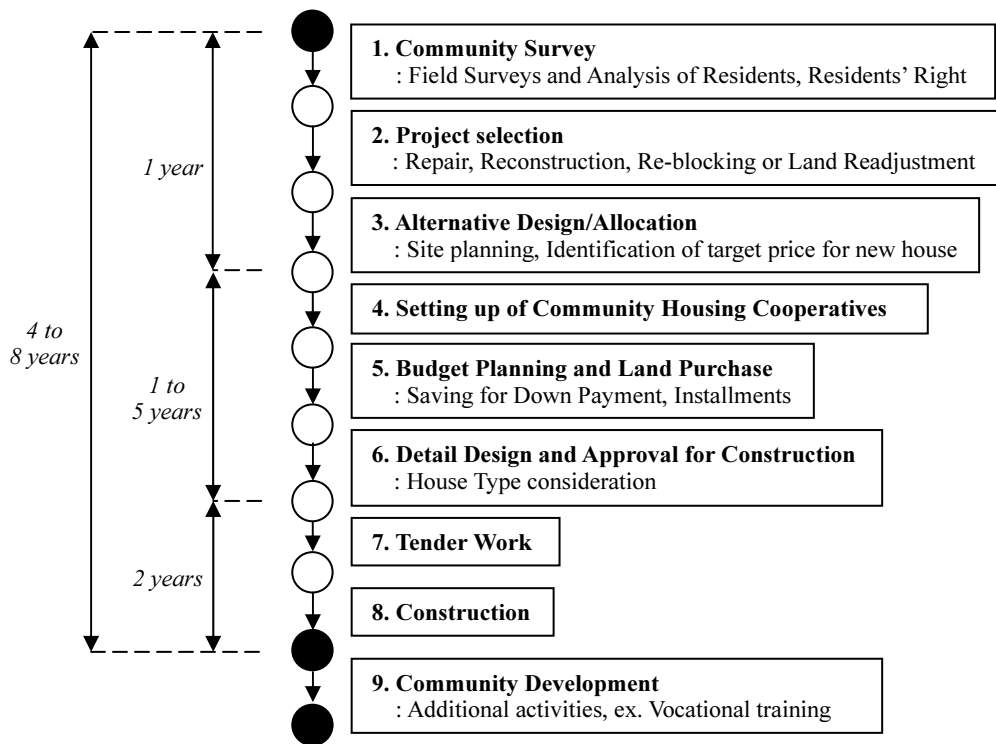


Figure 3-6: Reconstruction Project Workflow

(3) Good practices



<The community members of Sengki>

1) Project Name: Sengki Community Project in Bangkok

2) Project Outline

(a) Background

Sengki is an old, typical, low-income community in the center of Bangkok. It began as a community on rented land. When the city developed, it gradually became more crowded. In 1978, a huge fire in the community effectively removed the people's rental rights and the security of tenure they thought that they had. The deterioration of the settlement due to the fire and the influx of new residents, together with rapid increase of land prices and escalated demands for city land created pressures for the area redevelopment. The total area of Sengki Community was 25,080 m² and the number of households was 216 with 928 people before starting this project.

(b) Implementation Organization

The two units of NHA were involved in the project. One of them was the Center for Housing and Human Settlements Studies (CHHSS)^{3.2} and the other was the Community

^{3.2} CHHSS and Community Development Department do not exist in NHA organization at present.

Development Department. CHHSS assisted with some techniques and skills in preparing alternatives for solving problems at various stages of the organizing process, providing trainings, calculating project expenditures, designing allocation plots and acting as a middle person in negotiations between the residents and the land owners, and between the residents and other organizations. After various stages had been developed and until the land had been purchased and the cooperative had been established and could work independently, CHHSS was phased out. The Community Development Department took over the coordinating work and constructed infrastructure for the community.

(c) Implementation Process

a) Land Procurement for the New Housing Site

After discussions among related organizations, the landowner, the King's Property Bureau agreed to sell the 1,508 sq. wah^{3.3} (6,032 m²) of land for 4,427,000 baht to the Sengki community. The land price of 2,935 baht per sq. wah was very favorable condition compared with the actual price of 8,000 baht per sq. wah at that time. The land was not sold to the individual residents, but to the residents' legal representative, i.e., the Sengki Housing Cooperative that was established on December 17, 1986. According to the contract, the residents paid 20% of the land price as down payment, and the other 80% plus interest was repaid in 60 months under the revolving guaranteed fund for low-incomes from the Netherlands Habitat Committee.

b) Land Division

The division of the site into plots was depended upon the shape of the site and the physical condition and the land prices that deviated according to the location of each plot. After the community had reached an agreement on plot allocation and prices, a system for the selection of plots was determined. The former location of each household was a basic consideration in determining the new site.

(d) Project Output

a) Infrastructure

The Bangkok Metropolitan Authority managed the construction of a 6-meter wide main street with drains through the center of the community, and NHA was responsible for the construction of minor streets, walkways and drains within the community.

b) Housing

Houses were constructed section by section to allow the flexibility needed for people to remain living on the site until they were ready to move in because the new houses were to be constructed in the area overlapping with houses existed. There were three types of new houses that the residents had agreed to acquire, depending not only on their preference, but also on their affordability. The first type is a three-story reinforced concrete house with shared terrace, the second type is those that were build by residents. The third type is houses built on half of a regular plot (6 sq. wah: 24 m²).

c) Construction Cost

The construction cost of the first type was 430,000 baht/unit. The residents had to pay either the total cash amount or a 45,000 baht down payment per unit. The cooperative helped its members to find a loan to repay the outstanding amount. The total housing construction expenditure was estimated to be 36,612,000 baht.

3) Evaluation

In most slum communities, when landowners want to redevelop a site the community has to move out or is forced to relocate. In the case of the Sengki community, residents were able to

^{3.3} Sq. wah is a Thai area unit and one sq. wah equals to 4 m².

negotiate a deal with the landowners. The residents could settle on the same section where their former community was located on the site with secured land tenure while the landlord could develop the larger and more commercially attractive portion of the site with his desire.

The people in the community formed a cooperative to enable them to plan and organize appropriate housing and infrastructure. As a consequence of the overall strategy, the people were not dislocated from their jobs and their community and could continue the development of their community without disruption.

This is a good practice of the Reconstruction Projects in which community people could find necessary assistances to solve their financial problems, to purchase land, and to construct new houses by the cooperation of NHA.

(4) Analysis: Advantage and Disadvantage

In the case of the Sengki Community Project, NHA begun study and cooperation after the request from the landlord, The King's Property Bureau, to solve the problems. As the result of the development, the former residents as well as renters were able to stay on the site with secure land tenure. Also, the former illegal community recognized matters related to legal aspect.

However, there are some disadvantages in the reconstruction by cooperatives for low-incomes. The first issue is the heavy burden of loan repayment for residents, and the second issue is the difficulty to find guaranteed funds. The third issue is on a limited number of the selection of the house types provided by NHA, that does not correspondent to their life style preferences.

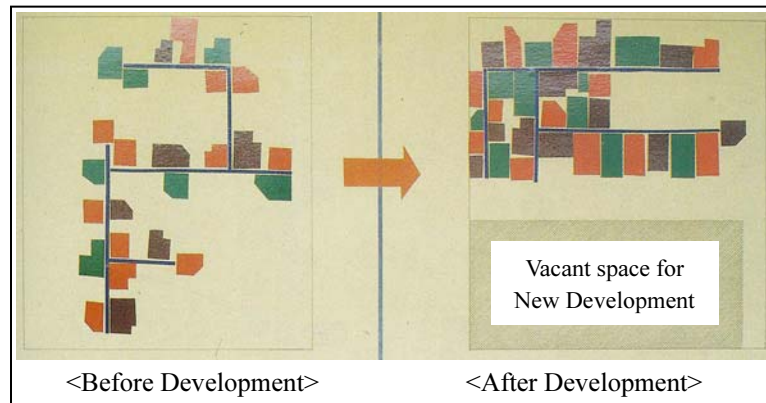
(5) Points to improve the project

The cooperation of international organizations, such as UNCHS, UNDP and Netherlands Habitat Committee for financial assistance, contributed to a great success of the Sengki Community Project. It may be concluded that the project might not been successfully implemented without those organizations' assistance.

It is necessary to establish a concrete method to receive revolving funds with guarantee for reconstruction development of low-income houses.

In addition, the existing conditions on housing plot size and building quality that are always lower than the legal standards in low-income communities, need to be considered at the early stage of a concerned project. This is because that upgrading the existing community standard to meet the legal standards is costly for the community people. It may necessary to establish the exemption in the Building Control Act or the regulation for the lower housing standards in order to encourage slum improvement projects.

3-1-2-4 Land-sharing



Land-sharing

(1) Method

This is the sharing of land between landowners and residents. NHA will act as a core agency in negotiations with the landowners who are seeking agreement to sell some parts of the community land to residents at low prices, or rent them on a long-term basis. This is managed in such a way that landowners can still use parts of the land for their own benefit. After agreement is reached, NHA will map out the land, divide it into plots for residents to purchase or rent the plots on a long-term basis, improve public utilities and the infrastructure, rent the land for housing construction, undertake economic and social development, and allow residents to pay, in installment, land fees to NHA or financial institutions which support the project.

It will be necessary to organize a cooperative for a concerned community to implement and negotiate with all of stakeholders as the representative of the community in most cases. The cooperative also will act as a saving group to prepare the development.

A land-sharing project usually includes the reconstruction of housing and re-blocking of the land so that the project investment will be much more than the other types of projects. Regarding the project investment, the share of project cost among the stakeholders will depend on the land values for landowners.

The responsible division for the project is the Physical Environment Improvement Division, and the resource of project budget is from (NHA), the Government, local authorities controlling the communities or CODI, and the project implementation organization will be (NHA), local authorities, or CODI. Examples for this project type are Sengki Project, 70-rai Klong-toey Project and Wat Laad-bua-khao Project.

(2) Workflow

The project implementation period varies from 2 years to several years according to the situation of a concerned community and financial resources for each project, and the following figure shows a typical workflow of the Land-sharing Project in NHA that takes approximately 7 to 8 years.

NHA will act as a non-profit facilitator to mediate among the landowners, banks, local authority, contractors, developers and communities. NHA will also lead the cooperative as a responsible organization for the development. NHA and the local authorities will survey financial resources based on the Government subsidy for the infrastructure improvement.

On the other hand, the community will prepare funds for new housing construction by itself. The transfer of land ownership will be discussed among the stakeholders. In a case that when the community purchases the land, the community may need to take a long-term loan for repayment

into consideration along with the building loan.

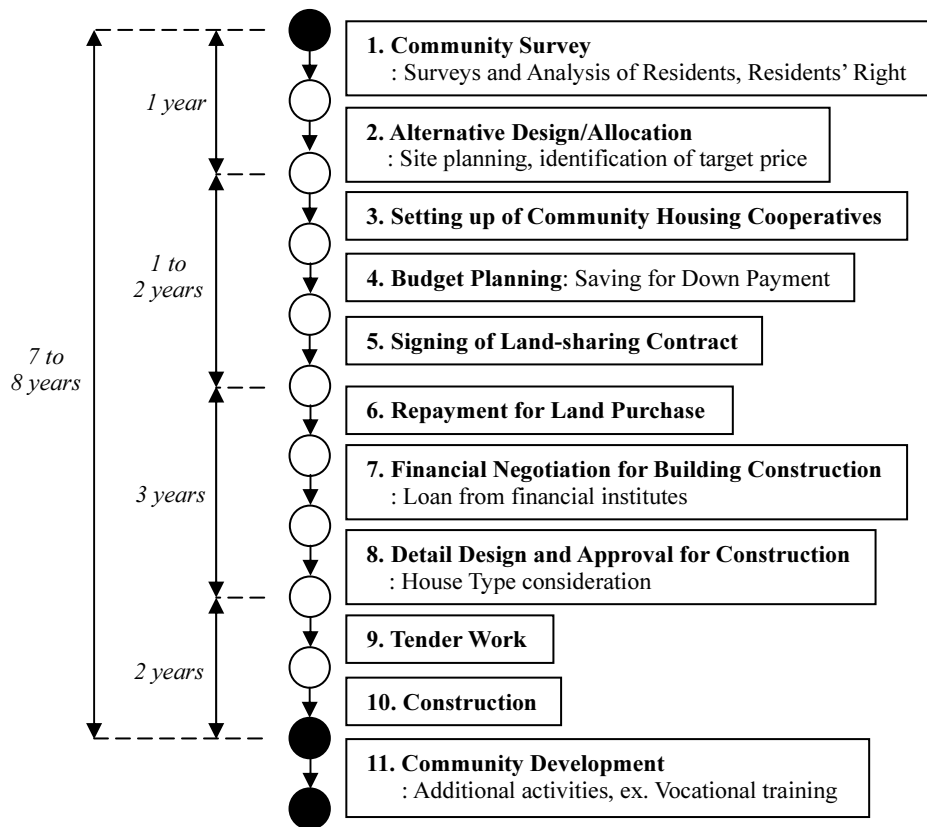


Figure 3-7: Land-sharing Project Workflow

(3) Good practices



<Bird's eye view of the community>

1) Project Name: Sengki Community Project in Bangkok

2) Project Outline

The general introduction on regarding the background, implementation organization, implementation process, and output of this project is described in “Section 3-1-2-3 Reconstruction.”

The NHA begun studying and cooperation after the request from the landlord, the King's Property Bureau, to solve problems. It was a good opportunity for the landlord who wanted to develop the land in the area, in particularly, because of the rapid rise of land prices in the area. As the result of the land-sharing contract, the land was shared between the residents and the landlord. While the residents took 46.47% of the land that would be legally developed for their housing project, the landlord retained the remaining 53.35% and could develop it according to

his own wishes.

3) Evaluation

This is a good practice of Land-sharing Projects in which the community people and the landowner were involved to solve the problems without eviction from the community.

This project was awarded with the 1991 Habitat Scroll of Honor in the recognition of the developing initiative land tenure system and financial mechanisms to facilitate adequate shelters for low-income groups.

Other general evaluation is also described in “Section 3-1-2-3 Reconstruction.”

(4) Analysis: Advantage and Disadvantage

The land-sharing strategy, promoting people’s organizations as the main actor in the development process, is one possible and workable alternative to the eviction of urban poor slum communities. A formal organization, housing cooperative committee, is to be established to act as the legal representative, develop procedures and manage the implementation of all community projects with the community participation. It could be said that the rearrangement of land use for housing in Sengki Project is a concrete example of the incremental processes to organize the community.

An issue as a disadvantage is raised that is the negotiation with landlords and the intervention of private developers who wish to promote commercial development for their benefits before signing land-sharing contract. As many of urban slum areas are having prominent possibilities for commercial purposes, landlords or private developers may force the community to leave the areas.

Other issues are the heavy burden of loan repayment for residents, and the difficulty to find guaranteed funds. Although a community buys a land at a lower price than the market, the residents have to pay fees for the land and the construction of new housing. The lack of appropriate sources for loans brings problems to the residents.

(5) Points to improve the project

As the low-income residents have scarce savings and costs for building housing are expensive for them, they need loans with low interest rates and long-term installment plan. In the case of the Sengki Project, international organizations, such as UNCHS, UNDP and Netherlands Habitat Committee, were involved in the project and assisted on solving finance problems.

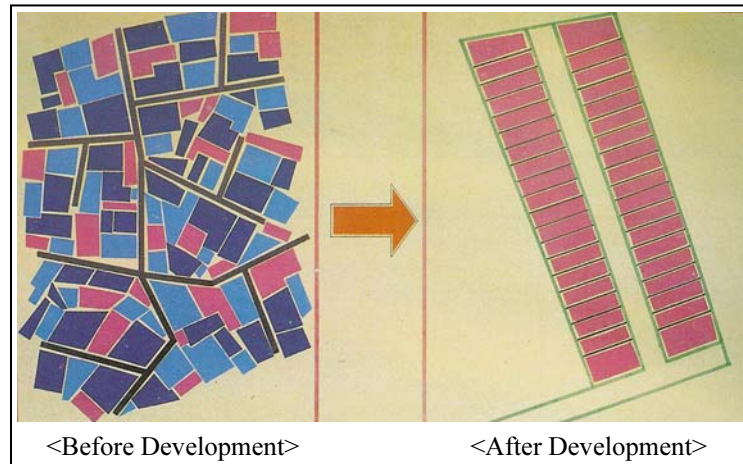
It is necessary to establish a concrete method to receive revolving funds with guarantee for the development.

As the key of the success of land-sharing project relies on housing cooperative committees through people’s participation, it will be necessary to establish legal supports by giving tax concessions or exemptions to the cooperatives for the low-income housing development.

[New Site Project]

This “New Site Project” described in this section is a project implemented by NHA in a newly developed site.

3-1-2-5 Relocation and Resettlement



Relocation or Resettlement

(1) Method

The Resettlement Project of NHA is a project to solve problems related to the relation between community people living in a concerned land, the landowner, and the physical conditions in communities. This project is mostly implemented as a relocation project. The Resettlement Project includes physical improvement, for example, like relocation and also social activities to secure job opportunities for relocated people to be settled in a new site.

The Relocation is the removal of slum from their original sites to new pieces of land. NHA is the core agency in developing new housing for residents to purchase for their owns, or to lease on a long-term basis. The owners of the original land must jointly be responsible for this implementation. NHA will divide the land for providing public utilities, economic and social development into plots, and residents will pay in installment fees for the plots and the land development to NHA or financial institutions.

The responsible division for the project is the Physical Environment Improvement Division, and the resource of project budget is from (NHA), the Government, local authorities controlling the communities or CODI. The project implementation organization will be (NHA), local authorities, or CODI. Examples of this type of project are Romklat 1 6 Projects, Suwanprasit 3 Project, Kaewnimit Project, and Kajorn kiat community Project.

(2) Workflow

In the Resettlement Project, the members of a project team in NHA are similar to the Slum Upgrading and Re-blocking Project staff. The team spends a lot of time for land acquisition and community opinion organization in the process of the workflow as shown in the following figure.

It is not easy to find an appropriate land for community people because the price of land has been increased even in the countryside of Thailand. Thus, the community people tend to stay in the same area as they used to live. Usually it takes 2.5 to 3.5 years to procure and negotiate for new land for relocation either with individual landowners, local authorities or private companies.

After preparing new land for community people, either NHA, the local authority or the landowner provides the infrastructure and necessary public facilities in the project site. Then, the

community people build new housing by hiring contractors or sometimes by themselves. The people pay the construction cost out of their own budgetary funds or by asking financial supports from financial institutions or from CODI. The period for the construction depends on the quality and quantity of their housing, but it takes normally 6 months to 1 year. In many cases, during the construction period, community people either move into NHA's existing normal housing, row houses or other types of provided houses that are already subsidized by the Government.

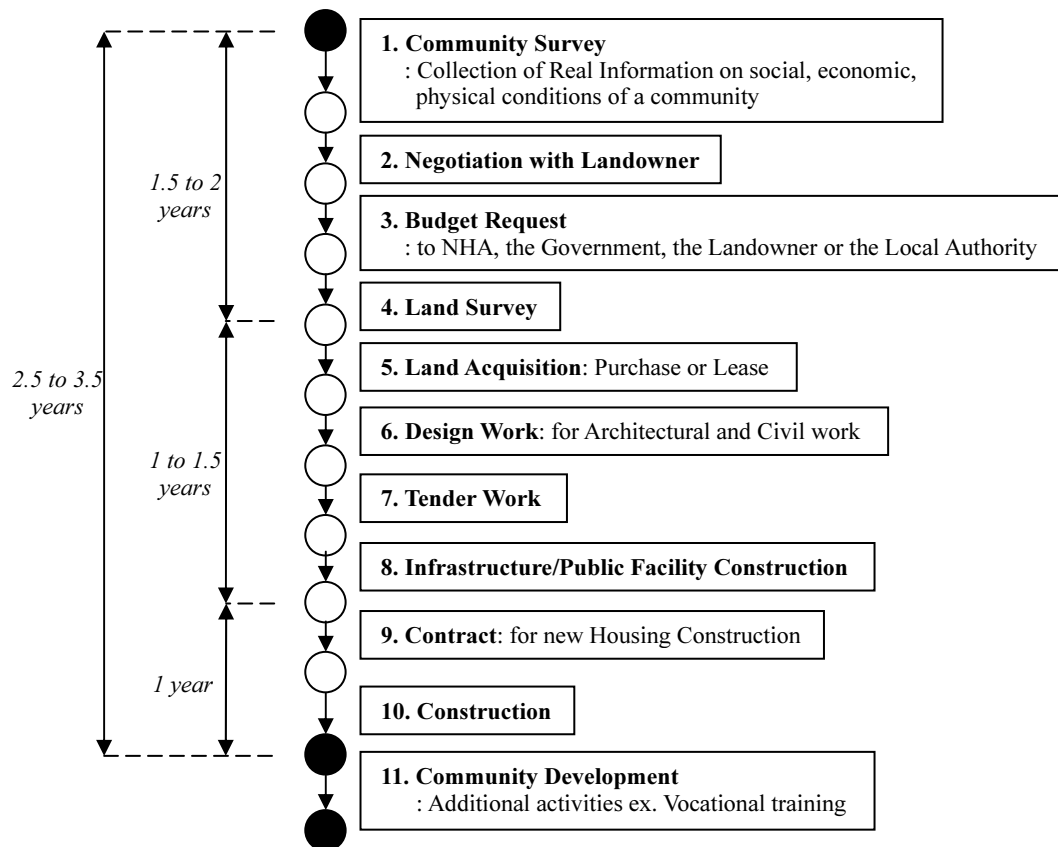


Figure 3-8: Relocation and Resettlement Project Workflow

(3) Good practices



<Community activity center>

1) Project Name: Kajorn kiat Community Project in Phuket

2) Project Outline

(a) Background

The Kajorn kiat community site owned by a private company is located on the backside of a road market along a main street near the central area of Phuket city. The existing community is a squatter settlement, which looks like a slum, and the housing conditions are not appropriate for living. Some wooden houses in this community are so old that they are

nearly to collapse. The company as the landowner of this site has tried to clean the squatters away from the land for business purposes.

(b) Cooperation with CODI

In this relocation project, NHA and CODI have worked together. At the beginning of the project, NHA worked with the community as a facilitator to coordinate their demands and find a new site for their housing. NHA has conducted workshops in the community to advise the people how to implement the relocation project, find a new land to live, and to organize a committee. After NHA started to coordinate this project, CODI was requested to work on the housing construction at a new site that the community people found through their own surveys. The new site is located in the suburb area of Phuket city about 30 minutes drive from the existing community site. The new housing is arranged or designed by hired architects of CODI, who has prepared a drawing book showing various types of low-cost housing which is appropriate for local climate, and which provides a space for additional use or rooms. For the community people, CODI is helpful to look for their preferable housing from the book, and consult with the architects for the final decision of housing that corresponds to their financial conditions.

(c) Construction Budget Sharing

Concerning the construction budget, the building cost for a housing unit is estimated as 870,000 baht. The company takes responsibility for 670,000 baht per one housing unit and the community people pay 200,000 baht as well.

The housing provision has been finished in 2007. However, it is said that there is no future project for the original site after demolishing the old housing yet.

3) Evaluation

This is a good practice of relocation projects in which the community people and the stakeholders are involved. There were no troubles in making an agreement for the project among the community people and preparing for the new land to relocate. The community people understood this project well so that they could take action on necessary works for their own community.

(4) Analysis: Advantage and Disadvantage

The method of relocation is useful for avoiding a long lawsuit on ownership and living right, and eviction of squatters or residents. However, making an agreement between landowners and residents, and finding a new site for a community are difficult because these activities take a lot of time and need to solve financial problems.

(5) Points to improve the project

There are some points to be considered besides the points as mentioned in the article of Slum Upgrading (see "Section 3-1-2-1 Upgrading").

1) Information Network for Real Estate

It is necessary to ensure how NHA organizes their own information networks for real estate in the country and how effectively it works in order to find a candidate land quickly and evaluate it adequately.

2) Time Saving System

Although projects cannot avoid a land procurement process, it is necessary to think measures for time reduction not only to save budgetary funds among concerned stakeholders but also to prevent intervention for projects from private sectors.

3-1-3 Low-cost Housing Provision for Low-income People

NHA has provided low-cost housing for sale and rent to low-income people by different forms. This section describes the major projects of NHA. Regarding the subsidy from the Government, any housing for low-income people, including for sale and rent, is applicable to the subsidy.

