

# Low-income housing in Bangkok A review of some housing sub-markets

edited by Yap Kioe Sheng



HD  
7288.78  
T52  
3365  
1000

# Low-income housing in Bangkok

## A review of some housing sub-markets

## "BUILDING PRODUCTIVE COMMUNITIES"

1. A.Shahand, M.A.Tekie and K.E.Weber,  
*The Role of Women in Slum Improvement: A Comparative Study of the Squatter Settlements at Klong Toey and Wat Yai Sri Suphan in Bangkok, Thailand* (1986).
2. Md.A.Quader Miah, K.E.Weber and N.Islam,  
*Upgrading a Slum Settlement in Dhaka, Bangladesh: Study of Existing Conditions, Assessment of Dwellers' Potential for Self-Help, and Project Design* (1990).
3. Md.A.Quader Miah and K.E.Weber,  
*An Affordability Dynamics Model for Slum Upgrading* (1990).
4. Md.A.Quader Miah and K.E.Weber,  
*Potential for Slum Upgrading among Owners and Renters* (1990).
5. B.Igel,  
*The Economy of Survival in the Slums of Bangkok* (1992).
6. Yap Kioe Sheng (ed.),  
*Low-Income Housing in Bangkok: A Review of some Housing Sub-Markets* (1992).

**[LOW-INCOME HOUSING IN BANGKOK]**

**A review of some housing sub-markets**

edited by

**Yap Kioe Sheng**

**HSD Monograph 25**

*HD/7288.78/T52/B365/1992*

**Division of Human Settlements Development  
Asian Institute of Technology**

**Bangkok**

**1992**

1EAX0507

*Low-Income Housing in Bangkok:  
A Review of some Housing Sub-Markets*

*HSD Monograph, 25*

*Published by the Division of Human Settlements  
Asian Institute of Technology  
G.P.O.Box 2754  
Bangkok, Thailand*

*Copyright 1992 by Yap Kioe Sheng*

*Recommended catalogue description:*

*Low-income housing in Bangkok: a review of some housing sub-markets/  
edited by Yap Kioe Sheng.*

*Bangkok AIT 1992*

*153 p.*

*1.Housing I. Yap Kioe Sheng*

*ISBN 974-8209-31-8*



Division of Human Settlements  
Development  
Asian Institute of Technology  
G.P.O.Box 2754  
Bangkok 10501  
Thailand

Telex: 84276  
Fax: (66-2) 516-2126  
Tel.:524-5606, 516-0110-29



## ACKNOWLEDGEMENTS

An overview of low-income housing sub-markets in a city as complex as Bangkok cannot be written by one person alone. Different authors have, therefore, contributed chapters to this book. They, in turn, have often had to base themselves on findings, ideas and opinions of others. Where these had been recorded in published documents, reference has been made in the text and the bibliography at the end of the book. However, on behalf of the authors I would also like to express our gratitude to all those who verbally supplied ideas and information. They include the communities of Sengki and Suwan Prasad 2, the staff of the National Housing Authority, in particular Ms Chantana Chanond, many housing developers in Bangkok, Khun Sidhijai Tanphiphat of the Government Housing Bank, Ms Somsook Boonyabancha of the Asian Coalition for Housing Rights and Father Joseph Maier of the Human Development Centre.

Furthermore, I would like to thank Prof. Karl Weber and Prof. Ira Robinson, both of the Division of Human Settlements Development at the Asian Institute of Technology, for their support and Dr. Jan J. van der Linden of the Amsterdam Free University for his comments on a draft version of the book. Furthermore, we are grateful to Dr. Roger Hawkey for reviewing and correcting the text, to Ms Rossukhon Kaewrueng for formatting the manuscript and typing the tables, to Ms Moe Moe Lwin for drawing the maps, and to Ek Raj Ojha and Hari Srinivas for their assistance in producing the book.