3-1-3-1 Rental Housing for Public

(1) Method

In this project, NHA will provide housing for rent for general low-incomes on the land that is owned by NHA or rented from landowners, such as the Government, local authorities, private sectors, or individuals. The rent fee is set at lower price than the similar type in the market around the project site. The housing unit is normally a multi purpose room of 24 to 33 m² like a studio type room. After the construction is finished, NHA will collect rent from tenants, and in the case of rented land, NHA also will pay land rent, normally for 30 years.

The Project Management Department (1-4) will manage this Rental Housing for Public Project of NHA.

(2) Workflow

The workflow of the Rental Housing for Public Project is generally the same as the Normal Housing Project, as described in “Section 3-1-3-3 Normal Housing Project.” It usually takes 2 to 4 years to complete a project, as shown in the workflow below:

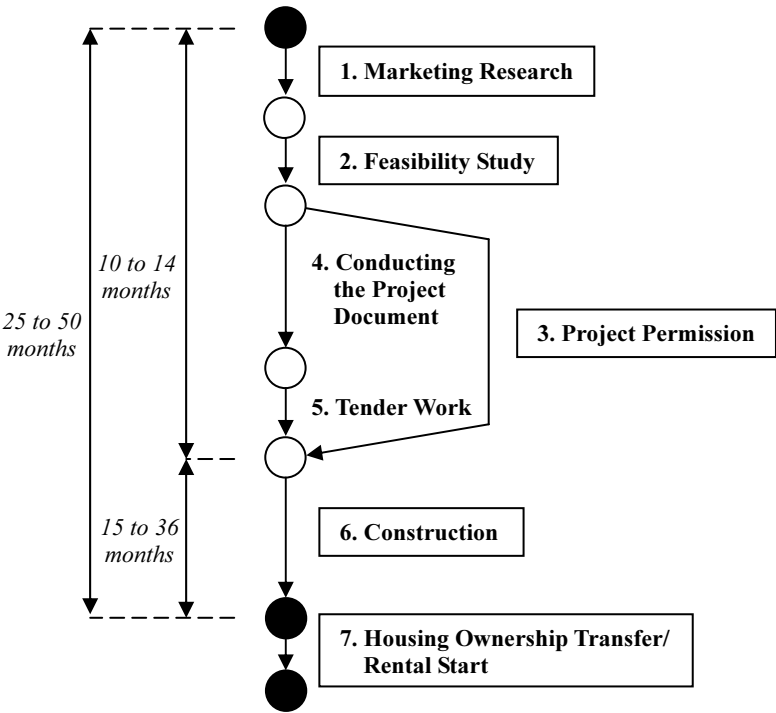


Figure 3-9: Rental Housing for Public Project Workflow

(3) Good practices



<Perspective drawing>

1) Project Name: Khonkaen Community Housing Project in Khonkaen

2) Project Outline

(a) Background and Objectives

The Khonkaen Community Housing Project has been developed in Khonkaen, that is located in the north and east part of Thailand, for four times providing totally 1,391 housing units for middle-incomes to purchase. This was the 5th project under the Project mentioned above and the 1st project to provide rental housing of 48 units in the site of 1,176 m² for general people and government officials of low-income. This project was started in 2002 and completed in 2004, including 15 months for the construction.

(b) Target and Output

Target groups were those government officials who moved from the other area and who could get rental subsidy from their offices, students and people in town. The rental fee was set between 1,500 to 1,800 baht/unit/month as a reasonable amount compared with the average rent fees in this area, from the marketing research. The project constructed 3-story housing, public utilities, such as roads, footpaths, car parkings, and each of drainage, water supply, electricity and wastewater treatment systems, and public service facilities, such as playground, public open space and landscape design area.

3) Evaluation

This project is a good practice for the people of low-incomes like students and local government officials who temporally live in the area, because the housing units, public facilities, and rents were appropriately set for them.

(4) Analysis: Advantage and Disadvantage

Although the housing has no trouble in this project except for the less variety in unit types, there is a crucial problem in the rent collection that NHA has no good measures when tenants cannot pay their rents. That is why NHA cannot continue this rental housing project any more without a method that can convince the Government that will not create the problem again.

(5) Points to improve the project

NHA may need to set up a flexible rent for low-incomes and should make a strict contract condition including eviction in case of unpaid rent, or prepare welfare housing supported by the Government for those who cannot pay rents for a long period of time.

3-1-3-2 Rental Housing for Government Personnel

(1) Method

In the Rental Housing for Government Personnel Project, NHA will provide housing for rent to government personnel (officials) of low-incomes in a land where NHA owns or rents from local authorities that own land. The rent fee is set up at lower price than the similar type of housing in the market around the project site, and the housing unit is normally with a multi purpose room of 24 to 33 m² like a studio type room. After the construction being finished, NHA will collect rents directly from tenants, i.e., government personnel, who receive allowance for living from government offices. Since NHA normally rents the land from the Government or local authorities, NHA needs to pay the land rent for 30 years at low prices. There are some cases that a local government purchases a housing rental right after the completion of project. Those cases are less than 10% of the total projects. Specifications for those housing are the same as NHA standards.

The Project Management Department (1-4) will manage the Rental Housing for Government Personnel project of NHA.

(2) Workflow

The workflow of the Rental Housing for Government Personnel Project is generally the same as the Normal Housing Project, as described in “Section 3-2-3-3 Normal Housing Project”. It usually takes 2 to 3 years to complete a project, as shown in the below workflow:

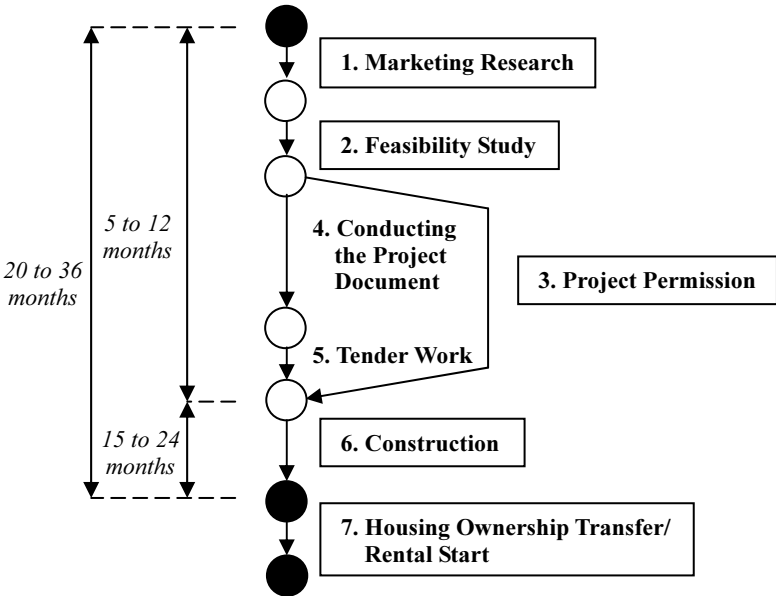


Figure 3-10: Rental Housing for Government Personnel Project Workflow

(3) Good practices



<Perspective drawing >

1) Project Name: Rental Housing for Government Personnel in Hatyai

2) Project Outline

(a) Objectives

This project was implemented to provide a rental housing for the low-income government personnel whose income is in between 7,000 to 11,700 baht per family in Hat Yai. The project implementation started in 2006 and took 15 months to complete in 2007.

(b) Land

Hat Yai is a city in Songkhla province located in the southern part of Thailand and the project site was a part of the land owned by the municipality. The site area is approximately 1,800 m² where the NHA and the municipality made a contract for rent at a price of 1,000 baht/year and with a contract period of 30 years.

(c) Land Use and Public Utilities

The planned land use and constructed public utilities in this project are shown in the following table.

Table 3-8: Land Use and constructed Public Utilities

Land Use	Land Area (m ²)	LAR (%)	Note
Housing	598.30	34.13	70 families, 280 people 63 families per rai
Car parking and Road	443.22	25.29	Car parking for 17 cars (2.5 x 5.0 m per car)
Footpath	125.61	7.17	Municipality constructed with drain pipes
Park and Public Space	585.63	33.41	Electricity, Water supply and Telephone systems are linked with the local ones. Wastewater is released to the public drainage through septic tanks in housing. The project site level is 0.2 meters raised from the main street for flood control.
Total	1,752.76	100.00	

(d) Housing Unit

The total housing units are 70 units in one 5-story flat and the unit type is a 32m² multipurpose room type (studio type).

(e) Budget

The NHA invested 29,320,200 baht for this project. For 30 years NHA will collect the room rent from government personnel to pay for the land rent to the municipality.

(4) Analysis: Advantage and Disadvantage

Unlike the Rental Housing for Public, the tenants of the project are the government officials who receive regular salaries from government offices so that they can pay rents without any problem. However, there is not a variety of housing unit types corresponding to the tenant family types, such as single, couple, family with children, etc.

(5) Points to improve the project

It is better to provide housing units in various types so that tenants could choose a suitable one. The contract could include articles to allow tenants to renovate their units under the condition that they have to recover the units as they were by their own expenses when they move out to other places. By this way, tenants could enjoy their lives more in rental housing.

3-1-3-3 Normal Housing Project

(1) Method

1) Objectives

This Normal Housing Project aims to provide various types of housing units for sale to low-income and middle-income people at low prices. This project has been a major work of NHA since 1973.

2) Implementation Body

In the Normal Housing Project, the Project Management Department (1-4) will manage all phases to complete the project by conducting a master plan, preparing technical drawings and documents to implement the project by selecting contractors to construct through bidding at the planning phase. NHA's project team under the Project Management Department (1-4) will also supervise the progress of construction and buildings' quality according to the project schedule and the quality control manual at each construction phase.

3) Housing Unit and Planning Standard

NHA has developed standard design for housing unit of various types, such as detached (single), semi-detached (twin), row houses, and flat. For making a master plan, NHA staff arranges those housing types in a site and makes an infrastructure plan according to the design requirements and NHA's planning rules.

The area ratio of the public spaces to the whole site area and the housing unit ratio of low-income units to the total units are standardized in NHA. Normally, housing units for low-incomes need to be planned in a site at least 30% of the total units with units for middle incomes. When approved by NHA, a project can provided housing units only for middle incomes.

4) Construction Method

The construction methods have been developed at the Construction System and Material Development Center in NHA. For example, Pre-cast concrete installation system has been adapted to projects implemented by contractors having enough capacities, such as technical knowledge, practical experience, and construction machine.

5) Contract with Customers

In this normal housing project, the hire purchase system has been introduced to housing sale in many places. The hire purchase is a kind of loan system by which customers pay installments for their housing normally for a period of 30 years to NHA that takes the housing as a mortgage. This loan system is flexible for low-incomes compared with GHB.

(2) Workflow

The Normal Housing Project usually takes approximately three years, one year for conducting the Planning phase and two years to complete the Construction phase. The workflow and the construction period with building types are shown in the following figure and table:

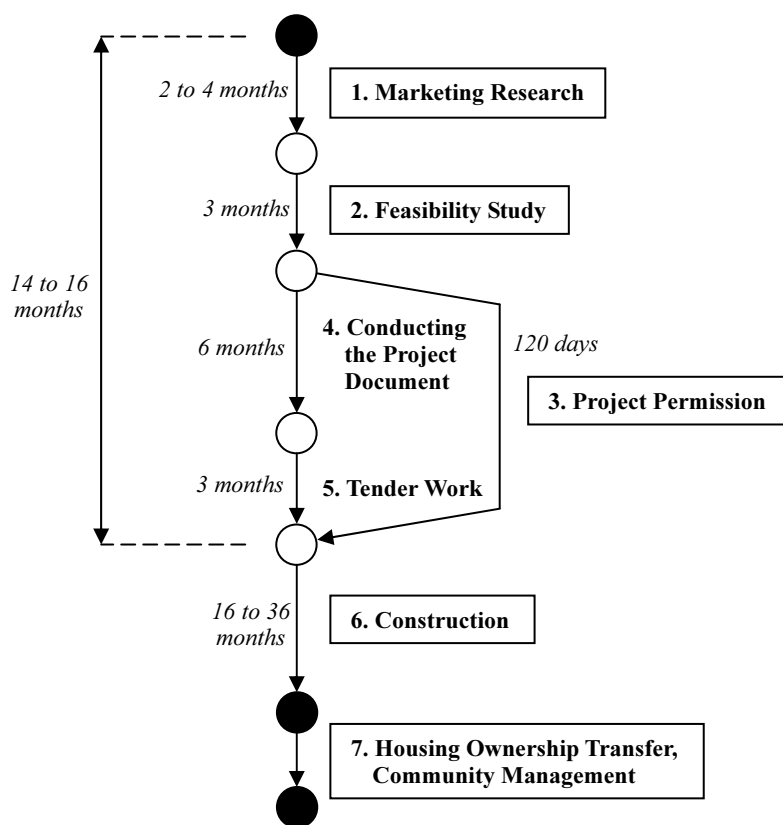


Figure 3-11: Normal Housing Project Workflow

Table 3-9: The Construction Period List by Building Type

Unit or Story No, (Construction Period)	Unit No.					Story No.					Note
	Under 300 (days)	300- 500 (days)	500- 1000 (days)	1000- 2000 (days)	2000- 3000 (days)	8 stories (days)	10 stories (days)	12 stories (days)	16 stories (days)	20 stories (days)	
Flat Type	540	600	720	780	900	-	-	-	-	-	Fill in soil work included
5 Story Building Type	480	500	600	720	780	-	-	-	-	-	
Over 8 Story Building Type (less than 1,500 m ² /story)	-	-	-	-	-	540	660	780	900	1080	

At the beginning of the Planning phase, the economists and staffs of the Marketing Division of the Community Management Department will conduct marketing research by themselves or outsourcing upon the request from the Project Management Department. The marketing research for a specific location is to find demands and preferences of the project customers, including costs for land and construction, costs for maintenance and management after construction completion, and income and affordability of the target groups. The Policy and Planning Department sends the basic requirement to the Community Management Department and the Project Management Department before starting the feasibility study.

In the feasibility study, physical surveys, such as site condition, accessibility, related regulations, construction methods, and an alternative master plan with housing plan, are to be conducted according to the basic requirement from the Policy and Planning Department.

After the feasibility study, the architects and economists of the Project Management Department will review the result and prepare a project proposal to receive approval consecutively from NHA executives, NHA Board and the Cabinet.

After receiving approval, the architects will prepare architectural drawings and the engineers will prepare structural, electrical, and sanitary drawings together with the architects. At the same time, environmental engineers will prepare for conducting Environment Impact Assessment (EIA).

After the construction drawing are prepared, a quantity surveyor will estimate the construction costs of housing, equipment and facilities as project documents for bidding.

Then, bidding to select a construction company among contractors is implemented by a tendering officer. The construction period naturally depends on a project size indicated by the expected number of housing units to be built, but generally it takes around 2 years and the number of housing units in a project site is often approximately 200.

After the completion of construction, the Community Management Work will be implemented to organize a committee of the community and support their management in cooperation with the relevant organizations and the community.

(3) Good practices



<Constructed houses outside view>

1) Project Name: Lipon Project in Phuket

2) Project Outline

In this project, NHA built 220 houses for middle-incomes in Phuket about 10 years ago and sold all of them out. The average sale price was approximately 700,000 baht at that time. Several types of houses, including a single house and a semi-detached house, were provided in appropriate sizes of housing lots. Especially, on a lot at the corner of the roads, a more decent type of house was built like a symbol or landmark of the community. The infrastructure of the community was also well designed, such as a wide road along with sidewalks, electricity and water supply systems.

Next to this community, there is a Baan Eua-Arthorn project under construction, which will provide 300 housing units for low incomes.

3) Evaluation

Those housing are well maintained even now have created a comfortable residential area in Phuket. Demand for those housing is quite high. This can obviously be seen from the fact that a vacant house for sale is seldom seen in the community.

(4) Analysis: Advantage and Disadvantage

This project has achieved relatively decent works for housing provision for people. However, NHA has not developed a new method or approach to meet the demands of people who need housing fit to their life styles and affordability, and housing with desirable quality and comfortableness in living environment with amenity that can be built by a low cost housing project. NHA seems to follow the development process established in the past without analysis.

(5) Points to improve the project

1) Housing Design

NHA often utilizes their prototypes of housing units for design in a project. But they do not often match to people's demand and preference. It is necessary to review and adjust the

original prototypes or redesign them according to the people's requirements, expected living environment and life style in a concerned project site and community.

Regarding global environment issues, like the Climate Change, NHA should study and develop a new technical strategy to solve this kind of problems, especially in Thailand. Research of Thai traditional houses or vernacular houses, might be more helpful than pursuing advanced technologies. Especially, the idea of Eco-house system needs to be applied for the housing projects in this country. It could be easier to develop because difference of temperature and duration of sunshine is not so significant throughout a year.

In order to develop other approaches, improve the present housing development, and also stimulate NHA staff, national and international design competitions for a housing project conducted by NHA are recommendable. Furthermore, outsourcing for housing design, which has been adopted by the Urban Renaissance Agency and the Publicly Operated Housing Supply Corporation in Japan, is also a meaningful idea to study and evaluate various designs by competent architects because housing design is not a routine work but an integrated work composed of various kinds of subjects in which many people are involved.

The roles of architects should be clarified in NHA. Architects design buildings not only to satisfy their clients' demands but also to realize their ideas that make the living environment better, give wonderful lives, build the world for people who never imagined before, and contribute to the society through architectural work even for a small project or a project without enough budgets.

2) Construction Management

As Thailand has been a developing country in the world and is becoming a developed country and, as result, people's attention are paid to quality more than quantity of products, it would be necessary to think about quality control for housing provision to provide durable housing not requiring frequent maintenance work.

Concerning building materials, the Construction System and Material Development Center has worked as an institute of research and development of technological matters. However, it is recommended that the Center focuses its efforts more on works related to the development of fundamental and common materials, construction system and construction method related to maintenance free low-income housing.

3-1-3-4 Baan Eua-Arthorn Project

(1) Method

1) Objectives

The Baan Eua-Arthorn Project has started as a nation wide housing project to enhance economic growth under the Government in 2003. The project was planned to provide 600,000 housing units with subsidy for low-income households receiving incomes of lower than 15,000 baht/month by 2008. The housing price for purchase has been set up at 390,000 baht/unit based on the construction cost of 470,000 baht/unit and the subsidy of 8,000 baht/unit to cover the difference.

2) Contract System with Construction Company

Regarding contracts with construction companies, at the beginning of the project implementation NHA conducted the normal contract procedures. However, NHA found that it would be difficult for NHA to handle the planned number of housing units with the procedures. Thus, NHA introduced another contract procedure called the Turnkey system that has been applied to most projects since then.

This turnkey system is, according to the TOR (Terms of Reference) of NHA, to make contractors prepare land for a project and construct housing units by their own investment, and receive the land cost after transferring the land ownership to NHA. NHA will pay construction costs according to the terms of installment payment of every 30 days or the progress of construction work approved by the project supervisor.

The TOR requires contractors or developers who take the turnkey system before starting a project to submit a proposal showing the outline of the concerned project and the list of applicants who want to purchase housing units, requiring the minimum number of applicants exceeding the twice of the number of housing units to be built.

3) Type of Housing Unit

The project provides several types of housing units, such as 5-story flat with 33 m² units, mainly in urban areas, and 2-story single houses, Semi-detached (Twin) houses, and row houses, mainly of 50 m² on a lot of around 60m² in suburb areas. In these types, there is no option.

4) Hire Purchase and Payment System

For purchasing of a housing unit, a hire purchase system has been generally adopted in Thailand as well as to this project. In the hire purchase system, customers pay installments for their housing normally for a 20 to 30 years period to financial institutions, such as banks that own the housing units by buying from the former housing owners, in this case, NHA. The legal ownership belongs to the financial institutions and mortgage on the housing is not set up due to the unstable financial conditions of customers.

5) Subsidy

The subsidy is set at 80,000 baht/unit for all housing of Baan Eua-Arthorn Projects that is to be allocated for the construction fees of public facilities, such as community centers in the project site, expenditure to run the five-year maintenance of the public facilities, including electric charge for lighting in the site, and management works of NHA after completion of the project.

6) Applicant Qualification

As of November in 2007, the applicant's qualification for the housing units provided by this Baan Eua-Arthorn Project was announced as follows:

- a) Applicant must be a Thai who is over 20 years old and is not a bankrupt.
- b) Applicant has a monthly income of 5,000 to 22,000 baht/person.

c) Applicant does not own other housing.

The qualification for applicants by their incomes has been changed so many times according to the actual financial conditions of low incomes in this country and their incomes should be indicated from a household income. However, the requirement of current income does not mention a total of household income that should be more than an individual income. It is assumed that NHA has tried to make the target group to buy the housing units wider to include the middle incomes.

7) Current Situation

The project was suspended in 2007 when the Government was transferred to the provisional government dominated by the military. The Project, that started and completed just over 10% of the planned total housing units, may be able to continue and complete project construction. Although NHA has changed the requirement for the upper limit of applicants' income level to expand the target group from the original amount of 15,000 baht/month to 17,000 in July 2006, and to 25,000 in September 2006, there are still many unsold vacant units in the project sites. In addition, the project schedule has been changed to extend the project completion year.

NHA made a decision to build 350,000 units out of planned 600,000 housing units and has tried to find other scheme instead of the Eua-Arthorn in project sites where NHA previously purchased land for the Baan Eua-Arthorn Project.

(2) Workflow

NHA has applied two implementation procedures based on the contracts mentioned above. The procedure under the turnkey contract is explained here, as shown in the following figure of workflow. On the other hand, the procedure under the lump sum contract is almost the same as the normal housing provision project.

A project will start after NHA approves the proposal submitted by developers who submit the outline and framework of a concerned project and the list of applicants who want to purchase housing units following TOR. The flowchart shows the detailed steps to be proceeded in NHA before starting the construction.

During the construction stage, NHA staffs conduct supervision works to check the construction schedule and quality of buildings to make fulfill NHA's building standards.

After completing housing construction, NHA will sell completed housing units to the applicants who normally obtain financial supports, like loans.

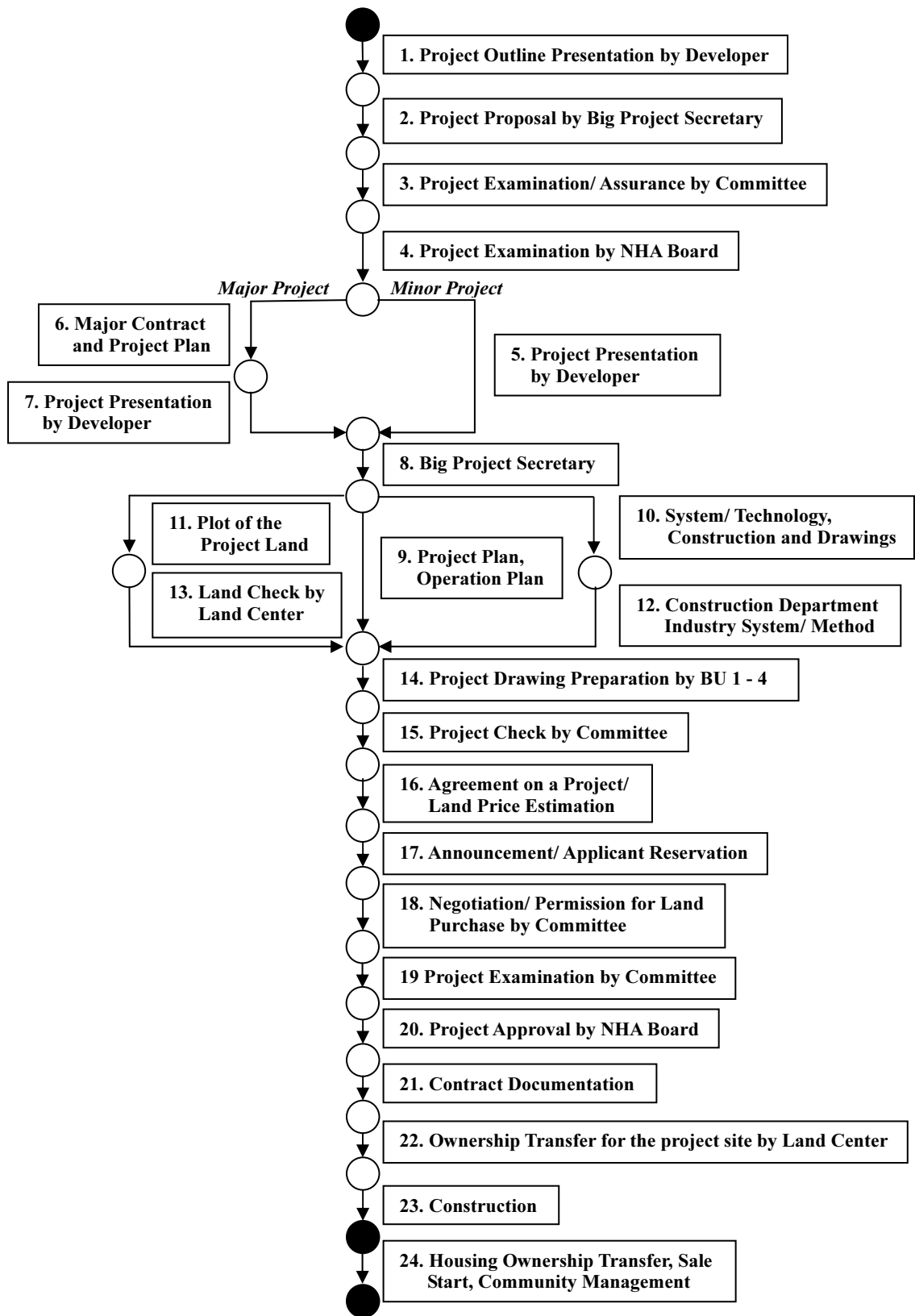


Figure 3-12: Baan Eua-Arthorn Project Workflow

(3) Good practices

[Example 1]



<Activity of residents>

1) Project Name: Bangchalong Project in Bangkok

2) Project Outline

The Bangchalong Project is a pilot project in Baan Eua-Arthorn for government leading housing development. The aim of the Baan Eua-Arthorn Project is to secure housing security and to improve the quality of life of the target group in physical, economic and social aspects. The target group is those low-income households whose incomes are lower than 15,000 baht per month in 2003.

The project site is located in the east suburban area of Bangkok, 3 km from the Suvannabhum International Airport that is accessible from the Bangna-Trad Road and the Teparuk Road. The total area of the project site is 98.15 rai (15.7 ha) divided into 3 phases; around 14.60 rai (2.4 ha) for the first phase, 20.74 rai (3.3 ha) for the second phase and 62.81 rai (10 ha) to be covered by the third phase. The total number of 5 story walk-up flats is 92 buildings comprised of 4,140 housing units. The project goal is to create a livable urban community with the design concept of semi self-contained, environment-friendly, and people-friendly community that are described below.

a) For a Semi Self-Contained Community

NHA provides daily use facilities for the convenience of the community people, such as kindergarten, community center, fresh market, athletic field, and open space in the site. Especially, those basketball courts and tot lots that are provided in every housing cluster serve as good places for teenagers and children to spend their spare times by playing sports with friends in stead of involving with narcotics. In a community center, there will be equipped with computer room, library, nursery school, cooperative office and others.

b) For an Environment-Friendly Community

In order to reduce the energy consumption within the community, NHA places all the important facilities in the heart of the community for people to come on foot or by bicycle instead of by vehicles.

NHA provides a water reservoir like a huge pond in the central area of the community not only to collect rainwater but also to serve as a part of the landscape. It serves as an enjoyable place with water scenery, a background for important events like Loy-krathong Festival, and water recycle facility for watering all trees and plants in the community.

c) For Energy Saving

NHA places the housing blocks in a cluster form surrounding the open space, tot lot and athletic field, and also plans the buildings in a cross ventilation manner to have good natural ventilation and light so that the residents can reduce energy consumption to control the living environmental condition in housing units.

d) For a People-Friendly Community

The open space and athletic field plotted in between the housing clusters are planned to

support and promote social interactions among the residents including meeting and chatting each other.

3) Evaluation

This is a well-planned housing project of Baan Eua-Arthorn in terms of the living environment. Public facilities and open spaces are adequately provided in the community and consideration to the natural environment is also taken carefully. However, it is pity that not all the Eua-Arthorn Projects share the same quality and convenience as this Bangchalong Project has. The main reason why this project is so successfully done could be assumed that NHA and the Government had enough budgetary funds, time and enthusiasm for a pilot project of Eua-Arthorn, while the location of the project site and the quality of the built environment are suitable for customers' convenience and demand, and the purchase price was within the affordability of customers.

[Example 2]



<Constructed houses outside view>

1) Project Name: Klong 3 Rangsit Housing Project in a suburb of Bangkok

2) Project Outline

The Klong 3 Rangsit Housing Project in Klong Luang Rd., Rathumthani started to build 477 housing units in 2003 and finished in 2004. The land size is 41.68 rai (6.7 ha). The feature of the project was to provide single houses with two stories. The usable floor area of a unit is 51.5 m² on a 78 m² to 84 m² lot. The project composed of several kinds of public spaces, such as playground, community center and small gardens. As the housing site is located in a suburban area of Bangkok, residents can enjoy not only the location but also the suburban environment. This was an early accomplishment of low-rise housing units in Baan Eua-Arthorn Project in NHA.

3) Evaluation

The Klong 3 Rangsit Eau-Arthone Project was an early project of NHA for low incomes. As the housing site is located in a suburban area of Bangkok, residents can enjoy not only the location close to the central area but also the suburban environment. In this case of the Baan Eua-Arthorn project, the location of the housing site and the price of a housing unit somehow met the demand and affordability of low incomes in Bangkok. This is why the project was succeeded and an example of good practices of Low-rise Housing in the Baan Eua-Arthorn project.

(4) Analysis: Advantage and Disadvantage

The project objectives are good for this country that needs to solve a lack of housing for people. However, the limited time and manpower could not allow the Government and NHA to conduct the careful research, planning and implementation of the project, while the expected number of housing units is so huge for NHA to deal with.

The project method is too simple to practically apply to each project. But, the lack of detailed implementation plan brought problems, such as the suspension of construction, a full of unsold

vacant units, disqualified applicants, and increasing in NHA's debts.

Even NHA takes many steps to approve projects proposed by developers, most of all failed project sites are located far from work areas with no bus services nor public facilities, such as schools, clinics, and shops nearby. It is questionable how NHA made a decision for the implementation of such projects. NHA should not excuse saying that the main causes of project failure are the oppressive housing policy of the Government, the lack of time and manpower of NHA, and the profit-oriented project of developers. NHA should take seriously its responsibility for people and the failed projects. In addition, NHA should reestablish its organization structure as an independent agency of the Government in terms of housing policy and as a public organization for people.

(5) Points to improve the project

1) Planning and Development

The idea of submitting proposals from private developers in the Baan Eua-Arthorn Project, might be applied, as a suitable measure to assist NHA that is running a large number of project without sufficient manpower at the planning phase. Proposals submitted by developers and contractors could reduce the workload of NHA's planning staff but could result in inadequate project analyses due to the same reason of the lack of manpower. Examples of inadequate proposal analyses can be seen in the failure of the Baan Eua-Arthorn Project.

It is absolutely necessary to conduct a careful research on marketing and planning before starting a project. In order to solve problems related to the limited NHA manpower, utilization of outsourcing would be one solution to be considered.

From a marketing point of view, as it is always said that the most important key point for a successful project is the location of a project site, NHA needs to consider a project site carefully by themselves.

2) Housing Design

There is the design standard in TOR that private developers must follow, but even so it could be necessary for NHA staffs to consider proposed master plan before approving a project. It is because that in some cases, public spaces and facilities designed in a project site seem to be so minimal that there is neither attractive nor comfortable space for customers to purchase or rent the housing, and that could be not what NHA staffs expected to see.

3) Financial Support

Almost all applicants cannot pay 390,000 baht/unit for the housing at once due to their limited affordability so that they try to make a contract with GHB or GSB by taking hire purchase system. However, their requirements are very high for applicants to fulfill and eventually they cannot purchase because of no financial support.

It is a fundamental issue that a flexible financial support system for low-incomes should be prepared before starting any housing project for them. Otherwise a project could be failed all the time.

In the Baan Eua-Arthorn Project, subsidy system has been applied as financial support from the Government. However it is not clear how NHA uses the subsidy of 80,000 baht/unit from the Government, and how much effectively the subsidy contributes to customers. The sales price and construction cost are the same at everywhere in Thailand, without regarding whether a project site is in countryside or in an urban area. This price setting is a very unclear and unfair part of this project that may cause a scandal between NHA and developers.

It is necessary to set a sales price according to the real situation, and to analyze how effectively this subsidy system worked for low-income customers.

3-1-3-5 Site and Services

(1) Method

The Site and Services Project was introduced as a pilot project in the “NHA Housing Development Accelerated Plan 1979-1982” to replace the complete housing units to reduce the cost of housing projects and to improve affordability supported by ADB (Asian Development Bank). The Government subsidized the plan for the amount of 1,500 million baht for infrastructure cost of the project, which was only 10% of the total investment. The main components of the project consists of land and infrastructure, core houses with sanitary core and partially built housing units, material loans and technical assistance for house completion, and health, education and social facilities. The type of core houses are designed according to target income groups among which cross subsidy is expected. They include sanitary cores, one-story core row houses, semi-detached core houses with sanitary units, one-story row houses with sanitary units, two-story row houses, one and two-story semi-detached houses, and two-story and three-story row shop houses.

After purchasing a Core Unit or a Core House shown in the following figure, people will build or add parts and rooms by themselves according to their affordability and needs.

Since then NHA has completed 4 site and services projects in this country such as Rang Sit, Tung Song Hong, Ladkrabang, and Bang Plee New Town, a total of 13,508 units.

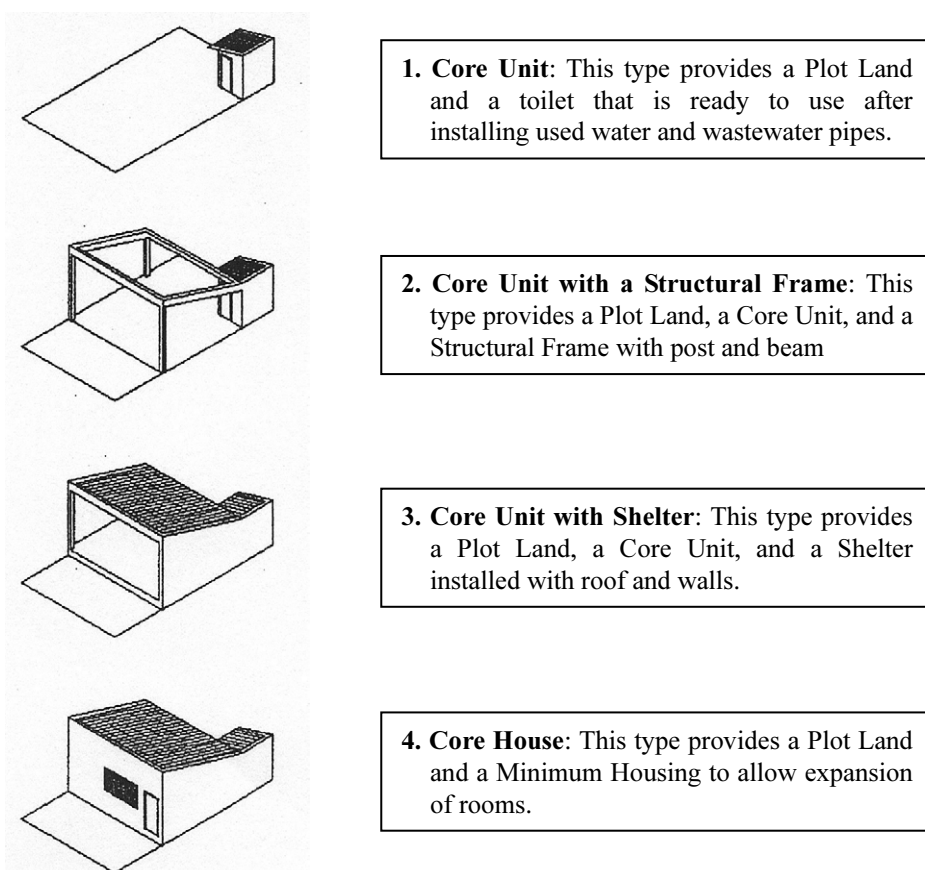


Figure 3-13: House Type in Site and Services Project

(2) Analysis: Advantage and Disadvantage

The Site and Services Project has reduced the capital cost and government subsidy while providing the type of housing and secure land tenure suitable to the real needs of people. But the site and services project still has three disadvantages, suggesting that this program does not fit to the Thai life style and affordability of low-income people.

1) The location of the project

The locations of all the site and services projects are far from urban center and job locations. The limitation of job opportunities cannot attract low-income people in urban poor settlement to buy houses provided by the site and services projects. As a result, the projects will not be able to serve the real target group.

2) The uninformed residents

Residents expected more complete housing than NHA's core housing by the site and services project. Only few of them were well aware of the housing condition and the majority of them were not ready to spend more money for completing building on top of the down payment and monthly installment. The unexpected expenditure caused dissatisfaction in the project and encouraged selling buildings.

3) The price

The site and services project is still costly from the facts that the lowest monthly installment was 1,275 baht for one-story row house and 1,915 baht for two-story row house in early '90s. Such price was unaffordable for low-income people with a monthly income less than 4,000 baht.

3-1-4 Urban Development

3-1-4-1 New Town

There is only one New Town Project called Bang Plee New Town in Bangkok that was implemented by NHA in Thailand.

(1) Method

1) Objectives

In a new town project as a self-contained community, NHA will aim to provide housing for middle and low-income people to alleviate the housing shortage in urban area, provide job opportunities to residents and people coming from other areas by inviting government offices, shops and factories in the business, commercial and industrial areas placed in the site, and relieve the traffic congestion in urban area so that people do not need to commute to the central area to work. In addition, NHA will provide necessary public utilities and facilities in the entire project site for people to receive public services.

NHA procures land for a New Town and provides infrastructure, including roads and public utilities in the entire area, housing for rent or sale in residential area, and land in commercial and industrial areas for sale.

2) Implementation Body

The Special Project Department of NHA takes responsibility for this project. It operates this project in cooperation with related government organizations and private sectors.

3) Project Investment

The project investment resources are initially from loans of international organization with long-term contract, NHA funds and the Government subsidy. Anticipated revenues from the project will be mainly capital gains from land for business, commercial and industrial areas and profit from selling housing.

4) Planning Method

NHA applies the neighborhood system for developing a new town that is a residential area divided into “neighborhoods”, with its own service area including such amenities as a kindergarten, shops, and a playground within a walking distance. Some neighborhoods are grouped into a “tambon”, which means a sub-district in Thai, with a tambon level service area including such amenities as primary and secondary schools, market places, health clinics, a sports ground, and a community park situated within a 10 minutes walking distance from the housing area. The tambon level service area is also conveniently accessible by cyclists. In addition, amenities at the town level also is provided by various facilities, such as a hospital, a bus terminal, a pier, a town business district, and a government office that are situated in places where they can serve to people in the community and the surrounding communities with a maximum convenience.

(2) Workflow

There are basically three stages to implement a New Town project, namely schematic and implementation planning stages, and construction stage. In the 1st stage of schematic planning, NHA’s project team conducts a feasibility study to clarify the project objectives and goals, a research on the physical, social and future aspects of target areas, including the surroundings, and makes a preliminary master plan. The team receives comments and opinions from relevant agencies regarding the study results. Then, NHA proceeds to the site selection and project approval process. In terms of land acquisition, there are mainly two methods for purchasing land,

such as Direct Negotiation and Open Purchase depending on whether NHA specifies the site location or not. The workflows of those methods are shown in Appendix 3-4 and 3-5. The land acquisition for new town is not a crucial problem in this country because sites for a new town are located in a suburban area with land of low price and landowners will agree to sell land if the certificate of land price from the lands authority is presented to the landowners.

In the implementation planning stage, the team works with the relevant agencies to plan public utilities and facilities in the site to fit the master plan. Then, the team prepares project documents and sends them for EIA, then for the tender.

In the construction stage, implementation procedures take a phase system, which divides the entire project site into several construction areas to conduct project construction in different time periods according to the implementation schedule.

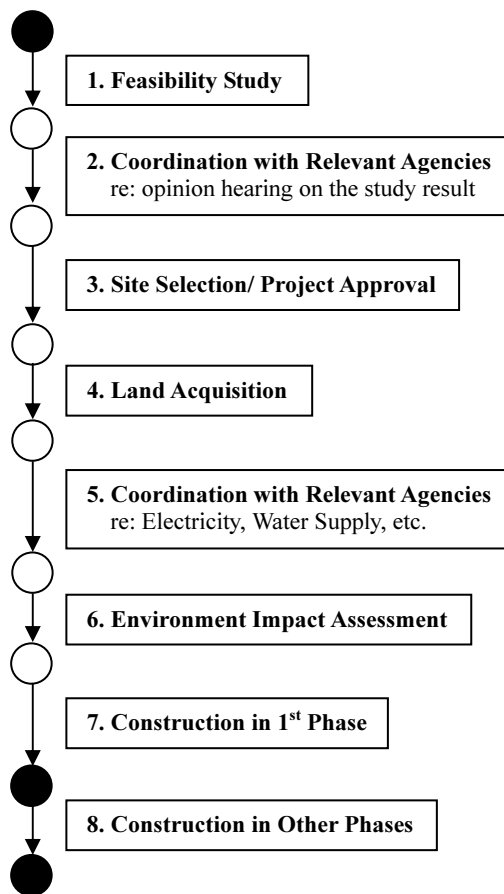


Figure 3-14: New Town Project Workflow

(3) Good practices



<Bird's eye view of the project site>



<Constructed flat outside view>

- 1) Project Name: Bang Plee New Town in Bangkok
- 2) Project Outline

The Bang Plee New Town is located along the Bangna Trad Highway between Bangkok and the Eastern Seaboard, which is being developed as the major industrial estate in this country. NHA purchased a land of 4,469 rai (715 ha) for this project in 1976 and divided into 2 phases; the 1st phase covering the area of 267 ha started to develop in 1977 and implemented during a period from 1980 to 1988; the 2nd phase covering an area of 448 ha began in 1988 and was scheduled to complete in 2006.

Although NHA has developed 242 ha out of 448 ha in the 2nd phase by 2002, it is planning the additional 3rd phase to develop 240 ha including the rest of undeveloped area from the 1st and 2nd phases between 2002 and 2011. In the 3rd phase, the project target is a middle-income group and NHA will invest money in the project with private sectors, including housing development for middle incomes and construction of a department store.

This New Town provides housing for up to 25,000 families and are able to accommodate up to 130,000 people.

The initial investment amount for the project was a total of 1,237.8 million baht in 1977 from ADB Loan (31% of the total investment), NHA (24%), FRN Loan (17%), the Government Subsidy (16%), USAID Loan (7%), and TOT (4%), and the major expenditures were 960.7 million baht (77.6%) for the construction, 95.3 million baht (7.7%) for the interest, and 72.4 million baht (5.8%) for the land acquisition.

The project was implemented according to the following subjects.

(a) Objectives

- a) To alleviate the housing shortage in Bangkok
- b) To provide infrastructure systems and public utilities in response to the increase in the city population
- c) To spread job opportunities from Bangkok by encouraging the establishment of industrial and commercial centers in the new town, thereby creating a new economic base
- d) To relieve the traffic congestion problem in Bangkok by providing jobs for residents, thus reducing the need to travel to Bangkok

(b) Planning Concept

In planning the “Bang Plee” New Town, great emphasis was placed on good living conditions and convenient transport facilities. The main spine road of the community divides the community into two sections. On the east is the industrial estate and on the west is the residential area. The community service area, including sports complexes, schools, market places, community centers, etc., is situated in a long strip between the main spine road and

the residential area in order to segregate the latter from the industrial area as well as from the main thoroughfare itself.

The residential area is arranged according to “the neighborhoods system” as mentioned before.

A landscaped open space for recreational activities of the residents is situated in the vicinity of a dike that constitutes a long strip running lengthly throughout the town. Therefore, every resident can gain the maximum benefit from it.

The road system within Bang Plee New Town is designed in an orderly fashion and represents a mixture of a grid system and a loop system. The internal roads vary in width dependent on the traffic volume; for example, a road within a neighborhood is 7.5 m wide, a road at the tambon level is 18 m wide while the main spine road is 32 m wide.

(c) Job Opportunities

Taken together, the industrial area, the commercial area and an area allocated for the use of government offices in Bang Plee New Town can provide job opportunities for approximately 50% of the labor forces within the community.

- a) The Bang Plee Industrial Estate covers an area of 160 ha and can accommodate up to 110 ha with a potential to generate 14,000 jobs. All the industries housed in this estate must be clean, pollution-free and labor intensive.
- b) The Central Business District (CBD) in Bang Plee New Town, which serves as a major business and commercial center, catering both to the residents and neighboring communities, consists of department stores, offices and entertainment establishments.
- c) The Bang Plee government office center, a center of district-level government office, consists of various government offices that provide a wide range of services to members of the new town and neighboring communities as well.

(d) Infrastructure System and Public Utilities

- a) Road System: The main road of the new town links up with three major transport routes with a network of internal roads with various sizes.
- b) Flood Prevention System: A “dike”, which is 2 meters above the sea level, was constructed to prevent flooding. Ditches and a reservoir were constructed for holding rain water before it is pumped out into nearby public canals.
- c) Drainage System: Drainage is affected through U-shaped pipes designed to drain water off into the ditches specially dug for the purpose.
- d) Wastewater Treatment System: Three central wastewater treatment plants have been constructed in the community to treat wastewater from the residential area as well as from the industrial area
- e) Electricity: There are two electricity sub-stations situated within the community to supply electricity to both the project itself and neighboring communities.
- f) Water Supply: The water supply system in Bang Plee New Town, which includes a mobile treatment plant installed by PWA, makes use of water from public canals as well as from the reservoir in the community providing a water supply to serve the residential and industrial areas.
- g) Mass Transport System: A number of BMTA buses run between the new town and Bangkok.
- h) Sports Complexes: There are three sports complexes in the new town, each featuring a swimming pool, a football ground, tennis courts, badminton courts and a gymnasium.
- i) Service Area: This includes kindergartens, primary and secondary schools, vocational training centers, health centers, post offices, a police station, fire stations, community parks, etc.

(e) Housing Provision

In the Bang Plee New Town, NHA has provided various types of housing units and the following table shows target groups, housing types, construction costs, sale prices, etc. in the 1st phase.

Table 3-10: Types of Housing Units in Bang Plee New Town in Phase 1

Building Type	Monthly Income (baht/month)	Housing Type	Floor Area (m ²)	Plot Size (m ²)	Built Units	Construction Cost (baht)	Unit Cost (baht)	Sale Price in Cash (baht)	Hire Purchase Monthly Rate (20 yrs) (baht)	Service Conser-vancy Charges (baht)
A	5,000 – 7,000	1-story row house	25.2	84	1,260	46,816	99,900	53,500	825	200
B	7,000 – 9,000	2-story row house	37.8	84	1,902	62,390	120,100	94,905	1,325	220
C	9,000 – 12,000	2-story Semi-detached	60.0	160	832	80,134	210,660	207,300	2,590	250
D	12,000 – 16,000	2-story Semi-detached	84.42	200	768	117,068	288,250	305,000	3,500	260
E	16,000	Open plot	-	440	110	-	216,790	-	-	-
SH*2	16,000	2-story row house	127.49	80	133	218,653	333,350	460,000	3,730 – 5,055	300
SH*3	16,000	3-story row house	181.41	80	200	312,755	507,650	547,000	4,455 – 6,470	300

Note: SH*; Shop House

3) Project Output as of 2005

The Bang Plee New Town Project has already operated 65% of the whole areas, and provided 13,750 housing units. 12,920 housing units have been sold including 11,250 units under the Normal Housing project and 830 units under the Baan Eua-Arthorn project and 830 units has been unsold. The total population was approximately 150,000 and the entire residents are low-income group, and around 143 factories were operated in 2005.

4) Evaluation

The Bang Plee New Town project is a good example of a theoretical planning for a new town and it may not be a good practice from the result of this project. However, it could be a good practice in the notion of considering a New Town project more carefully. The following topics explain how the original plan of Bang Plee New Town as a self-contained community practically worked in the project area.

(a) Public Facilities

The components of the Project in the first phase were completed in the period shown in the following table.