Several organizations have funded the research which resulted in this book: the Asian Institute of Technology (AIT), the Canadian International Development Agency (CIDA) through its CIDA/AIT-CUC Partnership Programme, the International Development Research Centre (IDRC) of Canada, the National Housing Authority (NHA) of Thailand, the United Nations Centre for Human Settlements (Habitat) and the United States Agency for International Development (USAID). The CIDA/AIT-CUC Partnership Programme also partly financed the production of the book.

Yap Kioe Sheng

Bangkok, June 1992

## TABLE OF CONTENTS

<i>Acknowledgements.</i>	v
<i>List of tables.</i>	x
<i>List of figures.</i>	xi
<i>Abbreviations.</i>	xii
<i>Thai words.</i>	xii
<i>Conversions.</i>	xii
<b>INTRODUCTION</b>	<b>1</b>
<i>by Yap Kioe Sheng</i>	
<b>I : LOW-INCOME HOUSING SUB-MARKETS</b>	<b>7</b>
<i>by Yap Kioe Sheng</i>	
a. Bangkok.	7
b. Informal settlements.	9
c. Public sector housing.	12
d. Land sharing.	15
e. Resettlement.	23
f. Private-sector land and housing projects.	27
<b>II : THE SLUMS OF BANGKOK</b>	<b>31</b>
<i>by Yap Kioe Sheng</i>	
a. Slums and squatter settlements.	31
b. Living conditions.	35
c. Evictions.	38
d. The 1020 slums.	44
e. Conclusions.	47
<b>III : LAND SHARING : THE SENGKI PROJECT</b>	<b>49</b>
<i>by Yap Kioe Sheng and Shlomo Angel</i>	
a. Soi Sengki.	49
b. Living conditions in Soi Sengki.	51
c. Negotiating land sharing.	54
d. Selection of beneficiaries and plot allocation.	57
e. Financing the land purchase.	62
f. Lessons and conclusions.	66

IV : THE SUWAN PRASID 2 RESETTLEMENT PROJECT	73
<i>by Yap Kioe Sheng with Chiapchai Ruangchap</i>	
a. The evictions.	73
b. Plot allocation.	78
c. The move.	80
d. Financing the project.	83
e. Socio-economic conditions.	85
f. Investments.	88
g. Infrastructure and services.	90
h. The consequences of resettlement.	91
i. Conclusions.	94
V : PRIVATE SECTOR LOW-COST HOUSING	99
<i>by Foo Tuan Seik</i>	
a. An enabling strategy.	99
b. Housing market conditions (1980 - 1989).	100
c. Down-market trend of the private sector.	101
d. Private sector low-cost housing projects.	105
e. Factors influencing the supply of low-cost housing.	106
f. Low-cost condominiums.	108
g. Conclusions.	112
VI : LOW-INCOME RENTAL AND RENT-FREE HOUSING	115
<i>by Koen De Wandeler and Areepan Khanaiklang</i>	
a. Introduction.	115
b. Rental housing in Bangkok.	116
c. Types and forms of rental housing.	119
d. Public rental housing.	121
e. Employers housing.	124
f. Private low-income rental housing.	127
g. Rental slum housing.	130
h. Conclusions.	131



## VII : TRENDS AND OPTIONS

137

*by Yap Kioe Sheng*

- |  |     |
|--|-----|
| a. Changing supply and demand of low-income housing. | 137 |
| b. A great variety of housing needs.                 | 139 |
| c. Land sharing or resettlement.                     | 142 |
| d. Whither the slums ?                               | 144 |