Table 3-11: Component Construction Period in the first phase

Construction Period	Constructed Components of the Project
1982	Started to develop the project area, dike and ditch
1983	Construction stop shortly because of the flood water
1984	Developed the industrial estate area
1985 to 1986	Completed housing construction
1985	Completed the community commercial building construction
1986	Completed the main spine road and a bus terminal
1987	Completed schools and a community center
1988	Completed all of the construction

According to the table, all of the components for the new town were not completed at the same time. It caused troubles to the residents since they could not receive the public services through school, community center, and governmental administrative office, and the daily services from the shops inadequately developed at that time. They also could not expect the temporary services from the surrounding communities that had not been developed yet.

(b) Job Opportunities

NHA tried to invite industrial companies to set their factories in an industrial area of the new town even by changing the land use ratio for many times due to the change of economic situations shown below. However, the newly acquired jobs were only 3,000 in the first 5 years although expected jobs were 14,000 at the beginning. In the meanwhile, the population in Bang Plee New Town had constantly increased year by year that was 5,500 in 1985 and 20,000 in 1990. The majority of residents in the new town were low and middle incomes who occupied 70% of the total residents and their incomes were in between 5,000 and 10,300 baht per family. The unemployed residents had to go to the central area of Bangkok for job hunting to work there instead in this new town.

Table 3-12: Land Use for Bang Plee New Town

Land Use	Ratio in Original Plan	Ratio in the Final Plan
Residential	37%	32%
Industrial	10%	20%
Office	7%	6%
Public Service	14%	7%
Park	8%	5%
Road	24%	21%
Government Service	-	2%
Bank of Thailand	-	7%

In the 2nd phase, NHA sold pieces of land to the Training Institute, the Samut Prakan Provincial Social Security Office, and 300 rai (48 ha) to the Bank of Thailand. The former of two government organizations built their offices, but the latter has not built any facility in the site yet. In addition, as the Nongngoohao Airport construction project has been delayed, it affected the industrial development and supporting project, such as housing provision for the airport staff. Even though, around 44 factories have been built in the 2nd phase, job opportunities for the residents are still not enough within the new town.

(c) Infrastructure and Public Utilities

The infrastructure and public utilities, such as dikes and water supply system, had troubles because of the reason that NHA had not assumed them before starting the project.

The dikes for flood prevention are provided along the canals in the new town, but they sank after the construction at the beginning of the project. Then, the whole construction was delayed for 36 months to adjust the original plan. The cause of the sink settlement was analyzed and found that the bearable load of soil was less than the dike's weight, for which NHA could not indicate the miscalculation in the structural design phase.

After new residents moved into the new town in 1986, they still used groundwater for drinking. NHA dug 11 wells at that time and only 2 wells were in use. Then, in 1990, the Metropolitan Waterworks Authority provided a mobile plant in the Bang Plee area to produce water 55,000 m³ per day supplying the whole new town.

(4) Analysis: Advantage and Disadvantage

It is actually important and difficult to correctly predict the future situation of the Bang Plee New Town as a good practice introduced above. The lack of experience on this kind of a grand project caused many problems in the new town. However, the local government officials could learn the knowledge of a new town planning, construction process of public facilities, and urban community management through cooperation with NHA, which will be a good lesson to the Decentralization.

A new town aiming at a self-contained town at the town level of “Compact City” could prevent an urban sprawl problem, that is, the development of bedroom town in suburban areas only for considering the provision of housing.

The planning in theory, such as setting overall project goal, objectives, planning concept and master plan is reasonable and appropriate for a New Town. However, the planning in practice is poor in terms of the investment method, participation from private sectors and related organizations, marketing research, implementation schedule, coordination among concerned sections, and technical skills for the New Town project.

(5) Points to improve the project

1) An Organization and New Town Act

It is necessary to establish a responsible organization under a certain Ministry to control and manage New Town, and set up a New Town Act, including land use control, Land Provision Method, and Building Control to avoid individual developments without the common method or rules in a planned new town.

2) Development Method

Based on experience gained through the Bang Plee New Town Project, current research works on New Town in other countries, and continuous surveys on people’s demand, NHA needs to revise its roles and the method of New Town development if they are not applicable to the present and anticipative future situations.

3) Land Provision Method

It is recommendable to study land provision ways not only through purchase but also through expropriation, land readjustment, etc.

4) Coordination among Concerned Sections

It is necessary to coordinate works and planning operations among the concerned sections for public utilities, public assistance, finance, construction, etc. In addition, NHA needs to work in cooperation with private sectors more to activate the project and expand the channels for investment from related organizations and companies.

3-1-4-2 Urban Renewal

(1) Method

In a case of an urban area, that was developed long ago, has not been functioning well, an urban renewal project needs to be implemented. This is a reorganization of an existing area and restructuring of relationship with the surrounding area to reactivate the living environment and people in the area.

The Urban Renewal project deals with the renovation of physical and social aspects by planning the Land Use, Land Readjustment, Transportation System, including roads and mass transit railways, Population including residents and visitors during daytime and nighttime, Facility Provision, including public facilities and new housing for the present residents, Finance, Job Employment, and Community Organization, according to the visions of related people and organizations.

NHA will act as a facilitator among stakeholders, such as the community people, landowners, relevant organizations, and private sectors, and also present the renewal plan in cooperation with urban planning consultants to those people. In a case that the regulations and laws need to be clarified or revised to fit the current demand, NHA will study and adjust the present legislative measures. An example is only the Din Daeng Community Development in Bangkok, which has not started yet now.

(2) Workflow

As the following workflow of Urban Renewal Project shows series of steps for the project implementation, different organizations are involved in the project and each progress of activity are closely related to others. Therefore, presentation of the implementation schedule is the key activity of the project besides the master plan, including all solutions of critical problems.

There are basically three stages to implement an Urban Renewal Project. They are schematic and implementation planning stages, and construction stage. In the 1st stage of the schematic planning, NHA's project team conducts feasibility study to clarify the project objectives and goals corresponding to the problems in the area, a research related to the physical, social and future aspects, including the surroundings, and makes a preliminary master plan for the Cabinet permission. In addition, the team receives requests from relevant government offices regarding the project proposal. Then, NHA proceeds to the process of another feasibility study for project approval from NHA Board.

In the 2nd stage of implementation planning, the team works with the relevant agencies for the public utilities and facilities, coordinates with private sectors in charge of commercial and public facility constructions, and continues the social activities with the present residents in the area.

Further, the team prepares project documents and sends them for EIA, then for the tender. In addition, NHA facilitates negotiations with landowners on land purchase in a case that the project site includes private land.

In the 3rd stage of construction, implementation procedure taking phase system includes preparation for and execution of the move of present residents into new housing and transfer of land rights to the contractors in order to construct other facilities, except housing that is managed by NHA.

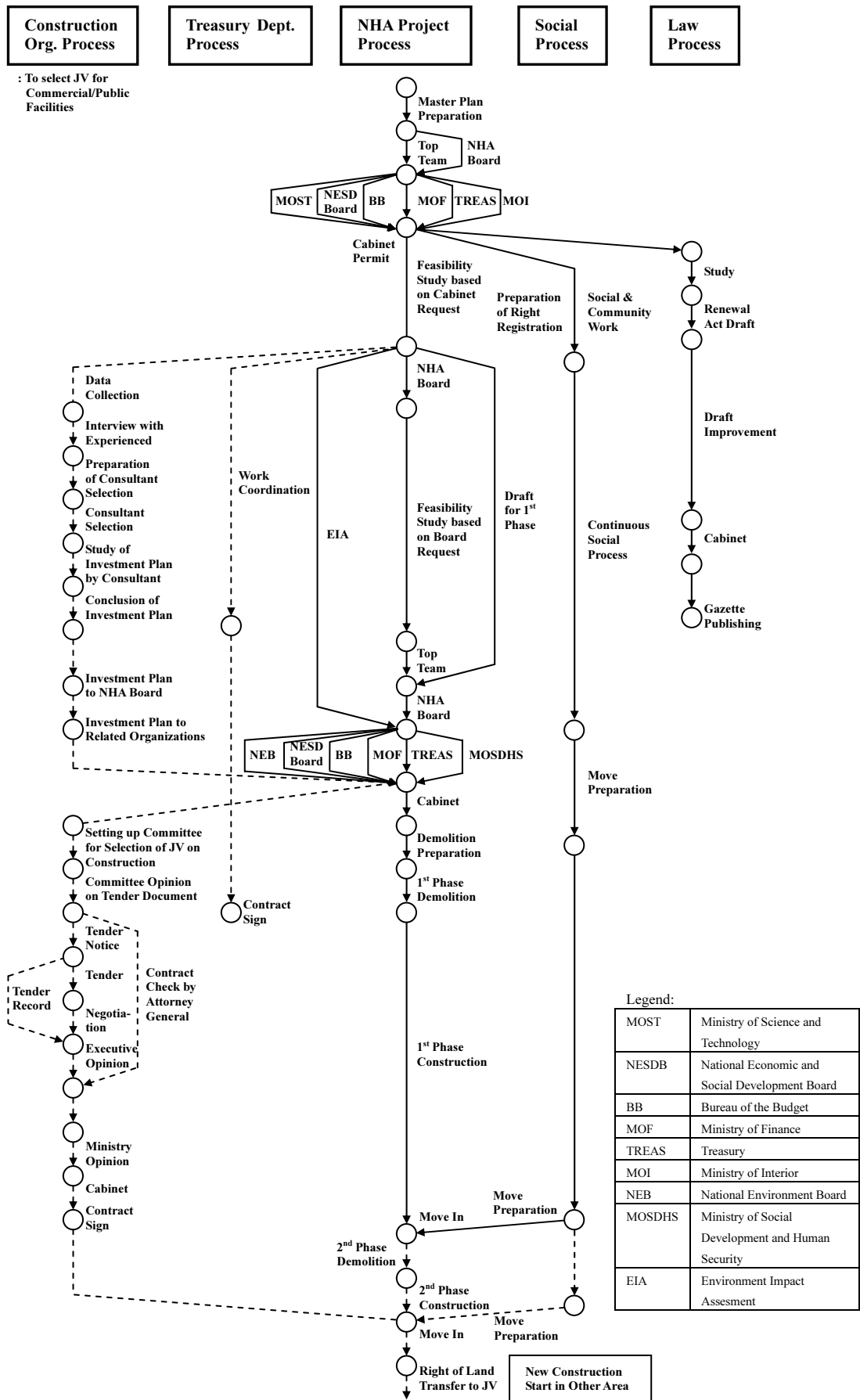


Figure 3-15: Urban Renewal Project Workflow

(3) Good practices



<Perspective drawing>

1) Project Name: Din Daeng Community Development in Bangkok

2) Background

(a) Site

The entire land of 102.9 ha Din Daeng Community Area (DDC Area) belongs to the Government. The government institutions use most of the area, which is 64.4% of the total area. Non-government organizations, such as BMA and NHA, mainly use the rest of it. There are 30,011 residents in DDC Area and all of them live in NHA's Din Daeng Housing Complex. The population density is estimated to be 695.5 persons/ha over the entire area, while 927.7 persons/ha in the housing section.

(b) Development History

In 1992, NHA and BMA agreed to improve and renew DDC Area. Between 1996 and 1997, NHA and BMA jointly studied the concept for the urban renewal of this area and a Working Committee was established. In 1999, NHA worked out a preliminary master plan focusing on the renewal of the Din Daeng Housing Complex, and the Working Committee decided to entrust a consultant team to formulate a master plan for minimizing public investment.

On November 7 in 2000, the Cabinet approved the master plan under the condition that the implementation plan should include project activities such as community participation, provision of social welfare facilities, and participation of private sectors.

In 2002, NHA proposed a revised master plan to match the current situations, and in 2006 NHA committee approved a new master plan based on the last two plans.

(c) Life Style and Preference of Present Residents according to NHA's social survey

- a) Residents who are satisfied with the existing housing are around 49% of the total. They want to improve the housing and the living environment.
- b) Residents using housing units for living are 72%, while 28% use as a workspace and supplement work place.
- c) Housing units of 31 to 40 m² are preferred by 28% of the residents, while 21.6% prefer 41 to 50 m².
- d) More than 85% of the residents hope to live in housing with floors of less than 15.
- e) Expected unit has 2 or 3 bedrooms and 1 or 2 bathrooms.
- f) 57% of the residents prefer a unit type bathroom and around 80% prefer it with a bathtub.
- g) A kitchen separated from a living room is preferred by 88% of the residents.
- h) The returning residents will be 85% of the total, and 51% of the residents oppose to the project due to their worries about the changes of living environment.

3) Project Outline

A. Master Plan approved by the Cabinet in 2000

(a) Objectives

The objectives of the project are to set up a pilot project adopting the urban renewal concept by utilizing the land development potential at the local level. The project also aims to provide urban environment of good quality and job opportunities to the present and future residents in the community.

(b) Planning Concept

At the district level, the project should have more parks, open spaces, and traffic plan including traffic volume increased by this redevelopment and a subway main station. The local road network should be well connected to the city level system with access to the subway station. At the super block level, the project should be well coordinated with SRT Makkasan Development Project located in the south of DDC Area.

(c) Land Use

The land use consists of seven zones and its plan was formulated to achieve the following topics:

- a) Land for mixed use to match the location with advantage
- b) Effective network of infrastructure
- c) More parks, open spaces and green areas to enhance the community environment
- d) Careful approach to minimize impacts on the present residents
- e) Provision of other necessary measures to facilitate the new BMA City Hall and other government works and services

(d) Housing Development

The master plan proposes to build the two types of housing unit with 33 m² and 41.25 m² and provide 7,242 units for the present residents, 3,019 units with a 33 m² floor space and 4,193 units with a 41.25 m² floor space, and 6,330 units with a 41.25 m² floor space for future residents.

(e) Implementation Plan

The master plan proposes a construction schedule to implement within 10 years. The total investment is estimated to be 26,433 million baht including the initial investment of 2,556 million baht for the first phase.

NHA has assumed three alternative implementation organizations, such as NHA or the Government as a sole investor, private sector as a sole investor, or cooperation of NHA and private sector.

(f) Community Participation

NHA has conducted seminars for the community in order to explain the concept of the project, and to receive comments and opinions from the present residents and related organizations.

The result of the seminars of the community leaders show that most of attendants seemed to agree with the project although they expressed the following requests for participation:

- a) Provision of updated information such as distributing leaflets, setting up an information center, and holding a seminar with more attendants
- b) Positive cooperation with community leaders
- c) Contribution to planning
- d) Closer coordination got relocation and compensation planning, such as cooperation with community leaders
- e) Closer discussion on new rent fee setup

B. Revised Master Plan in 2002

This plan has some partial changes from the original master plan approved by the Cabinet in 2000 in order make it more practical.

(a) Functional Components in DDC Area

- a) New BMA City Hall is placed at the new symbolic facility.
 - b) Commercial facilities will include large retail industries from private sector.
 - c) Housing provision will include the utilization of existing housing unit for low-incomes and new housing units for the present residents of middle-incomes.
- (b) Development Framework
- a) Future population is estimated as 29,800 of residents and 56,200 of daytime population in 2011. The estimation is based on the data that the proposed housing units are 8,761 and an average family member is assumed as 3.4 persons/household.
 - b) Demand for commercial floor area is estimated as 183,000 m² in total; 156,000 m² for modern commercial facilities and 27,000 m² for medium to small-scale commercial facilities. Demand for office-use floor area is estimated as 405,000 m².
- (c) Land Use Plan
- The land use is indicated in the revised master plan as follows.

Table 3-13: Land Use in DDC Area

Land Use		Land Area (m ²)	LAR (%)	Building Area (m ²)	BAR (%)	Floor Area (m ²)	FAR (%)
1. Total Building Site		790,877	76.9	255,335	32.3	1,741,000	220
1.1	Residential Car Parking	120,346	11.7	42,418	35.2	305,797 39,120	254
1.2	Office Car Parking	192,895	18.8	41,164	21.3	562,028 116,011	291
1.3	Commercial and Residential 1) Commercial Floor 2) Residential Floor 3) Public Service 4) Car Parking	142,918	13.9	83,133	58.2	714,523 230,789 316,127 28,559 139,048	500
1.4	Sports Facilities	124,733	12.1	20,533	16.5	38,998	31
1.5	Public Service	172,410	16.8	37,519	21.8	88,779	51
1.6	Public Service	9,840	1.0	5,136	52.2	19,316	196
1.7	School	111,391	10.8	22,088	19.8	48,409	43
1.8	Hospital	51,179	5.0	10,295	20.1	21,054	41
1.9	Work yard and Sewage Treatment Plant	34,198	3.3	30,005	87.7	30,005	88
1.10	Other	3,377	0.3	563	16.7	870	26
2. Public Space		237,840	23.1	-	-	-	-
2.1	Park	45,332	4.4	-	-	-	-
2.2	Public Facilities	25,070	2.4	-	-	-	-
2.3	Road	167,438	16.3	-	-	-	-
Total		1,028,717	100.0	255,335	24.8	1,741,000	169

The floor area ratio after the implementation of the project will increase from 83% to 169%, while the building coverage ratio is kept similar to 25%. The share of public space is improved from 9.6% to 23.1% as a result of contribution by the related organizations. Especially, the land for roads becomes twice as large as the present share.

- (d) Implementation Plan
- a) The construction plan is formulated by taking phase system, which consists of 4 implementation phases. (See Appendix 3-6)
 - b) Among the 6,818 households that are subjected to the housing renewal scheme, 1,023 households (15%) are considered to be moving out to other places.
 - c) The relocation plan is prepared for the present residents of low-incomes who earn less than 9,200 baht per month, and who want to return to the community after the completion of the project. Among them, 1,621 households, i.e., 22.5% of the total present households, will return to the rehabilitated housing units, while other 5,795 households (62.5%) will return to the reconstructed housing units.
 - d) Moving expenses for the returning and moving-out residents are set to 250,000 baht.

Besides this, compensation fee is set to 10,000 baht for the moving-out residents, which was agreed upon with the present residents through workshop held by NHA.

- e) A housing rent fee for returning residents has been determined to be 20% of household income. According to the social survey, the average household income of the ordinary group in the community is 15,000baht/month. On the other hand, a house rent fee for the future residents is set as 5,600 baht/month by referring to the current market rate around DDC Area that is about 140 baht/m²/month. The house rents for the ordinary income returnees and future residents will be raised by 15% every three years.

(e) Implementation Organization

Basic concept for the implementation organization is to return profits from commercial development to non-profitable sections such as housing developments. It is necessary that a public organization provides loan funds to ensure a low interest for a long term. The public organization will grant or re-rent to the implementation organization and revenues from the commercial development will be allocated for the repayment of the loan. The Organization Structure for Implementation is shown in the following figure.

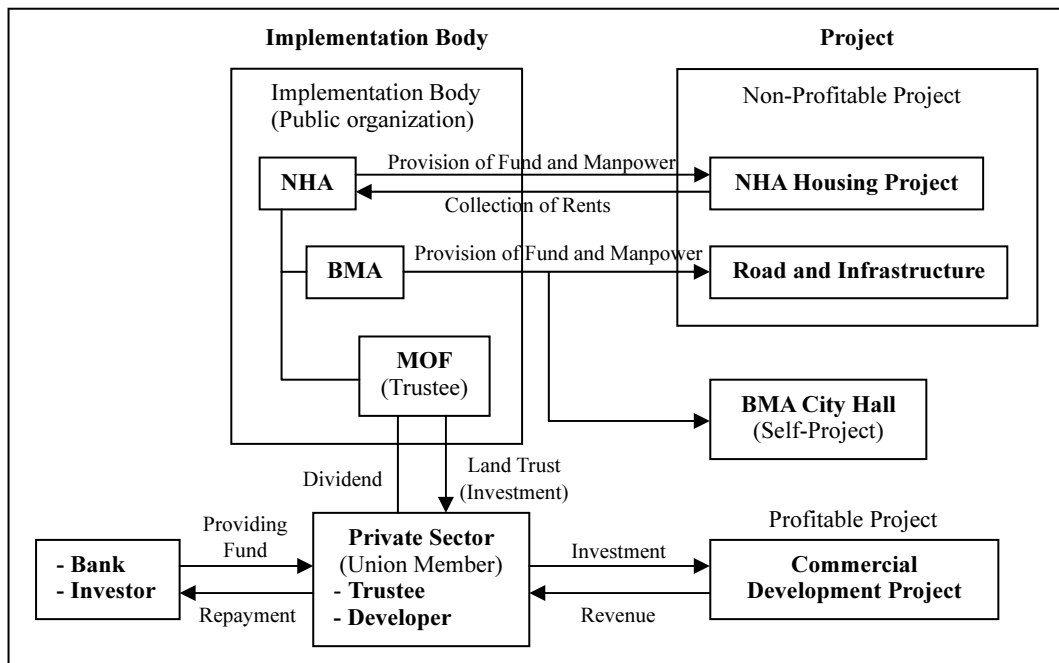


Figure 3-x: Organization Structure for Implementation

(f) Operation and Maintenance

The public organizations will operate and maintain the public facilities and non-profitable facilities, while the profitable facilities are operated by the private sectors.

(g) Community Empowerment

In order for the smooth implementation of the project, the implementation body is required to establish a special organization to strengthen the community.

C. Din Daeng Community Urban Renewal Project in 2006 (new master plan)

This new plan has been arranged by NHA based on the original and revised plans.

(a) Housing Provision

It includes 6,818 housing units in 3 areas, including an area of 2,322 rehabilitated housing units for the present residents of low-incomes, an area of 1,056 reconstructed housing units for the present middle-incomes, and an area of 3,440 new housing units for the future residents who are anticipated from high-incomes.

(b) Project Implementation Schedule

NHA proposes a detailed implementation schedule for the stage before starting the construction process. This includes NHA Act Modification, Community Operation, Proposing of the Din Daeng Community Urban Renewal Project, and Cooperation with the Treasury Department that has already started and is scheduled to finish at the end of 2008.

4) Evaluation

It is actually difficult to evaluate this Din Daeng Community Urban Renewal Project now because the project has not started yet and some community people have not agreed with NHA proposal. However, it is obvious that this community needs to be redeveloped due to the insecure condition of existing housing. This project is the only project to be implemented as an Urban Renewal project in this country and there is no former example to analyze. Therefore, this project could be a good practice even if the project may be suspended for a long period of time or even if the project may cause some problems after implementation of the project.

(4) Analysis: Advantage and Disadvantage

It is essential to make an agreement among related people, organizations, authorities, and the Government based on the master plan of a concerned urban renewal project. Therefore, the master plan including all aspects related to the project should be convincing for every related group.

However, stakeholders, especially politicians, always influence this kind of projects rightly or wrongly. Although the Urban Renewal involves different stakeholders, on the contrary, it may be involved in political and business games besides the technical planning struggles.

(5) Points to improve the project

Through the experience of Din Daeng Community Urban Renewal Project gained until now, some points are to be mentioned for the Urban renewal project.

1) Consistency in Development Policy

Unwavering government policy is indispensable for private sectors to participate in a huge and time-consuming project.

2) Setting-up of Session for Discussion and Coordination among Concerned Parties

In order to formulate a firm redevelopment policy, the concerned offices need to have a session to hold discussions and coordination.

3) Organizing Implementation Body for the Project

An urban renewal requires an implementation body composed of specialists including urban coordinator, survey analysts, project planners, project operation and administration specialists, architects, electrical, mechanical and civil engineers, legal advisors, community specialists, private sector specialists, etc. under the project director who controls the entire group of specialists, engages in decision making, and promotes the project implementation.

4) Strengthening of Legal Framework for Housing Renewal

The Government needs to make clear the needs for renewal to the public for smooth implementation of the renewal project. Without this kind of backing-up policy, it may be impossible to formulate consensus among residents for the renewal project.

5) Restriction of Right in Renewal

Once the renewal plan is officially approved, there occurs a speculative movement by the third parties trying to buy out the right of the residents counting on the rise in the fixed property value. A few returning residents may attempt to profit from the rise in property value by sub-renting the residences. It will be necessary to restrict the transfer of right among the present residents to restrain the speculative activities after the plan is approved.

6) Mobilization of Own Fund

It is quite risky to execute a redevelopment project by 100% full bond issuance. A minimum of 20-30% own funds will have to be invested.

3-1-5 Rural Housing

(1) Method

1) Background

NHA has constructed housing and solved problems in the slums only in towns for more than 25 years, while NHA has developed housing, structure and building materials for housing including the construction methods which are suitable for rural areas. NHA also has taken into consideration the readiness, demand, capability in management, and appropriateness of environment, economy, society, culture and intelligence of locality in the rural areas.