## REFERENCES

147

## LIST OF TABLES

1.1	Household income distribution in the BMR (1986/1988)	10
1.2	Housing stock in the BMR	12
1.3	Number of slums upgraded by the NHA	15
1.4	The slum community's land before and after land sharing	21
1.5	Number of households before and after land sharing	22
1.6	Type of land tenure in land sharing projects	23
2.1	Informal settlements, dwellings, households and population in Bangkok	31
2.2	Legal status of slum settlements	33
2.3	Public slum land owners in Bangkok	34
2.4	Land tenure of slum settlements	35
2.5	Slums by land level and drainage condition	36
2.6	Water supply and electricity in slum settlements	38
2.7	Land rent collection in the slums	39
2.8	Location of slum housing in relation to the centre of Bangkok	42
2.9	Average size of slums by area of the BMR	43
2.10	The situation of the 1020 slums in 1988	45
2.11	The situation of the 1020 slums in 1988 by BMR area	46
2.12	Population of 1020 slums in 1984 and 1988 (households)	47
3.1	Population of Soi Sengki	51
3.2	Monthly household income in Soi Sengki	53
3.3	Household access to infrastructure in Soi Sengki	54
3.4	The land sharing arrangement	56
3.5	Costs of the Sengki land sharing project	58
3.6	Occupancy status of households in Soi Sengki	60
3.7	Numbers of plots and plot sizes by zone	61
3.8	Land use in the Sengki land sharing project	61
3.9	Average cost of plots per zone	63
3.10	Down payments per zone	65
3.11	Plot distribution in Sengki land sharing project	71
3.12	Land prices in the Sengki land sharing project	72
4.1	Land use in Suwan Prasid 2	78
4.2	Plot allocation in Suwan Prasid 2	79
4.3	Plot allocation and plot occupation	80
4.4	Building permits and house registration	83
4.5	Payment schedule for plot purchase	84
4.6	Compensation per household by slum of origin	85
4.7	Monthly household income by slum of origin	87
4.8	Occupation of income-earners in Suwan Prasid 2	87
4.9	Sources of house building loans	88

4.10	Funds raised and invested per household	89
4.11	Facilities in Suwan Prasad 2	91
4.12	Economic conditions before and after resettlement	92
4.13	Changes in occupation and job location	93
4.14	Changes in income, occupation and job location after resettlement	94
4.15	Changes in monthly income after resettlement	95
5.1	Key indicators of the market conditions in the housing industry (1980-1989)	98
5.2	Sources of land for low-cost housing	109
5.3	Features of low-cost housing projects in 1980, 1986 and 1988	114
6.1	Households in Bangkok according to tenure status (1981/1986)	116
6.2	Households in Bangkok according to tenure status (1986)	117
6.3	Renters by type of house	118
6.4	Institutional housing constructed by the NHA	126
6.5	Rental housing projects financed by the Government Housing Bank	128
6.6	NHA rental housing in the Bangkok Metropolitan Region	133-134

### LIST OF FIGURES

1.1	Bangkok Metropolitan Region	11
1.2	Bangkok with selected locations	18
2.1	Period of origin of existing slums	37
2.2	Distance of evicted and new slums from the centre of Bangkok (Patumwan)	37
2.3	Zones of Bangkok	41
3.1	Soi Sengki before land sharing	52
3.2	Land sharing plan for Soi Sengki	64
4.1	Bangkok with location of Suwan Prasad slums	74
4.2	Location of the Rama IX slums	77
4.3	Royal City Avenue	81
4.4	Location of Suwan Prasad 2	84
5.1	Location of low-cost housing projects	104
6.1	Location of NHA rental housing estates	135
7.1	Location of new slums and low-cost housing projects (settlements/projects)	141
7.2	Monthly household income distribution in the BMR, Sengki and Suwan Prasad 2	141

## ABBREVIATIONS

BMA	:	Bangkok Metropolitan Administration/Area
BMR	:	Bangkok Metropolitan Region
BMTA	:	Bangkok Mass Transit Authority
CBD	:	Central Business District
CPB	:	Crown Property Bureau
CPI	:	Consumer Price Index
CUSRI	:	Chulalongkorn University Social Research Institute
GDP	:	Gross Domestic Product
GHB	:	Government Housing Bank
KPB	:	King's Property Bureau
LIF	:	Land Institute Foundation
MWA	:	Metropolitan Waterworks Authority
NGO	:	Non-Governmental Organization
NHA	:	National Housing Authority
PADCO	:	Planning and Development Collaborative International
PPI	:	Producer Price Index
SRT	:	State Railways of Thailand
UNCHS	:	United Nations Centre for Human Settlements (Habitat)
USAID	:	United States Agency for International Development

### Thai words

klong	:	waterway
seng	:	a type of rental arrangement.
soi	:	street/lane
tambon	:	subdistrict
wat	:	temple

### Conversions

1 rai : 1600 sq.metres  
 1 square wah : 4 sq.metres  
 Baht 25 = US\$ 1.00

### III : LAND SHARING: THE SENGKI PROJECT

Yap Kioe Sheng and Shlomo Angel

#### a. Soi Sengki.

The Sengki slum was located on both sides of a *soi* on a narrow strip of land between the Chao Phraya river and Charoenkrung Road, one of the oldest roads in Bangkok. There used to be a landing stage for a ferry at the end of the *soi* and before the construction of the Krungthep Bridge, people would take the ferry to Thonburi at Sengki. The land on which the Sengki slum was built belonged to close relatives of His Majesty the King of Thailand. The King's Property Bureau (KPB) was responsible for the management and the administration of this plot of land, which measured 25,080 square metres. Almost half of the land (11,012 sq.metres) was occupied by the slum dwellers; the remainder was rented by the Thai Danu Bank for its warehouse (10,376 sq.metres) and by the owner of a saw mill (3,692 sq.metres).

Some one hundred years ago, the settlement had a population of about a hundred persons, and was called Soi Hang Klang. A rice mill named Sengki stood along the river on the site currently occupied by the Thai Danu warehouse. The Chinese families in the settlement worked as labourers in the rice mill, while the Thai families worked in the surrounding orchards. In those days, the residents rented the land from the Royal Property Bureau (now the Crown Property Bureau), but with the abolition of the absolute monarchy in 1932, the land was transferred to the King's Property Bureau. The land rent varied with the location of the plots: Baht 0.75 per sq.metre per month for land along the main road and Baht 0.50 per sq.metre per month for land located inside the *soi*. These rents never changed.

On 16 April 1978, a fire which started in the adjacent slum of Wat Ladbuakaw destroyed a large part of the Sengki settlement including the

saw mill next to the warehouse. Following the fire, the land owner terminated the lease of the slum dwellers, except for those whose houses had been outside the damaged area, i.e. nearest to Charoenkrung Road. However, most slum dwellers who had been affected by the fire came back to the site and rebuilt their houses. In addition, squatters, i.e. people who had had no lease agreement before the fire, settled in the area. Given the low tenure security, the slum dwellers invested no more than was necessary in the construction and improvement of their houses and their living conditions began to deteriorate. They petitioned the King's Property Bureau for a new lease on the land, but the Bureau ignored the request. There were rumours that the Bureau was considering the site for commercial development and that developers were visiting the area to assess the feasibility of such a project.

From 1978, the residents submitted numerous petitions to the Royal Family requesting the right to stay in Soi Sengki, but to no avail. Then they noticed that the slum community of Wat Ladbuakaw, which had been destroyed by the same fire, had reached a land sharing agreement with its land owner after mediation by the National Housing Authority. In October 1982, construction of the houses on the community portion of the land had started in Wat Ladbuakaw. So, the Sengki residents requested the NHA for a similar arrangement. The NHA conducted a feasibility study, which showed that the Sengki slum had definite land sharing potential.

- \* There was no serious development pressure on the land and the community had occupied the land for a considerable period of time. Although the land owner had terminated the lease agreement, there was no immediate eviction threat.
- \* The Sengki slum was a well-established community and the two ethnic groups: Thai (70 per cent) and Chinese (30 per cent) were quite close.
- \* The leaders of Sengki were interested in a land sharing arrangement with the land owner, as many had seen what had been achieved in Wat Ladbuakaw.
- \* With the exception of some house-renters, most households were not poor. Given the cohesiveness of the community, there was a possibility of cross-subsidies.

- \* The density in the settlement was rather high; 141 households lived on 1.1 hectare of land. However, most of the houses were temporary structures made of wood, as the 1978 fire had destroyed the original houses.

In view of these facts, the National Housing Authority decided to take up the case of Soi Sengki as a land sharing project.