According to the Community Self Economy Performance Plan of the Ministry of Interior, NHA took responsibility from the Ministry for supporting the unemployed people facing the problems on housing and job opportunities who have returned to their hometowns due to the economic crisis. NHA conducted a plan between 1999 and 2001 to operate the rural housing development.

2) Objectives

- (a) To study the fast growing trees in Thailand that will be a building material for the construction of rural housing
- (b) To respond to the loyal idea “New Theory,” that is for people to plant trees for self-using and the possibility of setting up a community-wood-lot industry network which will support profession and increase local people’s income.
- (c) To apply the fast growing trees to the housing construction in rural areas.

3) Financial Support from the Government

The Government has supported the budget for promoting the project in 3 ways from the start:

- (a) To invest the budgetary funds for the construction of basic facilities, such as water resource and roads
- (b) To support the people who take a loan with a low interest in the short term to enable them to develop their housing units to fulfill the minimum requirement for living.
- (c) To support the people, especially those who are engaged in agricultural, to take a loan in the long term from financial institutions or the government funds.

The Government has coordinated with private sectors and foundations in Thailand and foreign countries for the financial supports.

(2) Workflow

NHA’s project team conducts a survey in the target community to study comments from the villagers, the leader of the community, and the members of district management organizations. During project implementation period, participants from the community learn the knowledge about the deteriorated area management.

The team manages to plant fast growing trees for use as a building material and furniture, and also for the support of occupation and income in the future.

In the project process, the team tests the quality and strength of trees in a laboratory and on site, and the community people construct a prototype of rural housing under the support of the local authorities.

Even after construction, the team continues to monitor the project by checking the growth of trees, community management, and occupational activities. The workflow in the following figure shows each step of the Rural Housing Project.

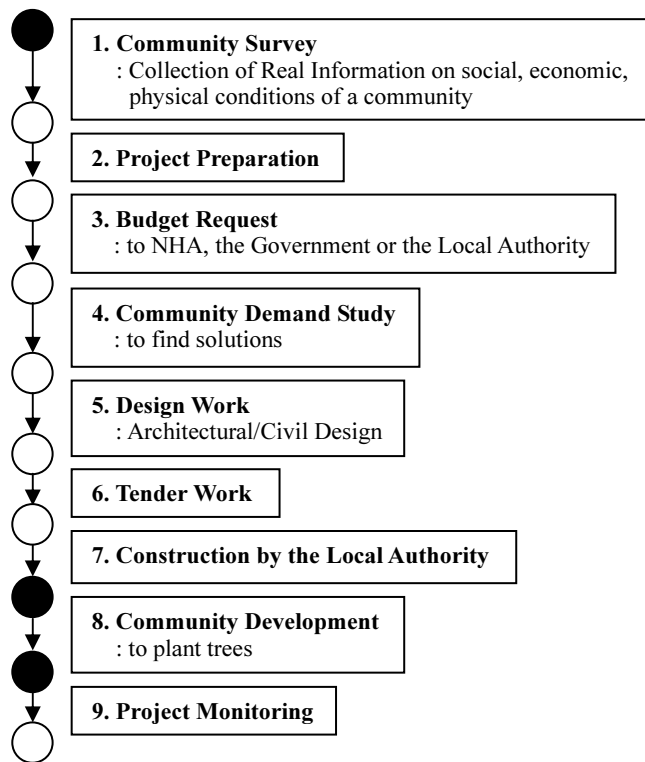


Figure 3-16: Rural Housing Project Workflow

(3) Good practices



<Constructed Rural Housing>

1) Project Name: Rural Housing Material Project

2) Project Outline

NHA's project team cooperated with related organizations and participants from the community conducted a pilot project for rural housing to transfer the planning method and management of fast growing trees to the people in 2005.

In the first year of the project, the team conducted research work on the types and quality of fast growing trees, building structure, and development plan. The team constructed housing in cooperation with the related organizations in the second year, conducted research on a pilot project for investment into the industry of the community.

3) Evaluation

This is a good practice focusing on the rural housing and area that NHA tends to keep away due to urgent problems to be solved in urban areas. This project will be able to improve the existing rural housing and, in addition, may stop the people in rural areas to migrate to the urban areas. On the other hand, the project may encourage the urban residents who have taken an interest to move back to rural areas.

(4) Analysis: Advantage and Disadvantage

In this rural housing project, the people can utilize the natural materials in rural areas for housing construction with a low cost and sell the materials for industrial use, such as making furniture and building component such as walls.

On the other hand, it is difficult for people to understand the advantage of project because the project requires a long period to grow trees and people participation that may cause troubles because of the reason that the people hesitate to sell or rent their lands to the private sectors.

(5) Points to improve the project

There are three points to improve the project.

1) Design

The design should take into consideration the relationship between the environment and materials in nature more from an ecological viewpoint.

2) Low-cost Housing

The low-cost housing construction method needs to be developed to save the materials and labor cost for the reason that planted fast growing trees and unemployed people are available in the rural project areas.

3) Job Opportunity and Community Income

The material utilization method, such as wood industry and furniture production, needs to be developed to improve job opportunities and incomes in the community.

3-2 Academic and Social Tasks

NHA carried out academic and social studies on housing development in addition to the housing projects described in Section 3-1. The Academic and Social Tasks introduced in this section include the following subjects:

1. Capacity Building for Local Administrative Organization
2. Capacity Building for Local Administrative Organization Staff and NHA Staff through OJT
3. Economic and Social Development Programs for Community
4. Researches and Development
5. New Attempt of NHA

3-2-1 Capacity Building for Local Administrative Organization

The Capacity Building for Local Administrative Organization has been conducted by NHA to support LA on Slum Improvement work that will be transferred from NHA to LA since 1999 when the Decentralization Act was established.

3-2-1-1 Capacity Building for Local Administrative Organization through the Establishment of “Urban Development Plan” and “Slum Prevention Plan”

(1) Objectives

NHA has operated housing development and slum improvement projects for over 30 years and recognized the importance of cooperation with different organizations, particularly with local authorities that have direct responsibilities for the people in their areas regarding to living environment.

According to the Decentralization Act in 1999, NHA started to prepare for transferring its role, which is to implement slum improvement and provide housing for the low-income people, to local authorities. NHA worked out a method of “Housing Development Plan” for local authorities through establishing “Urban Development Plan” and “Slum Prevention Plan” in 2004, based on NHA Operation Plan 2003-2006.

The purposes of Housing Development Plan are collecting information, transferring NHA experience, including techniques and academic suggestions on housing development and slum prevention, and participating to the operation of facilities with related organizations.

(2) Setting up an Operation Process

NHA has cooperated with academic organizations, such as universities in both the central areas and target local areas, and other organizations that have sufficient knowledge, experience and experts on this kind of housing development. For the operation process of urban development plan and slum prevention plan, those people set up steps to follow are,

- a) to collect and clarify the information to study the present situations
- b) to analyze data and the expected situation in the future
- c) to prove the real demand in the target area
- d) to draft a housing development plan
- e) to receive the opinions from community people for improvement
- f) to provide a pilot plan
- g) to integrate with the development plan of Local Authority

(3) Operation of Urban Development Plan

NHA has studied the theory and the collected secondary data of housing development in the past, surveyed and collected the present and expected future data. In addition, NHA has also conducted research related to information on housing development, such as housing prices, target incomes, locations, community systems, and related components, including analyses of physical, economic, social political, administrative, environmental, technological factors.

(4) Operation of Slum Prevention Plan

NHA has focused on the low-income housing in low-income and slum communities and collected and analyzed the data of those communities. Then NHA clarified their problems and possible operations. After that, NHA considered to select a pilot project to be an example for a real performance and study in cooperation with related organizations, and integrate with the development plan of Local Authority as an urban development plan

(5) Target Areas for Urban Development Plan and Slum Prevention Plan

Between 2004 and 2007, NHA has already operated 35 project areas and will plan to operate 12 areas in 2008. Those areas selected in 2004 are located in the center of cities or provinces. The following table shows the detail operation.

Table 3-14: Target areas for urban development plan and slum prevention plan

	Fiscal Year						
	2004	2005	2006	2007	2008	2009	2010
Central Regeon	1.Nakhonpathom	1.Lopburi 2.Layong	1.Saraburi 2.Nakhonnayok 3.Chachoengsao	1.Kanchanaburi 2.Ratchaburi 3.Suphanburi 4.Ayutthaya 5.Angthong	1.Chainat 2.Singburi 3.Pachachuapkinburi 4.Phrachinburi 5.Sakaeo 6.Chonburi 7.Chanthaburi 8.Trat		1.Nonthaburi 2.Pathumthani 3.Samutprakan 4.Samutsongkram
Northern Region	1.Chiangrai	1.Phisanulok	1.Chiangmai 2.Lampang 3.Lamphun	1.Phayao 2.Phrae 3.Nan 4.Nakhonsanan 5.Uthaithani 6.Kamphaengphet	1.Phichit 2.Sukhothai 3.Tao 4.Uttaradit	1.Maehongson 2.Petchabun	
North-eastern Regeon	1.Sakonkakhon	1.Nakhonratchasima 2.Maharakham	1.Udonthani 2.Nakhonphanorm 3.Nongkhai	1.Kalasin 2.Mukolahan	1.Loei 2.Nongbualamphu 3.Khonkaen 4.Roiet 5.Chaiyaphum 6.Buriram 7.Surin 8.Udonratchathani 9.Amnatcharoen 10.Yasothon 11.Sisaket		
Sothern Regeon	1.Phuket	1.Suratthani	1.Nakhonsithamarat 2.Krabi 3.Trang				1.Chumphon 2.Ranong 3.Phangnga 4.Patthalung 5.Satun 6.Songkhla 7.Yala 8.Pattane 9.Narathiwat

(6) Problems and Obstacles as Findings

NHA found out following problems and obstacles through the operations for urban development plan and slum prevention plan implemented between 2004 and 2007:

- 1) Varied purposes and targets among related organizations due to the different in their concepts, understandings and evaluations of the project
- 2) The limitation of related people:
 - a) No smooth operation by the work team due to unbalance capabilities and numbers of members
 - b) Heavy burden to the staffs from local authority and other organizations in participation

process

- c) No chances for the community people to obtain information, knowledge and participation
- 3) Unclear housing development policy and no budget allocation to the project
- 4) Inadequate project period, although it took more than one year per project
- 5) Mismatched arrangement between the project period and the development plan of local authorities
- 6) Unclear detail NHA role for transferring to local authorities

(7) Points as Conclusion

- 1) Urging the national housing development policy to realize the importance of housing problems
- 2) Providing a chance to people who would be a center of the whole development plan
- 3) Establishing the roles of NHA that are not only housing construction but also the development of quality life in housing suitable for people

3-2-1-2 Capacity Building for Local Administrative Organization on Housing Management

NHA coordinated with the Ministry of Social Development and Human Security for setting up a community organization to manage the community. The Ministry will support the operation and development of the community management after NHA operates the project during a five years period. NHA selected the project place in Baan Eua-Arthorn communities.

(1) Purpose

- 1) Local administrative organizations will obtain the knowledge and understand the concept and principle of the Baan Eua-Arthorn project including the realization of the important roles in housing management and the planning of housing development in their own communities.
- 2) Preparation of their works, such as the management of environment, public utility and facility, and community systematization.
- 3) Exchange of knowledge and experience in housing development and quality development of life in Baan Eua-Arthorn communities.

(2) Target

- 1) Staff from local authorities: 26 persons from 7 areas
- 2) Staff in the provincial office of the Ministry: 2 persons
- 3) Staff from NHA: 6 persons

(3) Training Course

- 1) Academic training by lectures
Experts from university gave lectures.
- 2) Practical training by seminars
The seminar adopted the Appreciation Influence Control method, which was for discussions for participants to have chances to communicate with each other and exchange their ideas and experiences.
 - a) Experience exchange
 - b) Mobilization of opinions about Baan Eua-Arthorn in the present and future by LA staff.
 - c) Preparation for a project exhibition by LA staff.
- 3) Field studies
Participants visited four areas; Phrapin 3 Community, Sahakon Kehasartan 4, Sahakon Credit Union Klongchan, and Baan Eua-Arthorn Retanarthibet to exchange opinions with the residents.
- 4) Training certification
After passing the evaluation of participants, the participants received the certifications from NHA and the Thammasat University that was requested to organize this project by NHA.

(4) Community Systematization for Baan Eua-Arthorn Community

- 1) Purpose
 - a) To explain the rules and duties of the people living in the community to residents
 - b) To establish a community cooperative
 - c) To promote community occupation
 - d) To organize community cooperation and Eua-Arthorn Culture that is the principle for the community to be independent, to help each other and cooperate with the family and community development

- e) To set up a library for the community
- 2) Community management

Five activities were planned in this project, which are shown in the table below:

Table 3-15: Practical Plan for Eua-Arthorn Community Management

Activity	Practical plan
1. Community management on the infrastructure and environment	To take care of the environment, cleanliness, safety, public utility and facility, and the community property
2. Management of “benefit of the community property and community business contract”	To set up a plan dealing with contract concerning with the benefit management of NHA, and to perform according to the condition clause of agreement including traffic arrange in commercial areas collection fees from outside stalls along paths
3. Community systematization in the quality development of life for the community people and Eua-Arthorn Culture	To transfer the information on community management to the community members, and to facilitate the activities
4. Debtor management	To offer the debtor management based on the Eua-Arthorn Culture
5. Water supply management	To manage the water supply including bill payment collection and maintenance service

NHA has transferred the public utility work to local authorities, such as electricity, water supply, and road managements according to the Decentralization Act.

3-2-2 Capacity Building for Local Administrative Organization Staff and NHA Staff through OJT

NHA has operated the urban housing development plan under the participation of related organizations since 2004. NHA and Chulalongkorn University, one of the participation groups, have studied the knowledge transference by “Participation in Housing Development” training performance. The related organizations were encouraged to obtain the chances and experience of planning the housing development in their regions through this training.

(1) Purpose

- 1) To understand the knowledge, exchange the experience of participants on housing development, and apply them to their duties in each organization.
- 2) To create and expand the network of housing development cooperation to the target areas according to the urban housing development plan of NHA.

(2) Target

- 1) Period
 - (a) Class 1: February 1-4, 2007
 - (b) Class 2: March 22-25, 2007
- 2) Participants
 - (a) Group A: The province and local authority staff who participated in the housing development plan and capacity building for the local authorities of NHA in the fiscal year of 2005 to 2006, and who were expected to participate the annual project in the fiscal year of 2007. The staff was from;
 - The social development and human security divisions in provinces
 - The offices of public works and town & country planning
 - The construction and technical work divisions of municipality and local authority
 - The community development and social welfare work divisions of municipality and local authorities
 - (b) Group B: NHA staff who has the tasks relate to the housing development and capacity development for local authorities in the housing development. The staff was from;
 - The policy and planning department
 - The housing development and studies department
 - The special project department
 - The construction project management department
 - (c) Group C: The staffs of local authority and other related organizations

(3) Training Area and Activity

The training area was Huahin municipality in Prachapkhirikhan province, that was suitable for this training because of the following points:

- Various levels and types of housing development are being operated.
- An example of housing development project exists.
- Database for housing development is available.
- Cooperative network of housing development is established.

Regarding the activities in this project, the participants attended the lectures on the concept and theory in urban housing development and surveyed the housing situations in Huahin town in small groups. They found several housing problems in Huahin as follows:

- 1) Squatters and slum settlement in the area along the railway that is occupied by low-income people. They built houses to live and are making earnings by operating small business. They would not be moved out due to insufficient financial resources.
- 2) Inadequate infrastructure, including roads, water supply, drainage, and wastewater treatment systems.
- 3) Traditional Thai style housing preservation because of the reason that owners cannot pay for the maintenance of the housing even the area is a culturally attractive part of Huahin.
- 4) Housing tenure security on the lands in the central area where foreigners own. It forces Thai people to live in the rural area.
- 5) High rent in Huahin town for labors. It forces people to live in a squatter settlement.

After the survey, the participants presented the housing development plan of Huahin town explaining follows:

- 1) To Provide housing for high to low incomes in the vacant area in the town to apply profits from housing for high incomes to housing construction for low incomes.
- 2) Housing data collection based on GIS to utilize the tax levy.
- 3) Establishment of institutes for urban housing development, financial system and land provision.
- 4) Housing zone specification, measures and standards for the settlement of foreigners
- 5) Participation for housing development plan includes NHA, academic institutions, and community development organizations.

3-2-3 Economic and Social Development Programs for Community

The Economic and Social Development Programs for Community in NHA, aims at improving the economic and social conditions of residents in slums through the cooperation and involvement of both government and private organizations. The main policy is to allow slum residents to express their opinions and participate in planning the project and making decisions so that they will take responsibility in developing their own community. Community committees are elected to represent the community and to lead the development.

(1) Method

1) Objectives

The objectives of the economic and social development are to increase the incomes and reduce the expenses of residents, eliminate unemployment through occupational training, promote production, find markets and set up cooperative stores, and make the sources of finance for residents to borrow for investment in businesses, occupations and the development of their own housing.

2) Activities

The social development is carried out through the promotion of education and health, improving the environment, creating a sense of order in the communities, teaching slum residents about the rights and responsibilities of being a member of society, and encouraging unity for social development.

3) Programs

Two sets of programs have been established for the economic and social development project.

A. The first-priority projects

- a) Projects establishing order in the communities through the setting up of community committees: Leaders are trained in management systems so that they can develop their communities efficiently.
- b) Projects to improve the community environment and promote pleasant living conditions. Examples are garbage disposal systems, maintenance of cleanliness, the promotion of tree planting, and the establishment of kitchen gardens.
- c) Projects to maintain public property: These projects encourage residents to be responsible for maintaining community properties for the benefit of all. This includes properties, such as footpaths, drainage, children's playgrounds, and community centers.
- d) Training projects to alleviate public hazards: These projects encourage the unity of residents to avoid various problems and health and safety hazards that may fall on such communities.
- e) House registration projects to be conducted in coordination with BMA (Bangkok Metropolitan Administration) to issue legal house registrations for those who have problems: This will have a continuous effect on education, occupation, and the security of the country.

B. The second-priority projects that NHA will operate later. Consideration is given to the needs of each community, and NHA will coordinate with both government and private organizations. These are:

- a) Child development projects to develop and strengthen children physically and mentally. Children can develop to a level and a rate appropriate for their age. This is accomplished through the training of children themselves and the children's supervisors. In addition,

communities are involved in child development projects, such as the establishment of daycare centers.

- b) Children's playground project to provide and encourage children to use a playground that is hygienic and safe.
- c) Project to promote health and hygiene so that residents will enjoy sound health and be able to take care of themselves and families correctly. This is accomplished by the setting up of health centers and provision of mobile medical units.
- d) Project to prevent drug abuse through the dissemination of knowledge about the dangers of illegal drugs and available methods of treatment for addicts.
- e) Youth relationship project, which offers training, information and various aspects of life to young people so that they can prepare themselves to be good citizens of the community and the country in the future.
- f) Library project to provide opportunities for self-education and development for those who are interested in and who want to make good use of their free time.
- g) Family planning project to teach residents about correct family planning methods and to promote good health for mothers and children.
- h) Literacy promotion project to encourage those who are illiterate to learn to read and write.
- i) Nutrition project to teach residents about nutrition and food preparation as a basis for health living.
- j) Security project to prevent crime in the communities and to promote a sense of unity.
- k) Vocational training project to encourage residents to develop skills and knowledge that can help to improve their financial status.
- l) Project to make consumer goods available to the communities at low cost to reduce families' living expenses.
- m) Project to lend money for small business operations, encourage expansion of small businesses, and increase family income.
- n) Cheap construction material project to help community residents buy construction materials at cheap prices in order to repair and improve their own housing.
- o) Technical assistance and housing loan project to encourage residents to improve their own housing.
- p) Project to encourage development and administration of family budgets, so that residents can learn how to control their expenses and build up savings.
- q) Recreational project and other activities on Children's Day and Songkran Day, etc.

To undertake these economic and social development programs, NHA will cooperate with agencies, such as BMA, Department of Industrial Promotion, Department of Public Welfare, Krung Thai Bank, National Women's Council, Duangprateep Foundation, etc. to solve problems and respond to the needs of the communities.

(2) Workflow

The workflow in the following figure shows each step of the Economic and Social Development Programs for a Community.

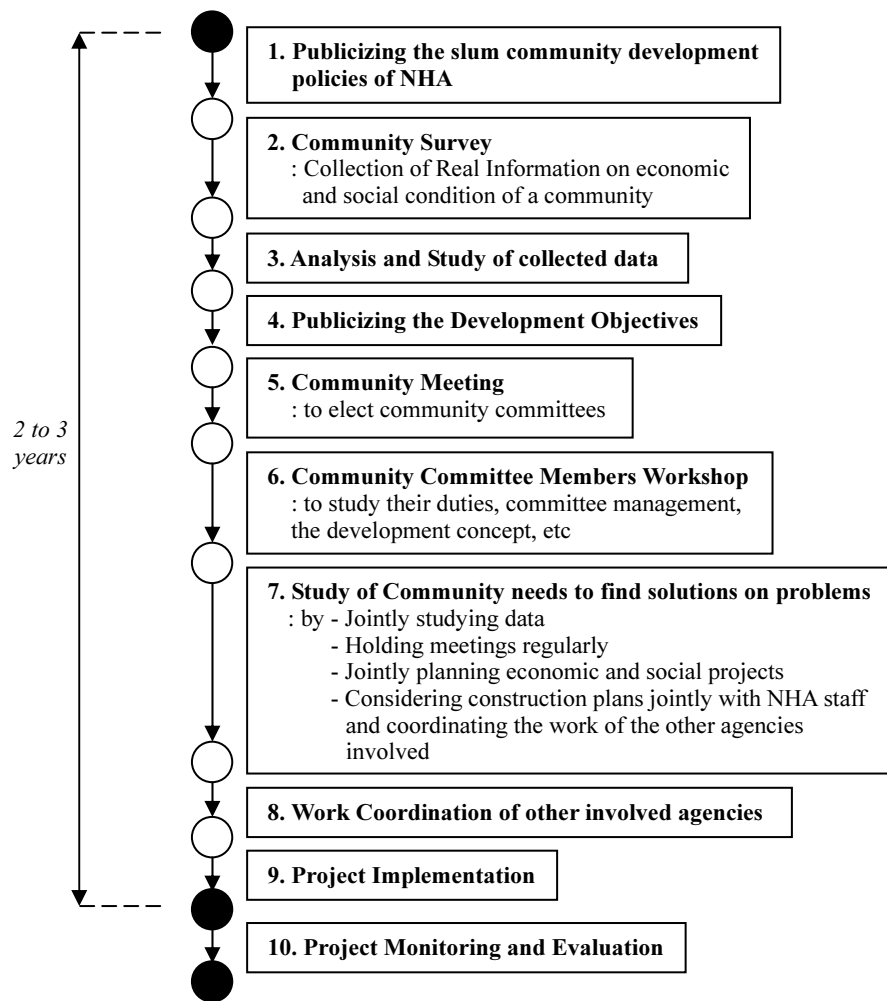


Figure 3-17: Economic and Social Development Programs Workflow

NHA will operate and coordinate with outside agencies over a period of about 2 to 3 years because this development requires time to improve the living conditions of community residents. Once communities can further develop by them, NHA will withdraw and delegate responsibility for the coordination and implementation of long-term operation to the communities and other agencies involved, such as BMA.

(3) Analysis: Advantage and Disadvantage

NHA is given a financial support only for physical work. It has no budget specifically for social development.

The work involves coordination with other government and private agencies. That brings some obstacles and limitations, such that:

- a) Each agency has its own goals and policies.
- b) The establishment of a major plan and a joint plan is difficult and the work is repeated.
- c) Emphasis is more on the presentation of work rather than the results and benefits for residents.

If communities lack security, community residents will not be willing to participate because of that:

- a) It is difficult to establish development goals in practical terms, and evaluate them.

- b) Target groups do not represent high potential customers for financial institutions, thus causing problems in economic development.

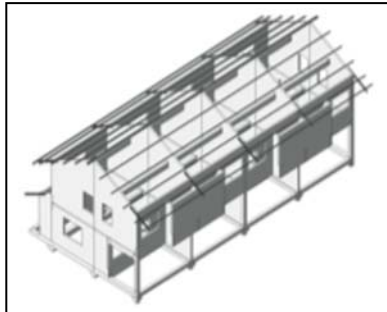
(4) Points to be considered

As community leaders have a strong influence on development, there are some points to be considered to implement this development such that:

- a) There should be fair elections accepted by community residents.
- b) Community leaders should continually be developed with quality.
- c) Exchange of experience among leaders is necessary.
- d) Communities should be encouraged to help themselves in their own development.
- e) Coordination and sincerity of all agencies is important.

3-2-4 Researches and Development

NHA has improved its roles in the housing studies that are guides, control, coordination, supports for information, technical study, research and innovation for increasing housing development processes with quality, standards, and achievement goals of people's life quality development.



<2-story structure for town house under the construction development program>



<6 kinds of fast growing trees development under the material development program>

(1) Information and Housing Information System Development

Regarding the information system in NHA, two websites are available in public. These are the main website of NHA and a website of the Department of Housing Development Studies. Most of the departments and sections have own sites in NHA's main site that shows the definition and task of each department. In addition, NHA has one intranet. The working software system for ERP, Enterprise Resource Planning, which has been introduced in 2006 for accounting, financing and budget management, is called MISNHA, Management Information System for NHA. The purpose of the system is to increase the efficiency of administration, operation and services, as well as to establish complete information networks.

(2) Housing Research and Development

Survey and research projects for knowledge development and innovations implemented in the recent years are:

- 1) Development of designing method of PC (Pre-cast Concrete) modular system in 2007 fiscal year.
- 5) Study of architectural drawing criteria and standards for future NHA construction projects in 2008 fiscal year.

(3) Seminars and Trainings

NHA holds various seminars and trainings every year. There were six seminars and trainings in 2006 and 11 in 2007 held by the Department of Housing Development Studies. The topics of the seminars were "Training on Housing Finance", "Seminar on Legal Enforcement of BMA Comprehensive Plan and Housing Development of NHA", "Meeting on Problem Resolving and Direction of Baan Eua-Arthorn Project", and "Seminar on World Habitat Day 2007: A Safe city as a Just city."

In addition, the Housing Study and Development Department, together with the Policy and Plan Department and the Special Project Department, held three seminars in the communities in provinces during 2004 fiscal year. NHA held seminars at four communities in Phuket and Suratthani, ten communities in Chiang Rai and Chiang Mai, and six communities in Sakonnakon and Udon Thani in 2004. In 2005, NHA held trainings on slum problems in Trang and Ratburi.

(4) Research and Development for Technology, Construction System and Materials

The recent projects of the research and development are:

- 1) Energy saving technology and material development: Wall system in 2006 and 2007 fiscal years,
- 2) Project for setting a standard model of 2-story buildings by PC taking system from 2006 to 2007 fiscal years.
- 3) Development of local housing construction by fast growing plants, including Siamese neem trees, Wattle, Acacia, Thepha, Eucalyptus, and Teak in 2007 fiscal year,
- 4) Development of a low water impact design for Tsunami in 2008 fiscal year.

(5) Life Quality and Environment Development Project

- 1) EM: Effective Micro Organism for wastewater treatment

3-2-5 New Attempts of NHA

Recently, NHA has conducted new attempts, especially making housing strategies, laws and regulations in addition to regular works and studies.

3-2-5-1 National Housing Committee and National Housing Strategies

In 2007, NHA proposed “National Housing Strategy for Housing Development” focused on the low-income housing development and decentralization. The Cabinet approved this proposal. This topic is described in “Section 2-3-2 National Strategy for Housing Development” in Chapter 2.

3-2-5-2 An attempt to enact related laws and regulations

NHA has attempted to enact related laws and regulations such as Land Readjustment and Urban Development Acts.

(1) Land Readjustment Act

In 1987 the idea of land readjustment was introduced in Thailand under the support of the Japanese government. The Department of City Planning has already started to study this technical issue since 1983, and NHA joined to make a proposal of the Act with the department after 1990. The Department of City Planning presented the draft of Land Readjustment Act to the Ministry of Interior in 1994 when a first pilot project was started along Praram 9 road. After the agreement of the ministry, the Cabinet started to consider it in 1995. However, some political changes have come and they had to wait the Cabinet approval of the draft until 2000. Through the process of the Parliament agreement, the Act came into force in 2004.

(2) Urban Development Act

As there is no laws for the urban development in Thailand at present, the government organizations have work coordination troubles in operation and management, including cooperation with local administrative organizations. NHA is a member of the team preparing the Urban Development Act to solve these problems. In the Act, a new organization has to be established to respond the policy and manage new town development, so that the operation will be faster and effective as people involving as a partner in urban development. The formation of the Urban Development is considered as follows:

- 1) General Provisions
- 2) Urban Development Committee
- 3) Office of Urban Development Committee
- 4) Executor of Urban Development Committee
- 5) Urban Development Operation
- 6) Organization Establishment
- 7) Organization Operation
- 8) Finance, Accounting and Inspection
- 9) Operation Evaluation
- 10) Funds for Urban Development
- 11) Relation to the Governmnet
- 12) Penalty Provisions
- 13) Transitory Provisions

3-3 Analysis of NHA Performances

In this section, NHA Project Performance, and Academic and Social Tasks on Low-income Housing Development are analyzed from different points of view.

(1) Project Performance

1) Project Approach

(a) Project Area

a) Urban Area

Projects in Urban Area for low-income people will be Slum Improvement, which includes Upgrading, Re-blocking, Reconstruction, Land-sharing, and Relocation and Resettlement, and also Urban Renewal. Especially, the Reconstruction project will be implemented in the communities where NHA had provided housing before. As local authorities are not ready to operate those projects and private sectors cannot deal with those in public lands by themselves, NHA needs to implement in cooperation with other organizations.

b) Suburban Area

In this area, Low-cost Housing Provision, such as Rental Housing for Public and Government Personnel and a Normal Housing project are necessary to be implemented. Baan Eua-Arthorn Project and Site and Services need to be improved because both systems have not fulfilled people's demand, custom and affordability for housing, although the both project concepts aim at solving the lack of housing. The Slum Improvement also needs to be conducted by NHA because suburban area has been developed as closely related with urban area.

c) Rural Area

This area had not been attractive to ordinary people and NHA could not afford to operate projects. However, those people are interested in the rural area as a living and visiting place, and organization roles. Although there is a problem in housing quality to be solved, the rural area is the origin of Thailand for living and a place to introduce something splendid that urban insiders have almost forgotten. NHA may provide rental housing for a short stay of ordinary people in the rural area, in addition to the rural housing improvement.

(b) Project Scale

a) Community Level

NHA has operated numerous projects at the community level and enhanced its knowledge and skills through practical experiences. NHA often faces troubles between communities and local authorities because of the difference in their visions on the community area. Therefore, NHA needs to consider not only the community but also the city plan, when working with local authorities to propose a clear and reasonable vision for the community.

b) Town Level

As NHA has not implemented projects at the town level, such as New Town and Urban Renewal, it does not have sufficient experience to manage those projects. However, NHA has sufficient experience on Slum Improvement, which is useful for such huge projects that include important activities cooperating with community people. The community participation activities involving NHA are not expected to include in Housing Provision projects.

(c) Provision Form

a) Hire Purchase

In the Housing Provision for low-income people, the people normally utilize the hire purchase method to obtain housing because its monthly installment for housing is affordable for them even they cannot pay a lump sum money at once. Thus, the hire purchase method gives a good incentive to low-income people to own their housing.

But not all the low incomes are capable to take this system. The lowest 30% of low incomes still have difficulties for payment. Therefore, they need to find financial supports somewhere else. The Government and NHA need to consider whether they provide other methods for those people or advise to choose rental housing instead.

b) Rent

As there are many cases of unpaid rent problems, NHA has not provided rental housing for general public. The rental housing is actually necessary for low incomes, especially for the lowest income group, government officials, migrants and students. NHA has to make a new measure for rental housing to convince the Government to allow continuing the project. Although strict rule or contract for renters, including eviction measure, does not fit the Thai custom and mentality, it is still one possibility to solve this problem.

(d) New Approach

It might be noticed as a business model of NHA.

a) Housing for Elderly and Disabled People

There are few projects in NHA providing Housing for Elderly and Disabled People. According to a statistical report^{3,4}, 4.02 million people who are over 60 years old in 1990 will increase to 10.78 million in 2020. This figure is 15.28% of the total population in Thailand. The ratio of population over 65 years old is 5.9% in 2000, and is estimated to be 7.6% in 2010 that exceeds 7% the definition of the aging society defined by the United Nations. Thailand will reach the aging society within 30 years that is much faster than other developed countries, such as England that took 100 years to reach the aging society. Sooner or later, Thailand will need to provide adequate housing for elderly and disabled people besides welfare houses for poor people. According to Thai life style and culture, housing design for these groups of people must be prepared very carefully and thoughtfully to meet their demands.

b) Historical Area and Housing Preservation

There are no questions that Thailand is a very attractive country with splendid art, culture, food, people and architecture developed over the long history. Traditional and historical housing is also a cultural heritage of this country. Public or private cultural organizations have tried to preserve historical buildings. But, it is better that NHA operates to preserve the historical housing in urban and rural areas. Preservation is not to keep the originals in a museum but to keep and utilize the historical housing while maintaining it. This is a duty of public organizations for the people of Thailand.

c) Cooperative Housing

In order to fulfill customers' demand, NHA will provide housing designed according to the preference of each family. There are examples of cooperative housing for middle incomes in Bangkok that are provided by private organizations. However, NHA may adopt this system to housing for low incomes after gaining the experience of the middle-income housing at first and understanding the method of cooperative housing. The method for low-income cooperative housing may include that a variety of housing units

^{3,4} "Population Projection for Thailand 1990-2020" by Human Resource Planning Division, NESDB, March 1995.

finished by low-cost materials, development of construction method and building materials, and customer participation in the construction.

d) Renewal project

As Urban Renewal at the town level is already mentioned above, a renewal project at the community level is also expected. A renewal project is a combination of Upgrading, Re-blocking, Reconstruction, Land-sharing, Relocation and Resettlement projects under the Slum and Squatter Settlement Improvement. The project site does not need to be in slums but in any community having problems in living environment. Therefore, this type of project will be out of the scope of the Decentralization Act. Thus, NHA could act on this type of projects more positively.

2) Planning Aspect

(a) Human Resources

As a challenge to new development projects, NHA needs to hold various capable and experienced staff, such as urban planners and coordinators, survey analysts, project planners, legal advisers, etc. to initiate new development projects with other organizations and communities. In addition, it is useful to exchange staff with other public and private organizations for a certain period to study other systems and to be criticized own since NHA staff does not seem to act with confidence or reliability to the organization.

(b) Feasibility Study

There is one point to be improved in feasibility study: NHA should consider about the cost performance and effectiveness of projects more seriously even though NHA is a state enterprise that does not need to think the deficit of a project but benefits of people. This point may be found out after people realizing as themselves being taxpayers who support the Government revenue and NHA budget.

(c) Marketing Research

This is also related with the weak points of public organizations that cannot act like private sectors to pursue their profits. However, they know the demand of target groups better than NHA and perceive people's preference and desire much faster than NHA, and make strategies to fulfill their needs for the sake of their own business. Marketing research represented those matters is an issue to review in NHA.

3) Technical Aspect

(a) Living Environment Quality

NHA has been facing the situations to improve the Living Environment from the amenity point of view, as Thailand is becoming a developed country. Even in low-cost housing for low incomes, it is necessary and possible to provide a cozy area, for example, by utilizing existing materials and settings in a project site without installing new building components.

(b) Building Quality

a) NHA Standard

NHA should review their own Standards for maintaining the qualities of living environment and housing that the customers and NHA staff could share with and understand NHA's technical housing policies. For instance, the duration of building structure needs to be shown in the Standards, such as specifying a reasonable period to reconstruct housing so that it is much clearer to suggest a demolition plan for public safety to people living in deteriorate housing.

b) Quality Control

As mentioning the Living Environment, NHA needs to think about Building Quality of Housing as well. One of the current issues on housing provision has been sifted from "quantity" to "quality". Controlled quality could give customers better living environment

and also could save maintenance costs.

(c) Construction System

a) Construction Method

It is necessary to develop new Construction Methods which fit the Thai industry and construction markets and which have a potential to expand in the whole country.

Ordinary pre-cast concrete mass production method may not be appropriate for the recent trend of customer demand expecting a variety of housing and room types with different finishing materials.

It might be a combination of the concrete frame structures with columns, beams and floors, and the installation of walls with industrialized materials, such as brick, concrete blocks and lightweight panels including concrete, metal, wood and laminated products. Steel or aluminum frame system needs to be considered to reduce a construction period.

b) Building Materials

For low-cost housing, requirements for building materials are availability in any city and at low prices with certain quality and size meeting the official standards. The standards and specifications of building materials need to be considered to keep the building quality and reduce the maintenance cost. For example, a housing constructed a few years ago already looks shabby and like 20 years of age that is common in everywhere. Although it might be caused by low techniques of contractors and no maintenance work after completion, the quality of building materials seems to be the key factor of this problem. Heat insulation materials installed on walls, especially ones facing to the west, could change the room condition better.

In addition, the conventional materials, including bamboo, lumber, mud and plaster, for secondary building components, such as window, screen, shade and wall finishing are possibly adopted for low-cost housing construction.

(d) Ecological Design Method

The ecological design method could solve problems not only on energy saving but also on environment preservation. Especially in Thailand, there are a lot of possibilities to develop ecological design methods, as the climate is relatively uniform in a year, in other words, these methods deal with the high temperature and humidity all the year around. Furthermore, natural resources of water and plant available in this country should be fully utilized for cooling and shading. Architectural and landscape designs need to be applied this method, for example, arrangement of windows and deep eaves corresponding to the direction of wind and sun, and central courtyards can provide cool areas with good natural ventilation and sun control, that are used to be a common method everywhere in the world.

It is not necessary to merely follow the developed countries to obtain their technologies because the advanced technologies sometimes are causing crucial problems in the world.

(e) Barrier Free and Universal Design

NHA has started to design housing based on the notion of barrier free, however these housing are not sufficient for customers. For example, a 2 m wide entry space constructed in flats is divided into 2 areas, one area provided with 1 m wide steps for normal people and another installed 1m wide slope without handrail for disabled people. Those areas will not function because there is no protection for disabled people and, further, the floor gap between steps and slope is very dangerous for anybody. Therefore, NHA needs to design such a place more practically and carefully even though the other buildings and roads in a city area are not designed for disabled people.

Moreover, NHA needs to take into consideration the Universal Design related with “Normalization”, which takes care of everyone, on top of the Barrier Free Design, which

intend to mainly treat disable and elderly people.

(f) Environmental Preservation

Regarding this issue, the 3R Method as a well-known idea is appropriate for NHA to consider. The method consists of Reduce, Reuse and Recycle ideas, which NHA has introduced to the construction sites and even in its office. However, NHA needs to work more with the related organizations and contractors, especially on industrial wastes generated by demolition and construction.

In addition to this issue, NHA needs to establish the measures for environmental preservation in cooperation with relevant government organizations as a responsible agency for housing supplier.

4) Financial Aspect

(a) Slum Improvement Project

It is necessary to find financial resources in revolving funds and financial institutes like a Credit Union, to realize projects in trouble with budgetary funds.

(b) Housing Provision Project

For housing provision for low incomes, a subsidy system is the essential measures to support projects. It includes well concerned measures and cross subsidy system.

(2) Academic and Social Tasks

1) Housing Development Studies

Although NHA has researched different kinds of subjects and issues, those studies and researches have not lasted continuously but often ended at the first place. Their results or outputs seem to be not compiled for other staff and future studies for use or share. This issue is related with the information center of NHA, which is not an archive where certain people search for rare documents but a resource center for everyone to find ideas or approaches to solve problems.

2) Information Center for NHA Staff

Concerning information center, the other section describes the detailed function for the people and local authorities. This center is also for NHA staff that needs articles for their works. However, it is difficult to find information, especially about NHA's own works because the information is not in the center but belongs to each division and department or individuals. Therefore, NHA needs to collect information in its own organization and also compile it to a database form for easy access.

3) Customer Service

(a) Application of the strategy from private sectors

NHA still needs to improve the customer service thereby enabling quick response to the request and demands from customers as referring the system and strategy of customer service in private sectors. It is also expected to establish an information resource center to distribute valuable data to the customers promptly.

(b) Monitoring

Surveys on customers' satisfaction and demands for implemented projects are useful to reflect them to new projects as well to NHA and the customers. Periodical project monitoring for every 5 to 10 years is valuable for NHA to ensure its housing policies, planning and future vision.

Chapter 4

Chapter 4 Trainings, Seminars and Materials achieved in This Project

4-1 Trainer Training

The possible future role of NHA according to the interpretations of various acts and regulations were explained in Chapter2. The activities and experiences since the foundation of NHA were explained in Chapter3. The Project team planed the training curriculum based on the analysis in the former chapters to strengthen the capacity of the NHA staff members to develop low-income housings. The “cascade training” method which the trained trainers train trainees, was adopted to maximize the efficiency of the training. The trainers trained in the trainer training made the staff member training curriculum and schedule including On-the-job(OJT) training. The relation of the training needs and the explanation of the former chapters based upon the discussions among the Project team members are show below:

Table 4-1: The training needs

Chapter	Contents	Critical Improvement Measures	Needs of trainings
Chapter2 Chapter3 3-2-1 Chapter3 3-2-2 Chapter3 3-2-3 Chapter3 3-2-5	-Local Authority and Decentralization -Housing Situation in Thailand -Role as Government Housing Supply Organization	1.Improvement as a National Housing Policy Making and Support Agency	1.Empowerment of Support to LA 2.Empowerment on National Housing Policy Making 3.Clarification of the role of NHA
Chapter3 3-1-2-1 Chapter3 3-1-2-2 Chapter3 3-1-2-3 Chapter3 3-1-2-4 Chapter3 3-1-2-5 Chapter3 3-1-3-1 Chapter3 3-1-3-2 Chapter3 3-1-3-3 Chapter3 3-1-3-4 Chapter3 3-1-3-5 Chapter3 3-1-4-1 Chapter3 3-1-4-2 Chapter3 3-2-3	-Upgrading -Re-blocking -Reconstruction -Land-sharing -Relocation and Resettlement -Rental Housing for Public -Rental Housing for Government Personnel -Normal Housing Project -Baan Eua-Arthorn Project -Site and Services -New Town -Urban Renewal -Economic and Social Development Programs for the Community	2.Improvement as a Housing Project Implementation Agency	1.Quality Improvement on Living Environment 2.Improvement of Building Quality 3.Improvement on Housing Supply Service 4.Improvement on Urban Development 5.Facilitation of Community Development 6.Community Participation Methods for Slum Improvement 7.Financial Support Methods for Low-income Housing Construction
Chapter3 3-1-5 Chapter3 3-2-4	-Research and Development of Housing Technology -Global Issue / Eco-Housing -Universal Design -Housing Construction Method for low-incomes -Housing Information and Research Institutes	3.Enhancement as a Center of Information & Technology	1.Improvement and Development on Technology & Service 2.Collection and Distribution of Information on Technology & Service 3.Awakeness of the necessity of Ecological and Universal Design

4-1-1 Record of Training

(1) Purpose and Schedule

The training for trainers was planned as the key of all the activities for the capacity development project for promoting low-income housing development in Thailand. In order to enhance NHA staff capability, the training places were selected in Thailand and Japan. NHA nominated ten core staff as trainers of 50 NHA staff training and as counterparts to the Japanese Experts. The name list of the trainers is shown in Appendix 4-1. The training consists of two

courses such as lectures to study philosophy, theory, planning method, and practical measures, and field trips to study the real situation of project sites. The lectures and field trips were carefully selected to strengthen the capacity of the trainers based upon the analysis of the present situation and the performance of NHA as explained in Chapter 2 and Chapter 3.

The lectures and field trips were held between 18th and 28th of June 2007 in Bangkok. The study trip to Japan was conducted between 9th and 27th of July 2007. After the trainer training, the Experts made an evaluation by questionnaire.

(2) Outline of the Trainer Training in Thailand

The trainer training in Thailand was planned as a program consisted of lectures and site visits of the former projects in Bangkok to insinuate trainers into the project objectives. The Japanese Experts gave lecture sessions to the trainers for the study trip to Japan according to the specific topics. Before the lectures the field trips to Phuket, Udon Thani, Chaing Mai, Chaing Rai and Rayon with Japanese Experts were scheduled to study the former NHA projects. The curriculum with schedule for lectures is shown in Appendix 4-2, and the outlines of lectures are shown in Appendix 4-2-1. The copies of lecture handouts and CD installed data of lectures were submitted by the sort-term experts.

(3) Purpose and Outline of the Trainer Training in Japan

The Japanese Experts formulated the training curriculum and schedule in Japan based upon the discussions with CP how to acquire Japanese experience in housing development, as well as technology and measures to meet various resident needs.

The training curriculum was formulated according to the range of NHA services. Through discussions and interviews with CP and other NHA staff on the current situation of NHA, the short-term experts analyzed three critical measures to be improved for the capacity building of NHA staff. Lectures and field trips in Japan were planned according to the training needs assumed in each critical measure. The selected lectures and visits in Japan based on the training needs are shown in the following table. The curriculum with schedule is shown in Appendix 4-3.

As it was no examples correspond to the training needs to find in Japan in these days, some of the necessary training could not include in the curriculum of the training.

Table 4-2: Selected lectures and visits in Japan based on the training needs

Critical Improvement Measures	Needs of trainings	Selected Lectures and Visits on Experiences in Japan	
		Categories	Lectures and Visits
1.Improvement as a National Housing Policy Making and Support Agency	1.Empowerment of Support to LA 2.Empowerment on National Housing Policy Making	Housing Policy of LA in Japan	1.Housing policy of Osaka Prefecture 2.Housing policy of Nerima-ku 3.Housing policy of Toshima-ku 4.Housing policy of Sumida-ku 5.Housing Policy of Higashi-Hiroshima-shi 6.Housing policy of Kurashiki-shi 7.Community Planning Policy of Kyoto-shi
	3.Clarification of the role of NHA	Role of Government Housing Agency in Japan	1.The history of government housing agency in Japan 2.Role of UR
2.Improvement as a Housing Project Implementation Agency	1.Quality Improvement on Living Environment 2.Improvement of Building Quality 3.Improvement on Housing Supply Service	Rental Housing for Public	1.Renovation of publicly-operated rental housing, and Publicly-operated rental housing especially for elderly in Nerima-ku (Kitamachi and Doshida) 2.Various types of publicly-operated rental housings in Higashi-Hiroshima-shi 3.Reconstruction of a publicly-operated rental housing in Kurashiki-shi (Nakasho)
		Improvement for Densely-built Area (disaster prevention)	1.Upgrading-project of a dense housing area in Sumida-ku (Kyojima) 2.Upgrading-project of a dense housing area in Toshima-ku (Higashi-Ikebukuro) 3.Upgrading-project of dense housing area and Disaster Prevention Project of Urban Area in Osaka Prefecture (Neyagawa-shi)
		Preservation of historical housing district	1.Preservation of a historical town in Kurashiki (Bikanchiku) 2.Traditional urban housings in Kyoto(Gionshimbashi, Sanneizaka, Kiyomizu)
		Cooperative Housing	1.Cooperative housing in Japan 2.Senbon Cooperative Housing (Kyoto-shi) 3.TEN Cooperative Housing (Osaka-shi)
	4.Improvement on Urban Development	Urban Development	1.JHC 'New Town' project in Tokyo Metropolitan (Hikarigaoka) 2.Urban renewal project in slum area in Hiroshima-shi (Motomachi) 3.Housing projects by Osaka Housing Supply Corporation (Senri) 4.Introduction of housing development in central urban area by UR through urban renewal methods in Tokyo (Ariake, Harumi, Kachidoki, Okawabata, Toyosu, Shinonome) 5.The settlement environment of cities in Asia 6.Development history of Tokyo
	5.Consideration on Global Issues	Eco-Housing	1.Eco-friendly housing development in Tokyo (Fukasawa)
		Universal Design	1. Examples of Universal Design were found in everywhere in Japan
6.Facilitation of Community Development	Community Participation in Japan	1.Role of a private consulting company for community planning 'Machi-Zukuri' 2.Activities of residents' association in 'New Town' (Hikarigaoka) 3.Philosophy of the Town Planning with Community Participation in Osaka (Awaji, Kitashiba)	
3.Enhancement as a Center of Information & Technology	1.Improvement and Development on Technology & Service	Research and Development of Housing Technology / Global Issue / Universal Design	1.Progressed housing construction techniques (UR UHTRI) 2.Skeleton Housing in Osaka (NEXT 21 by Osaka Gas Company)
		Housing Construction Method for low-incomes	1.Construction method for low-cost housing in Utsunomiya (You-me Mansion)
	2.Collection and Distribution of Information on Technology & Service	Housing Museum/ Housing Information and Research Institutes	1.Tsuratti Senbon in Kyoto (Kyoto-shi) 2.Osaka Museum of Housing and Living (Osaka-shi) 3.Urban & Housing Technology Research Institute of UR (Hachioji-shi)

4-1-2 Project Evaluations by Trainers

(1) Method of Evaluation and Analysis

The questionnaire for the Project evaluation was conducted to the 10 CP in this trainer training on the final day of the training in Japan (Refer to the result of the questionnaire in Appendix 4-5; answering ratio 100%, N=10). Major items of the questionnaire were related to the Project in general, the trainings in Thailand and Japan. The method of answering was composed of the evaluation in 5 degrees in accordance with the Likert Scale, and the section for free remarks. The result of analysis of the questionnaire is shown in Appendix 4-4.