#### b. Living conditions in Soi Sengki.

The National Housing Authority conducted several socio-economic and physical surveys in Soi Sengki after 1984. Unless otherwise indicated, the data from the 1984 and the 1987 surveys are used here, although they are not very consistent. The physical conditions in a slum or squatter settlement as well as the socio-economic and demographic characteristics of its population are rarely stable, but change continuously. Houses are built, improved, extended and demolished. Households settle and depart. Family members are born and die, arrive and leave the area. This has important repercussions for the planning of a slum or squatter settlement improvement project. Data from socio-economic and physical surveys represent the situation at a particular moment, but may be out of date by the time they are used. This not only makes planning difficult, but also complicates the selection of allottees and the allocation of plots for which data from the surveys are used.

Table 3.1 Population of Soi Sengki

	1984	1987
Number of households	129	130
Numbers of families	176	170
Number of persons	931	705
Average household size	7.2	5.4

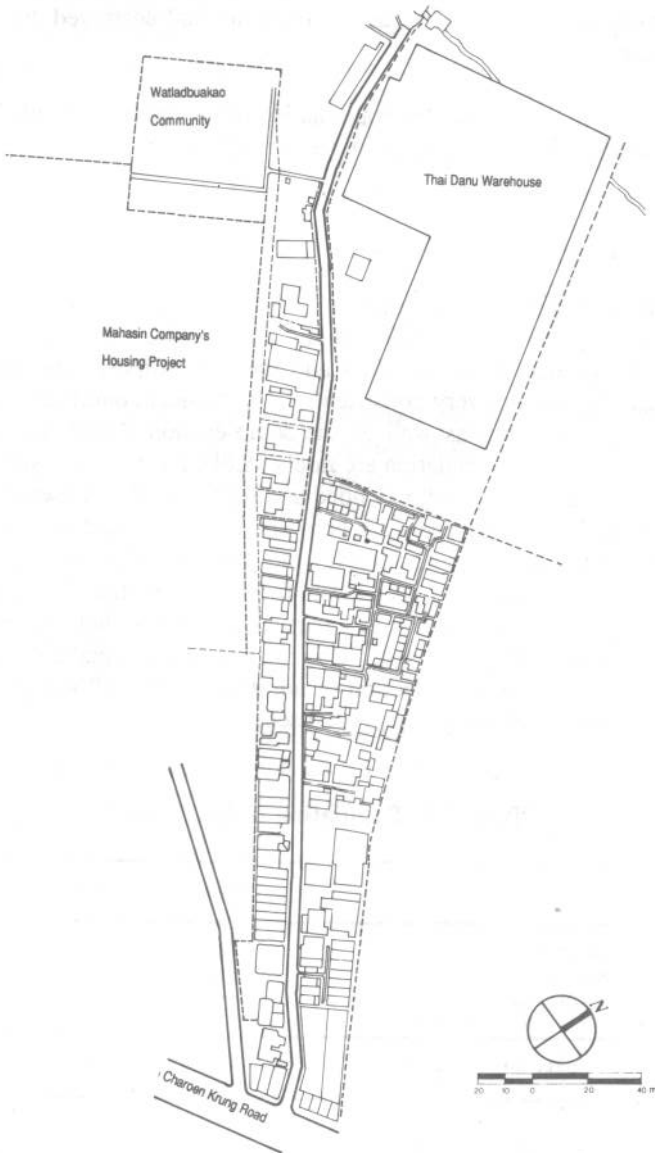


Figure 3.1 Soi Sengki before land sharing



Table 3.2 below shows that many households in Soi Sengki did not belong to the low-income category. In 1987, the median income for the whole of Bangkok was approximately Baht 6,000 per month, but over 50 per cent of the households in Soi Sengki earned more than that. The households renting a house or a room in Soi Sengki belonged mainly to the low-income group.