(2) Result of the Trainer Training

As the result of the evaluation, it was revealed that the degree of satisfaction of the 10 CP could be judged to be high in general. There are several points to be noted according to the evaluation of the training.

1) The trainer training in Thailand

As of the answers for the question in general, the training can be recognized as useful. The following matters are obtained as a result of the evaluation.

- Necessity to lengthen the hours of lectures.
- Good relevancy of the schedule and curriculum of lectures.
- Usefulness of the contents of lectures for their works.
- Necessity of the attendance of Thai interpreter.

2) The trainer training in Japan

As of the answers for the question in general, the training can be recognized as very useful. The following matters turned out as a result of the evaluation.

- Necessary to lengthen the period of field trip.
- Satisfaction of the schedule and curriculum of lectures and field trip.
- Usefulness of the contents of lectures for their works.
- Satisfaction of the attendance of experienced Thai interpreter.

4-2 NHA Staff Training

4-2-1 Record of Training

(1) Purpose and Schedule of the Training

The training to enhance the capacity of NHA staff for planning, implementing and managing low-income housing development to meet various kinds of needs was organized and implemented. NHA nominated 50 staff members from various sections and departments to be trained in the Project. The trainers participated in the trainer training lead and plan a series of the capacity development program for the 50 staff members and the officials from local authorities. The series of training sessions are presumed to be the most important activities to achieve the over-all goal of the Project through which the know-how of implementing low-income housing development is to be transferred to local authorities and the local authorities implement low-income housing development.

The training consists of three parts; training in Thailand, training in Japan, and On-the-job training in Phuket Municipality.

The training sessions for the 50 staff members were held between 27th of August and 6th of September 2007 in Bangkok. Then, the study trip to Japan in two groups had been held; for Tokyo Group between 10th and 15th of September, for Osaka Group between 15th and 21st of September 2007. Immediately after coming back from Japan trip, the OJT started from 28th of September. There were three sessions during the OJT in Phuket and it ended on 27th of November in 2007. After the training, the project team made an evaluation by questionnaire.

(2) Selection Criteria of the Trainees

Basically NHA set up criteria for trainees in the training to give a chance to promising staff members in various divisions to develop their capacities. According to the selection criteria, the trainees are to be:

- A. over level 3, (: the first level of staff joins NHA right after graduation from university)
- B. university of technical collage diploma holder,
- C. nominated by a director of the assigned division,
- D. able to join into all the activities of this project,
- E. not receiving any scholarship.

As the result, at least one trainee was selected from all the operation Lines of NHA as shown in the Table and Figure as shown below. 25 female and 25 male staff members were selected.

Table 4-3: Professional background of the trainees

Profession/Title	Tokyo Group		Osaka Group	
	Female	Male	Female	Male
Director/Deputy/Head		2	1	3
Architect	1	8	3	5
Engineer	3	3	1	2
Analyst	3		4	
Accountant	1			
Financier			1	
Economist	1		1	
Lawyer	1	1		
Officer		1	1	
Management officer	1		2	
TOTAL 50trainees	11	15	14	10

The trainees are divided into two groups based upon the study tour areas; 26 trainees in Tokyo Group and 24 trainees in Osaka Group. 26 among 50 trainees have architecture or engineering background. The name lists of the trainees according to the study tour to Japan are shown in Appendix 4-6. The average age of trainees is 38.4.

After the study tour to Japan, the trainees were shuffled into two groups based on their interests for the OJT in Phuket.

Table 4-4: The departments and divisions of trainees and their levels

LINE LEVEL	DEPARTMENT LEVEL	DIVISION LEVEL	Tokyo Group		Osaka Group	
			Female	Male	Female	Male
Planning and Customer Service Line	Policy and Plan Department	Risk Management Division			1	
		Monitoring and Evaluation Division				1
	Housing Study and Development Department	Study Coordination Division	1			
		Housing Information Division				2
	Construction System and Material Development Department	Construction System and Material Development Division			1	
Financial and Investment Management Line	Accounting Department	Management Accounting Division	1			
Central Administration Line	Financial and Investment Management Department					1
		Legal Center	Legal Acting Division	1		
	Human Resources Department	Human Resources Development Division		1		
		Human Resources Management Division				1
Repair and Maintenance Center		1				
Operation Line 1 be responsible for the East and Lower of the Central Part	Project Management Department 1	Production and Construction Division 1			1	
		Production and Construction Division 2			1	
		Production and Construction Division 3			1	1
		Public Utility and Environment Division 1			1	
		Financial and Project Accounting Management Division 1	1			
	Community Management Department 1	Provincial Community Management Division 1		1		
Operation Line 2 be responsible for the North East	Project Management Department 2	Production and Construction Division 4				1
		Production and Construction Division 5		1	1	
		Production and Construction Division 6		1		1
		Public Utility and Environment Division 2	1			
		Financial and Project Accounting Management Division 2			1	
	Community Management Department 2	Provincial Community Management Division 2			1	
Operation Line 3 be responsible for the North/ Upper of the Middle Part	Project Management Department 3	Production and Construction Division 7	1			
		Production and Construction Division 8	1			1
		Production and Construction Division 9		1		
		Public Utility and Environment Division 3				1
		Financial and Project Accounting Management Division 3	1			
	Community Management Department 3	Provincial Community Management Division 3			1	
Operation Line 4 be responsible for the South	Project Management Department 4	Production and Construction Division 10				1
		Production and Construction Division 11		1		1
		Production and Construction Division 12		1		1
		Public Utility and Environment Division 4	1			
		Financial and Project Accounting Management Division 4			1	
	Community Management Department 4	Provincial Community Management Division 4	1			
Special Project Department	Community Improvement Division			1	1	
	Urban Renewal Division			1	1	
	Urban Development Division			1		1
Total			11	15	14	10

(3) Outline of the Two-week Training in Thailand

The trainers formulated the schedule and curriculum. The training in Thailand was planned as a program of the combination of the lectures and former project site visits in Bangkok to insinuate themselves into the project idea gradually as well as trainer training. The trainers provided lecture sessions according to the specialty to give them the knowledge to be studied in Japan. The curriculum with schedule is shown in Appendix 4-7, and the outlines of lectures are shown in Appendix 4-7-1.

(4) Outline of the Training in Japan

The trainers scheduled curriculum by themselves, and the Japanese experts assisted them. The trainings in Tokyo and Osaka were implemented in September 2007. The most lectures and field studies were selected from the trainer-training curriculum. It was found through their comments after the trainings that the training in Japan gave a lot of information and experience as a trigger of consciousness, and encouraged the trainees to improve the situation of living environment in Thailand.

(5) Outline of the OJT in Phuket



<A meeting with the community people>



<A model of the tentative master plan>

40 Hong project



<Area photo showing OTOP in the community>



<A model of the tentative master plan>

Luang Por project

1) Background

NHA have been implementing urban living environment improvement projects with local authorities for long time. Among them, projects in Phuket have been highly evaluated by the Municipality and, as the result, the Phuket mayor suggested NHA to solve the problems of two communities, 40 Hong and Luang Por in the city. The expected project in the 40 Hong community will be a reconstruction of publicly operated housings. On the other hand, the expected project in the Luang Por community will be a re-blocking in slum improvement on the Municipality own plots. The schedule is shown in Appendix 4-8, and the name list of

trainees according to the study group is shown in Appendix 4-8-1.

2) Process

(a) 1st session

The first OJT session was implemented from 28th of September to 4th in October 2007 after the guidance to 50 trainees from the trainers in NHA. The purpose of the first session was to discuss with the community people, to survey the communities by interview and physical measurement, and to have workshops for making plans together with Municipality working staff to present the communities. At the end of the training session, the team with Phuket Municipality made presentations of one proposal to each community. The trainees improved the proposals according with the comments and discussions with the communities and the Municipality after coming back to Bangkok, and prepared for the second session.

a) Findings in the 1st session

The findings of the 40 Hong Community are:

- Accuracy of the measurement by GPS was not reliable
- All of the members requested that each housing unit should face to the front road.
- Most members are willing to reconstruct the housing.

The findings of the Luang Por Community are:

- The non-registered resident house has no house number.
- Some of the residents do not pay land lent to the municipality.
- The community is grouped by relationship.
- The leader has no strong leadership.
- Most of the residents will stay in the area from now onward. The relocation of the community will be difficult.

(b) 2nd session

The second OJT session was implemented from 26th to 29th in October 2007. The two groups of trainees made presentations of the plans prepared in Bangkok to the communities and the Municipality. After the workshops, discussions with the communities and the additional surveys, the team explained a revised plan to each community and discussed with the Municipality.

(c) 3rd session

After refining the plans in NHA, the last OJT session was implemented between 25th and 27th in November 2007. Before the last session, the team made a presentation about a series of the trainings to the executives of NHA on November 21.

The team made the final presentation to each community. The 40 Hong community accepted the proposal. The Luang Por community agreed with the proposal and started to organize a saving group and established a saving account in a Bank. Although there are some problems remained to be considered in the future, such as the financial support method, most community members and the mayor agreed to forward the projects and asked NHA to assist the Municipality continuously.

The record of OJT is shown in Appendix 4-8”.

4-2-2 Project Evaluation

(1) Method of analysis and evaluation

The evaluation was conducted by questionnaire. The method of answering was mostly composed of the evaluation in 5 degrees in accordance with the Likert Scale and the section for free remarks.

(2) Two weeks lecture session in Thailand

The questionnaire for the evaluation was conducted to 50 trainees at the end of the session (Refer to the result of questionnaire in Appendix 4-10; answering ratio 88~100%, N=44~50). Major items of the questionnaire were about the lectures in Thailand before going to the study trip to Japan. This evaluation shall be utilized for review of the textbooks prepared by the lecturers to make manuals for future trainings. The result of analysis and evaluation of the questionnaire are as follows.

1) The result of the evaluations of the two-week lecture session

Most of the lectures and their textbooks will be useful for the future trainings. The topics in those lectures and textbooks may have great weight with trainees not only because of the trainees' interest but also of the necessity of capacity development for low-income housings.

More than a half of the trainees were staff with the background of architecture and civil engineer. The topics concerning with the technology in Japan like "Universal Design" were highly rated. Also, the topics related with the low-income community development method like "Urban Development Plan/Slum Prevention Plan" and "Lesson Learned from Low-income Housing Development" aroused the interest of trainees. On the other hand, some of lectures like "Housing Financial System" were not rated from many trainees. However, it may not be appropriate to compile only the highly rated topics in the textbooks for trainings in the future since the trainees were not familiar with all the subjects in lectures.

(3) OJT in Phuket

At the end of the last session, the evaluation by the community people, Phuket Municipality staff and the trainees was made. The questionnaires are shown in Appendix 4-10-1, Appendix 4-10-2 and Appendix 4-10-3.

1) The result of the evaluation by the communities

(a) 40 Hong Community

The 45 community members answered the questionnaire among 51 households. Most of the community members were satisfied with the presentation and asked NHA to continue developing the community with Phuket Municipality. The following matters obtained as the result of evaluation.

- Satisfaction of the cooperation with NHA and the Municipality
- Necessity of an appropriate loan by the Municipality or NHA
- Necessity of a temporally housing during the reconstruction

(b) Luang Por Community

The 35 community members answered the questionnaire among 56 households. Satisfaction level of the community members was relatively lower than one of the 40 Hong Community. The following matters obtained as the result of evaluation.

- Necessity of their living environment improvement
- Necessity of NHA assistance as an organization between the community and Municipality

- Necessity of an appropriate loan.

As the result of the evaluation, both of the communities are really looking for a fair and experienced facilitator with the ability of detail planning who is able to work as an intermediate among community members, community leaders, the Municipality, financial institute, and the Government.

2) The result of the evaluation by Municipality

As the training of local authority staff was a part of the project, they had participated in the practical survey, analysis, and evaluation together with NHA trainees. Most of the answers evaluating the presentations by NHA were very good for the Municipality as well as the communities. For the municipal officers, the presentation of 40 Hong group looked very good according to their evaluations. However, their observation might show that some members would not agree with the plan for the Luang Por community.

Many officers evaluated the assistance of NHA was quite good and satisfactory and would like to work together for housing development projects.

3) The result of the evaluation by the 50 trainees

From the result of the trainees' evaluation, it is concluded that the on-the-job training in Phuket by taking part in the community participation approach for low-income housing development gave a certain impact to them.

(a) Survey in the community

More than half of the trainees observed not friendly or fair atmosphere about the communication between the community and the Municipality. Furthermore, the trainees thought the community members had been much friendlier to trainees than to the Municipality officers.

(b) The Municipality

The trainees evaluated the officers of the Municipality as 'willing to cope with and understood the contents of the presentation very well'.

(c) OJT

Most trainees had satisfied with the case study in Phuket and thought it to be relevant with their present work.

According to the questionnaire, 60% of the trainees are very interested in the slum improvement project. The other 40% trainees think it not attractive but good experience. There are comments from the trainees like "I feel good to very good about this project. This project makes new generation in idea about housing, especially for low-income Housing Development. All of this will be very helpful to develop my future work", "I think this study is very useful for people in the community and hope it will come true in the future" and "I learn a lot of problems, process, relationship, knowledge and others." On the other hand, there are trainee's pessimistic comments like "This project can not extend because NHA management is not interesting."

As the result, both of the community and the Municipality regard NHA as an experienced facilitator with technical background to be able to promote slum improvement project together with them.

4-3 Seminar in February 2008



<Guests and NHA Executives>



<Presenters>

NHA held a seminar entitled “Direction for Urban Development and Urban Renewal” on February 11, 2008 at Queen Sirikit National Convention Center, Bangkok. The main objectives of the seminar were to impart the knowledge and provide the venue for the participants to share their experiences on housing and urban redevelopment to the public. The seminar was one of the activities in the Project, which has been cooperated with JICA, and a celebration event for the 35th NHA anniversary. The program of seminar is shown in Appendix 4-11.

The participants were approximately 500 people including general public, representatives from the Government, local authorities and communities, researchers and experts from academic and related organizations, the press staff, while the participants from NHA were around 250 people of almost all the NHA executives and directors, and this seminar staff including the 10 CP and members of 50 trainees of the OJT in Phuket.

At the beginning of the seminar, remarks by 3 participants, such as Mr. Suchard Siriyodhipan, Governor of NHA, Mr. Sutha Chansang, Minister of Social Development and Human Security, and Mr. Masazumi Ogawa, JICA Deputy Resident Representative. After that, a brief presentation of Keynote Address on Prospects for Urban Redevelopment was carried out by Mr. Kwansuang Atibodhi, Diploma in engineering and Advisor to Executive Board of Directors, NHA.

The seminar was composed of 3 parts of activities that were Case Study Presentation and Discussion taken place in the morning, Workshops proceeded in the afternoon and Workshop Presentation and Conclusion at the end of this seminar.

(1) Case Study Presentation and Discussion

Four presenters showed case studies of each topic on urban development and urban renewal, as follows:

- 1) BTS and BMA by Ms. Panyapat Nopphan, Director of Urban Development Planning Division of Bangkok Metropolitan Administration (BMA)

The land use plan in Bangkok was explained that it was set up in macro or city level but not studied in micro or area level yet. BTS and BRT managed by BMA were introduced concerning the present situation and future plan together with development plans along with those lines.

- 2) Housing Development and Urban Renewal in Regional Cities by Mr. Ruangyuth Teeravanich (Mr. Yuai) Policy and Planning Analyst 9, Department of Housing Development Studies, NHA

Regarding this topic, examples at neighborhood level to city level implemented in Thailand and other countries were presented. And also the activities of the OJT in Phuket by the Project team were introduced.

- 3) Social Process of Urban Redevelopment Project; Din Daeng Case Study by Mr, Manop

Prathoomthong, Researcher

The general information on this project was explained including the result of latest research that 16% of the present residents want to move out, 42% want to stay in the replaced housing, 27% want NHA to repair the existing housing, and 14% have not decided yet. The presenter emphasized that NHA should have explained describing “the housing reconstruction is needed due to the deteriorated housing condition in advance and the participation of residents are necessary in the process of this project.”

4) Urban Redevelopment; International Experiences by Dr. Eggarin Anukulyudhathon, Assoc. Prof., Dean of Architecture Faculty, Kasetsart University

Examples for sustainable city development were introduced as showing implemented cases including the redevelopment project of Citroen factory site to a residential area provided with public and commercial facilities in Paris, Green Tram project with concept of railways covered by grass in Bordeaux, a project of the land use transfer from freeway to water front in Seoul, etc.

(2) Workshops

In this seminar, four workshops with around 100 participants of each were conducted according to the specific topics as follows:

Group 1: Urban Development and Urban Renewal Policy facilitated by Dr. Eggarin Anukulyudhathon

Group 2: Urban Development and Urban Renewal in BMR by Dr. Banasopit Melvichai

Group 3: Housing Development and Urban Renewal in the Region by Mr. Kwansuang Atibodhi

Group 4: Management Process for the Enhancement of Urban Community Renewal by Dr. Yongtanit Pimonstatean

Particularly, workshop of group 3 was related to the Project and the activity in workshop included problem presentation by participants from several local governments and academic organizations, and compilation of those opinions.

1) Case of Phuket presented by the Phuket Mayor

a) Sustainable tourism must generate income to people of every level; from fisherman to merchant

b) In the case of preservation of old building on Talong Rd. & Deebook Rd., an old city preservation foundation was established under the support by the municipality subsidy and people’s donation. Project was implemented in cooperation with the municipality, GTZ, Ladkrakang University and Phuket people.

2) Case of Sakonakorn by the Deputy Mayor

a) For the municipality, problems are to invest infrastructure in the suburban area where people move to live, and to develop the old city without planning.

3) Case of Nakornsawan by the Deputy Governor

a) In a low-income community, problems are land ownership, project finance, discontinuity of assistance from responsible organizations.

b) No budget under the Decentralization

c) Municipality has a plan to develop the origin of Chaopraya River with the cooperation of Association of Siamese Architect.

d) In the case of the rehabilitation of city wall, city people who developed the landscape initiated themselves, and Municipality, which improved the area by providing jogging track, lawn, benches, etc. worked together.

- 4) Case of Chiang Mai by Ms. Issara Gantang from Chiang Mai University
 - a) In general, problem is the discontinuity development in municipality such that when the new group comes, they abandon the development plan and works provided by the former mayor.
 - b) Many foreigners, especially old Japanese people, stay on occupied land in city. This group has high quality of life than local people, which is not fair for local people.
 - c) Other problems are bad public transportation system, pollution, such as air pollution, solid waste, etc., many gated communities without road network.
- 5) Comment given by a NGO staff
 - a) Based on the experiences of the rehabilitation projects in 40 cities, public participation is the most important issue that includes hearing people's needs and preferences.
- 6) Comment by Mr. K. Narong from Decentralization Committee
 - a) Although slum improvement is a decentralized task, NHA still acts as an assistant in terms of technology (know-how).
 - b) Decentralization does not allow local governments to provide low-income housing.
 - c) Only Nakorn Municipality is capable to provide low-income housing, besides this city, it is prohibited. (The Supreme Court judge)
 - d) On budget allocation, expenditure of budget depends on priority setting by Municipality. However, Municipality has many public service tasks so that it is quite difficult for them to handle low-income housing supply.
 - e) At present, as local governments are not capable to provide low-income housing, NHA should take this responsibility.
- 7) Comment by Dr. Sonchai Lobyaman from Office of Transport and Traffic Policy Planning
 - a) Thailand pays less attention on Urban Development.
 - b) There are many organizations but who can be the host for the Urban Development?
- 8) Comment by a researcher from Khonkaen University
 - a) Vision of city should come from people's needs in a city.
 - b) All organizations must coordinate to achieve goals.
 - c) People must help themselves.
 - d) In the case of a small scale Urban Renewal in Khonkaen, the municipality rearranges the traffic route of railway to take some area back to develop as city green area and 18 communities along the railway have plan to relocate in new area. However, commercial oriented private sectors buy prime land of the city for real estate development.
- 9) Comment by a researcher from Institute of Technology
 - a) Problem is development without vision; Tourism city, City of fishery or City of education
 - b) Most of budgets are allocated for beach improvement.
 - c) Abandon preservation of old city
 - d) Welfare house of government officials are deteriorated.

(3) Workshop Presentation and Conclusion

After the discussion in each workshop, the group facilitators presented the findings from the workshops as follows:

- Group 1: - Urban Renewal is a tool to "Infill" deteriorated area with new functions.
- Urban Development should not abandon the poor.
 - Right of people to know, think, participate, and decide needs to be secured.
 - Create public awareness toward liable city
 - Urban Renewal must pay attention to "People"
 - Should study local cultural and social structure

- Major Concerns;
 - A to I (Access to Information)
 - A to P (Access to Participation)
 - A to J (Access to Justice)
 - Equity & Resources (Ethic)
 - Zone to Urban perception
 - NHA should be a main actor in Urban Development but needs to cooperate with other people.
 - Urgent Issues;
 - (a) Slum
 - (b) Wastewater in BMA
 - (c) Integrated Development Plan: Real Implementation
 - (d) Establishment of National Urban Development Agenda
 - a) Land Use Planning (Regional Level)
 - b) Land Use Planning (City Level)
 - c) Environmental Preservation Laws & Regulations
 - d) Heritage Preservation Laws
 - Conclusion;
 - (a) National Agenda: Urban Development & Renewal (Top down policy)
 - (b) Definition of organization roles & responsibilities
 - (c) Participation of all stakeholders
 - (d) Public- Private partnership (Involvement of participation in process)
 - (e) Civil society participation in process: to specify their city vision & goals
- Group 2: - Objectives of Urban Community Renewal;
- (a) for better physical & economic condition
 - (b) to develop housing for all
 - (c) to provide public facilities
- Implementation (Analysis from the cases they discussed in the workshop);
- (a) Landowner
 - (b) Landowner + Related organization
- Process;
- (a) Commitment & Landowner; clear
 - (b) Master Plan; clear & touchable
 - (c) Assistance from Government; organization, budget, laws & regulations, incentives
- Strategies;
- (a) Feasibility Study; stability
 - (b) Win Win Solution; appropriateness (social, cultural)
- Organization;
- (a) Urban Development Cooperation; should set up
- Group 3: - City is the public issue.
- Ideal Model; Urban Development Committee + Urban Development Plan; Academic persons assist in process
 - Existing Model; Local → CODI/NHA → National
 - Decentralization; no success, many tasks with no budget, confusion, no continuity, very fast procedure (Local governments are not ready yet)
- Group 4: - must employ different methods for different cases.
- set common goal for the involved people

This seminar could provide an opportunity for various people to share their problems and opinions on Urban Development and Urban Renewal. Their comments made on the case study presentations and workshops were very general and basic issues and need to be notified by the public and related organizations. Then, the next steps will be finding the appropriate solving methods for different problems related to the implementation systems and plans, and implementation of actual projects. Although those people may struggle with intricate and unexpected issues in each development project because the fundamental measures and systems are not prepared in this country yet in terms of laws, regulations, taxation, infrastructure, etc., they have already reached this point so that they have nothing but proceeding to the goal step by step.

4-4 Preparation for the expected Seminar after the Project

NHA is planning to hold a seminar after the completion of Project, which is a part of the activities conducted in this Project to clarify the roles of NHA and Local Authorities.

(1) Seminar on Roles of NHA and LA in Low-income Housing Development

The 10 CP of this Project will conduct this seminar and the expected participants are representatives from local authorities, NHA executives, people from related organizations and Decentralization Committee. The objectives of seminar will be the clarification of each role in Low-income Housing Development and Slum improvement.

Before holding this seminar, NHA needs to set up its role clearly according to the decentralization policy. If necessary, NHA will submit its opinion to the Cabinet in order to discuss the real situation of decentralization, and revise the roles to be practical.

4-5 NHA Comprehensive Project Textbook

After the articles of Chapters 2 and 3 are translated in Thai and CP edits them, it will be the NHA Comprehensive Project Textbook on the Low-income Housing Development for the staff of NHA and Local Authority. The Project provides the fundamental material for the textbook.

4-6 E-textbook

After CP compiles the NHA Comprehensive Project Textbook and additional information from CP side, it will be the E-textbook for distribution of useful information to the general people and local authorities. A draft of the structure of the relation between the textbooks and the e-Textbook are shown in Appendix 4-13.

4-7 Guideline for Project Manual of Community Development and Slum Prevention Plan

In the Project, this Guideline for the Project Manual of Community Development and Slum Prevention Plan has been prepared for the staffs of NHA and Local Authority who operate projects in communities, in order to explain how to take steps to the goal of a project. This guideline clarifies the principle of the Project Manual that the CP is attempting to edit later. (See Appendix 4-12)

Chapter 5

Chapter 5 Conclusion and Recommendations

5-1 Roles of NHA and LA in the field of Low-income Housing Development

Responding to each field of Low-income Housing Development as shown in the table below, we propose expected roles of NHA and LA in the following parts.

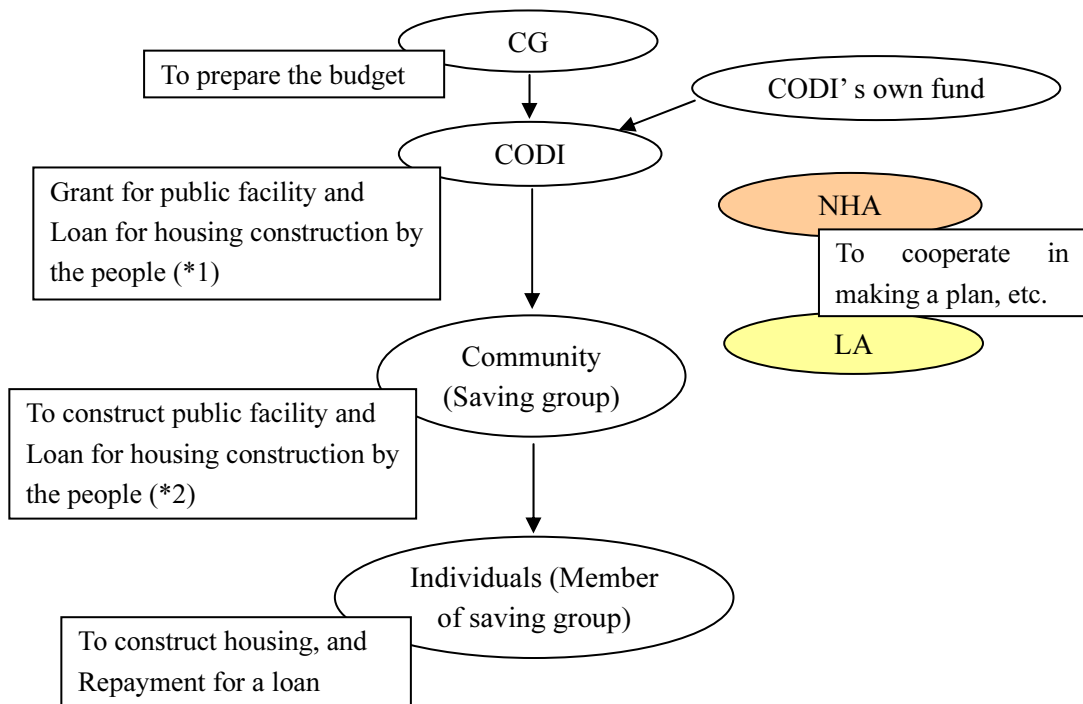
Field	Type of Project
Slum improvement	Upgrading
	Reblocking
	Reconstruction
	Land-sharing
	Relocation/Resettlement
Housing provision	Housing for sale including Hire-Purchase Housing (Construction and Sale of Housing)
	Rental Housing for Public (Construction and Operation of Rental Housing for Public)
	Rental Housing for Government Personnel (Construction and Operation of Rental Housing for Government Personnel)
Preservation	Support for preservation of traditional-style housings
Housing Loan	Loan system supporting construction/renovation/purchase of housings

5-1-1 Roles of NHA and LA in Slum Improvement

- In considering that;
- (1) Decentralization policy expects LA to implement Slum improvement.
(On the other hand, Decentralization policy does not prohibit NHA to implement Slum improvement.)
 - (2) The Municipality Act prohibits LA to expense its budget for the project on a private land.
(It means that LA is allowed to implement the project only on public land.)
 - (3) CG has a budget distribution system to LA, but it does not include a specified budget for Low-income housing development. In most cases, LA is not willing to allocate a part of its own budget to Slum improvement because of its limited income.
(It can be proposed that CG would establish a new budget distribution menu to LA focusing on Slum improvement.)
 - (4) It is very difficult for LA to establish its own housing loan system for low-incomes.
(It can be proposed that NHA would establish a new housing loan system for low-incomes instead of LA.)
 - (5) CODI’s system including a grant and loan (Baan Mankong) is expected to continue.
the following two systems can be proposed.

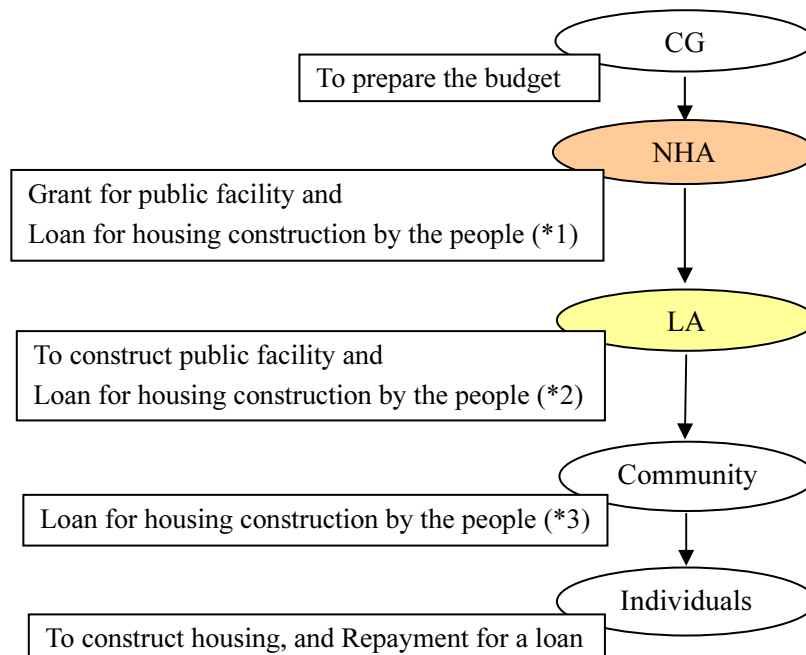
System A-1 (Baan Mankong)

- (1) Existing system. Many projects have been done and many projects are on going.
- (2) The gap between the interests of (*1) and (*2) is spent for a management cost including a cost for making up the frozen loans.



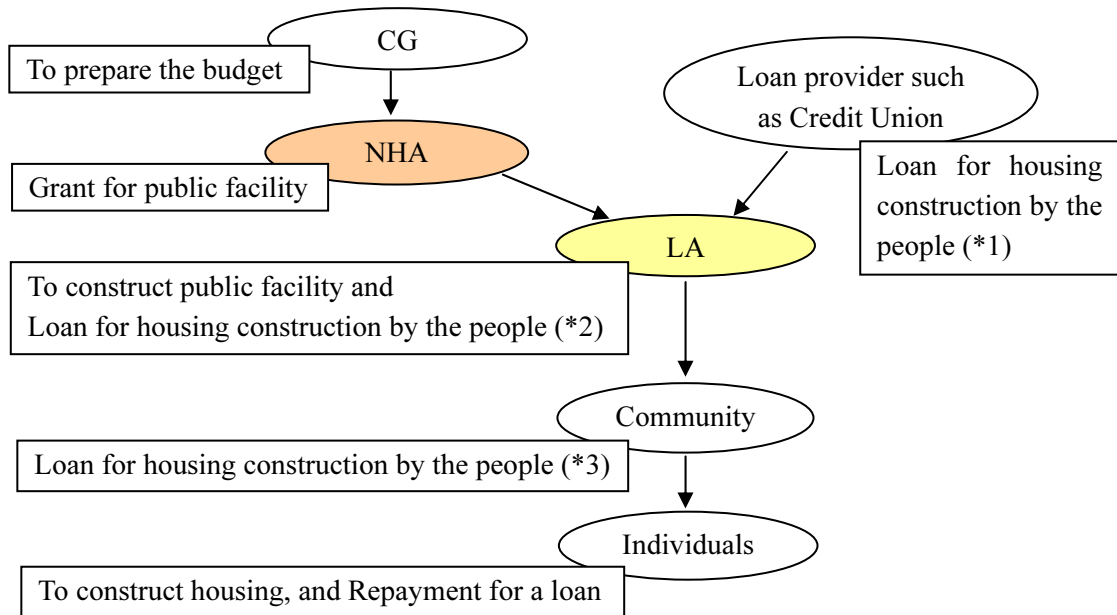
System A-2 (LA project financially and technically supported by NHA)

- (1) Proposed Project (Approval of CG is needed for the system establishment.)
- (2) The gap between the interests of (*1), (*2) and (*3) is spent for a management cost including a cost for making up the frozen loans.
- (3) It must be examined whether LA is allowed;
 - to construct public facilities in case of the private land, and
 - to loan to individuals.



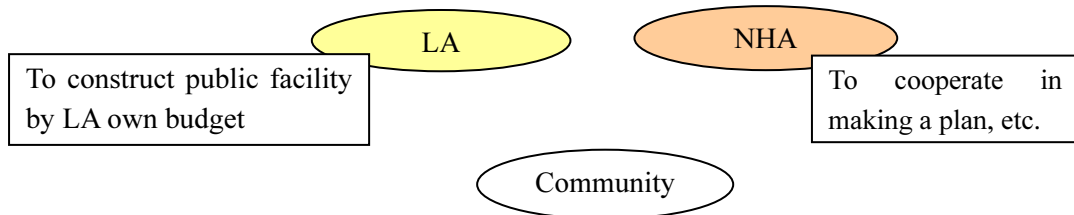
System A-3 (LA project financially and technically supported by NHA and financially supported by Loan provider)

- (1) Proposed Project (Approval of CG and Cooperation with a loan provider are needed for the system establishment.)
- (2) The gap between the interests of (*1), (*2) and (*3) is spent for a management cost including a cost for making up the frozen loans.
- (3) It must be examined whether LA is allowed;
 - to construct public facilities in case of the private land, and
 - to loan to individuals.



System A-4 (LA Upgrading project technically supported by NHA)

- (1) Upgrading projects on public land can be done by LA within the present Acts and systems. But we can not expect LA to implement such projects because of their limited budget.



5-1-2 Roles of NHA and LA in Housing Provision

In considering that LA is not allowed to provide;

- not only housing for sale
- but also rental housing,

NHA should maintain its role of a main provider in each system in cooperation with LA as shown in the table below.

System	Role	
	NHA	LA (Local authority)
B-1 Housing for sale	To construct and sell housing	LA is expected to; - cooperate with NHA in planning, and - manage public facilities after construction.
B-2 Rental housing for public	To construct and operate rental housing	LA is expected to; - cooperate with NHA in planning.
B-3 Rental housing for Government personnel	To construct and lease to Government or LA.	LA can request NHA to construct and lease to LA.

<Some points to be considered for the implementation>

(1) B-1 Housing for sale (including Hire-purchase housing)

Resume of Baan Eua Arthorn or establishment of another housing provision system is under discussion as of March 2008. In considering that some projects of Baan Eua Arthorn failed, improvement of the project method (described in 5-2-2) is needed.

(2) B-2 Rental housing for public

There are some problems in the operation of existing NHA rental housing. Improvement of the operation system (described in 5-2-2) is needed.

5-1-3 Roles of NHA and LA in Preservation

In considering that the Municipality Act prohibits LA to expense its budget for the project on a private land, NHA should maintain this system as shown the table below.

System	Role	
	NHA	LA (Local authority)
D-1 Preservation	To give subsidy and loan for the projects.	To cooperate with NHA.

<Remark>

CG approval is needed for the NHA budget

5-1-4 Roles of NHA and LA in Housing Loan

Besides GHB, it is better for NHA to establish new housing loan system.

- (1) This housing loan system is not like a housing loan which is related to Slum improvement projects mentioned in 5-1-1.
- (2) This housing loan system is aimed to give loan to;
 - a low-income community or low-income individuals who needs a loan for;
 - a construction of their own collective housing,
 - construction of their own individual housing, or
 - purchase of their own individual housing.

Field	Role	
	NHA	LA (Local authority)
Housing Loan	To give loan to the community or individuals.	To cooperate with NHA.

<Remark>

- (1) CG approval is needed for the NHA budget.
- (2) Demarcation of this housing loan system and GHB loan must be considered.

5-2 Recommendation for NHA on Organization Reengineering for Future Missions

5-2-1 Establishment of clear missions

On 18 December 2007, the Cabinet approved “National Strategy for Housing Development” in principle. It provides that all housing-related sectors including;

- Government sector,
- Private sector,
- Civil society, and
- People

must be involved. But, the roles of NHA are not clear yet.

In February 2008, new Cabinet was established after the election of the Parliament members on 23 December 2007.

It is needed to make the Thai housing policy and NHA role clear. Draft of the NHA role in the field of low-income housing development is proposed in **5-1**.

5-2-2 Improvement of project methods

(1) Housing for sale or Hire-purchase housing

<Feasibility judgment by NHA>

Before Baan Eua Arthorn, NHA developed a lot of hire-purchase housing and sold them successfully all over the country. (There were some failed projects too.) NHA has a lot of experiences on marketing process or feasibility study, which is done through examination or comparison with near-by projects or similar projects from the viewpoint of;

- estate planning and housing design,
- expenses (land price, construction cost, management cost, etc.),
- expected incomes (plot prices, housing prices, etc.),
- transport to the places for work, study, shop, etc.
- environmental conditions,
- neighborhood,
- etc.

Main reason why NHA failed to sell a lot of housings constructed through Baan Eua Arthorn is that NHA did not conduct marketing process or feasibility study by NHA itself and did not judge the result of the study by NHA itself.

If NHA restarts Baan Eua-Arthorn and NHA applies turn-key system again, NHA should judge the feasibility of each project by itself and should not leave this role to developers.

(2) Rental housing for public

<Collection of the rent>

In operating public rental housing, it is very important;

- (a) To check the qualification of the tenants/residents to live in the public rental housing especially from the viewpoint of their incomes.
- (b) To collect the rent surely, and

(c) To eject the tenants/residents if they do not meet the qualification or do not pay the rent. But these are difficult tasks for public organizations operating the rental housing. In Japan, there was the same problem in most public operated housing by LA and some UR rental housing in 1960' and 1970'. They got over the problem by steady efforts;

- to check the qualification one by one,
- to collect the rent one by one, and
- to eject the tenants/residents if they do not meet the qualification or do not pay the rent by using a legal method.

NHA should tackle this problem.

5-2-3 Capacity building for NHA staffs

We recommend capacity building for NHA staff as shown in below, in responding to the clarification of the role of NHA in the field of housing development for low-incomes.

<Training regarding to Slum improvement projects>

NHA staff training implemented in this Project was very effective for the trainees;

- (a) To acquire the basic knowledge on low-income housing development such as;
 - Housing Policy and Housing Situation in Thailand,
 - Local authority system in Thailand and decentralization policy,
 - Marketing method and demand analysis,
 - Housing finance system for low-incomes,
 - Housing design technique including eco-housing and barrier free,
 - Public participation in human settlement development,
 - Housing policy and housing development in Japan
- (b) To acquire the skill of;
 - how to communicate with the local people and LA,
 - how to stimulate the local people and LA, and
 - how to develop a plan with the local people and LA.
- (c) To acquire the experience which will be useful when they transfer the knowledge on low-income housing development to LA.

We recommend continuing this kind of training for other NHA staffs who are expected to be in charge of Slum improvement projects.

<Training regarding to Housing provision projects>

NHA will restart housing provision projects for low-incomes by means of Baan Eua Arthorn or so called normal housing project. In any cases, it is important that NHA judges the feasibility of each project by itself and do not leave this role to developers.

Therefore, we recommend NHA staff training on marketing research and feasibility study for housing provision projects.

5-2-4 Establishment of Center for Housing Development for LAs

This sub-section describes the necessity to improve low-income housing development capacity of LA by strengthening information and communication structure in cooperation with NHA.

There are three major points to improve low-income housing development capacity of LA by strengthening information and communication structure.

- To improve the function as an information center
- To improve public information service system for LA

(1) To improve the function as an information center

As an important factor on the services to the public with the increase of the housing development, NHA will be required to review its web site aiming at user-friendly interface on information technology.

There are three major points to be improved as a function of the information center.

- Necessity of the comprehensive information service
- Standardization of description and communal utilization of the data
- Corporate Social Responsibility and disclosure

(a) Comprehensive housing information service

If a person who is planning to move to a town in some reason, for example, to study in a school, or to work as a migrant, the person may ask to relatives or an estate agency in the town to find a place to stay in an affordable price. It will be a burden to mobilize the population without affordable housing condition. It will be suggested that the means to find a home have to be improved since nation wide public housing information system has not been developed yet.

It is estimated that the building of a search system by which any customer can draw out necessary information of public housing everywhere in the country will support the fluidity of population on a nationwide scale and will contribute to economic development.

Therefore, immediate search to draw vacancy information from the Web Page will be essential for customer service. The following systems will be enumerated for development or enhancement by the initiative of NHA in the future.

a) Nationwide publicly operated housing information

NHA will be able to find the information retrieval system for the nationwide publicly operated housing. It will particularly be an effective service to small-scale local authorities. Customers will be able to appreciate the benefit by easy search tool.

b) NHA rental housing information

If the rental housing information system exists on the web page when a resident wants to lend or exchange the house, it will be appreciated both by the resident and a future tenant or resident. It is necessary to set a rule of contract between the tenants or sub-tenant.

c) BOI and privately developed lower-price housing information

If no nationwide information service is available in the web site of BOI about lower-price housing, which indirectly uses a subsidy from CG, NHA may cooperate together with BOI, private sectors and local authorities to develop database of the privately developed lower-price housing. NHA will be able to improve customer service as a center of housing information by dealing with housings supported by BOI.

d) NHA hire-purchase housing information

Hire-purchase housing information such as Baan Eua-Arthone has already been appeared in the webpage of NHA. However, the contents are mostly limited in the project information

like the size of the apartment and the site plan. NHA should provide the location and community information of the project area for the customers by cooperating with local authorities regarding how the project and surrounding environment is attractive along with the physical information of the project. Moreover, it will be possible to show the surroundings by hyperlink on the monitor screen to other web pages of various facilities as followings:

- local authorities,
- public services,
- schools,
- hospitals,
- community organizations and,
- shops.

(b) Standardization of description and communal utilization of community data

It is recommended that the following electronic information contents on NHA web site be improved for community organizations, researchers, specialists, and local authority officials. In e-Library on NHA web site, security has been controlled by username and password. The security control may be considered in some contents.

a) Information for LA and community

The addition of a symbolic icon to the first page of web site of NHA for local authorities and community is recommended to separate the contents from general customers.

The contents of the information will be the explanation of the methods of housing development of NHA, introduction of the good practices, explanation of the cooperation cases with local authorities, description of financial supporting means to the community development with hyperlinks to related organizations, such as LA, banks, CG organizations and institutions. It will be better to explain about the formality of request to NHA.

b) Geographic Information System

GIS of NHA is not related and compatible with GIS that the local authorities uses. Each local authorities is taking its own system without nationwide guideline. It is expected for NHA to propose GIS with the common backbone so that NHA and local authorities may efficiently discuss the development plans by sharing detailed database.

(c) Corporate Social Responsibility and Disclosure

NHA will be required from the public to disclose necessary information of the plans as a part of CSR. There are two points to be improved.

- Public hearing before project start
- Construction tender notice with equal opportunity

a) New project announcement and public hearing

To exchange various opinions from the public concerning the project, the web page will be a suitable method to disclose the basic information of the future development. The schedule and timing of the disclosure of the information should be conferred with local authorities so as not to cause the confusion of local society community. Moreover, notification concerning open hearing and briefing can be published on the web.

b) Tender notice and the result of building construction

The tender announcement and the result of projects to the public are indispensable from the point of fairness as an official organization. It is necessary to update the information at any time.

(d) Other aspect to be improved

a) Web accessibility

Internet users may feel the web page of NHA shows up very slowly. It is suggested to improve the accessibility to the web site, which is one of the important factors for consumers on choosing the service and products.

(2) To improve public information service system for LA

Local authorities are not yet playing the role to provide a variety of housing information services in the region to the public. Private developers are providing the information from the viewpoint of real estate investment for relatively higher-income customers. Therefore, NHA will be able to help and cooperate with local authorities to strengthen housing information service to the ordinary population who are looking for a house or apartment to move in and out. It is preferable that NHA establishes "Housing Information Center" with local authorities, enhances the function of customer service sections (Customer Relation Center/Public Relation Center) of NHA.

The activities of the center shall be:

(a) Various information services to local populace and those who schedule moving in (rent, selling, and custom-built house):

To introduce hire-purchase housing developed by NHA, publicly-operated rental housing, condominium for middle to low-incomes (BOI housing etc.), architects and engineers for custom-built, and short-term rental or sub-lease housing information for migrant workers and students, etc.

(b) Management service of rental and hire-purchase housing developed by NHA (maintenance and correction of maintenance fee, etc):

To implement NHA housing administration and rent collection, to assist establishment support for housing administration organization, to introduce housing management company, to carry out management technique consulting and large-scale repair counseling, and to carry out disaster prevention counseling, etc.

(c) Museum and library of regional information (history, culture, and climate, etc.)

To establish and manage housing museum, housing library, information search, and community newsletter publishing, etc.

(d) Counseling of housing environment improvement

To listen and give advice to the community which require housing environment improvement.

(e) Counseling on housing loan for the hire purchase housing of NHA

To evaluate and give consulting to the customer who would like to purchase housing of hire purchase.

(f) Counseling about the cooperative housing construction (for middle incomes)

To organize a seminar and study tour to introduce former projects, and architects who have experience of cooperative housing and committee.

(g) Scheduled seminars for public including housing maintenance, housing management organization, disaster prevention, etc.

If it is possible, the following services shall be provided in the center. The local authorities have to play the major role to make the service to the public into reality.

(h) Integrated showroom function of enterprise related to housing and home appliance

The center will be able to get rents from the companies to contribute to the administration expense. The companies can use the place for advertisement purpose. The customer can get information of the housing or buy spare parts of appliances.

(i) Classified advertisement and job introduction by the local authorities

The housing need is strongly related with the work place. However, the service may be possible in the large cities only.

(j) Others

Child rearing counseling, law counseling (registration, etc.), neighboring trouble counseling, welfare counseling, etc.

5-3 Capacity Building for Local Administrative Organization

5-3-1 Capacity Building for LA in Slum Improvement

As mentioned in 5-1-1, we cannot expect LA to conduct slum improvement projects in existing systems because of the reasons as mentioned in 5-1-1. If we succeed to establish the new system mentioned in 5-1-1, which includes new grant and loan system through LA, it is necessary to conduct LA staff training to teach the new system.

On the other hand, there are some LA which are interested in conducting slum improvement projects. NHA staff training in the field of slum improvement mentioned in 5-2-3 should be open for the staff of such LA.

5-3-2 Capacity Building for LA in Housing Provision

As mentioned in 5-1-2, NHA is expected to maintain a main role in the field of housing provision. On the other hand, as mentioned in 2-4-2 (D-2), LA is expected to manage public facilities after NHA constructed housing. We recommend making a lecture on the management of public facilities for LA staff who will be in charge of this work.

5-4 Conclusion

The conclusion will be described in April 2008 when the Project is completed.