Table 3.2 Monthly household income in Soi Sengki

Monthly income in Baht	1984		1987	
	hds.	perc.	hds.	perc.
< 3,800	41	34	28	24
3,800 - 5,000	25	21	18	16
5,001 - 6,500	14	12	10	9
6,501 - 9,000	19	16	20	18
9,001 - 12,000	11	9	23	20
> 12,000	9	8	15	13
Sub-total	119	100	114	100
na	10		16	
Total	129		130	

Most households in Soi Sengki rented the land but owned their house (66 per cent in 1984 and 67 per cent in 1987). About one quarter rented a house or a room (25 per cent in 1964 and 29 per cent in 1987). The remaining households had another tenure status: sharing a house, squatting etc. In 1984, about 63 per cent of the houses had only one storey, while 35 per cent had two storeys. The remaining 2 per cent were houses built on stilts in the typical Thai style. Most of the houses in the part of Sengki not affected by the fire were made of wood and concrete blocks, with corrugated iron sheets for the roofs. In the part destroyed by the fire only few houses had been built with concrete, while many houses used second-hand materials.

The main road through the settlement was six metres wide. Some of the pathways were made of concrete, but most paths from the road into the settlement were made of wooden planks only and were in rather bad condition.

### c. Negotiating land sharing.

In February 1984, the King's Property Bureau offered to sell 4,280 square metres of land in Soi Sengki to the 85 former land renters whose houses had been demolished by the fire. This would be sufficient to give each land renter a plot of 40 square metres, while the remaining land would be available for public space. The Bureau set a price of Baht 625 per sq.metre, while the market price was about Baht 2,000 per sq.metre. The offer was not acceptable to the Sengki residents or the National Housing Authority. The Bureau recognized only 85 households as its (former) legal tenants, whereas the feasibility study had identified at least 129 households and the community claimed that there were 141 households. The National Housing Authority wanted to resettle all the households currently living in Sengki and not only the former land renters. Moreover, the households in the front portion of the settlement feared that they would be evicted once a land sharing agreement was reached and asked to be included in the project. The residents also considered 40-sq. metre plots too small and wanted at least 48 sq.metres.

Table 3.3 Household access to infrastructure in Soi Sengki

Type	Electricity		Water		Toilets	
	1984	1987	1984	1987	1984	1987
Own	67%	58%	40%	48%	93%	79%
Share	33%	42%	48%	52%	7%	21%
Buy	-	-	12%	-	-	-
Total	100%	100%	100%	100%	100%	100%

The community and the National Housing Authority petitioned for more land and in 1986, the Bureau agreed to sell 6,032 sq.metres of its land to the community. Initially, it wanted to sell the additional 1752 sq.metres at the prevailing market price of Baht 2,000 per sq.metre, but later agreed to a discounted price of Baht 1,000 per sq.metre. So eventually the community paid Baht 625 per sq.metre for the first 4,280

sq.metres of land and Baht 1,000 per sq.metre for the next 1,752 sq.metres of land. The total cost of land in the Sengki land sharing project came to Baht 4,427,000 or Baht 734 per sq.metre. In February 1987, the National Housing Authority reached an agreement with the King's Property Bureau on the terms of payment. The community would make a down payment of 20 per cent of the price of the land and pay the balance in monthly installments over a period of 5 years. The Bureau would charge a floating interest rate equal to the highest interest rate of commercial banks for one-year fixed deposits (then 7.25 per cent) plus an administrative charge of 2.5 per cent per annum.

Two other problems were also solved during these negotiations. Access to the Chao Phraya River was important to the Sengki community. The community used the river for washing and bathing. The end of the *soi* had previously been the landing site for a ferry and the community attached special importance to it. The community also felt that it needed an emergency exit to the river in case of a fire, as it feared that it might otherwise be trapped. It thus asked the King's Property Bureau for a right-of-way to the river. The King's Property Bureau agreed to provide free of charge a 1.5 metre wide road between the saw mill plot and the warehouse plot to give the community access to the Chao Phraya River.

Furthermore, the slum community agreed to vacate the portion of the land nearest to the Charoenkrung Road, so that it could be used for commercial development. However, that portion had not been affected by the fire and some people who lived there still had a lease contract with the King's Property Bureau. They refused to move if they would have to resettle on a much smaller plot. Yet without their co-operation, the land sharing agreement could not be implemented. The Bureau and the Sengki community decided to reserve the unoccupied plots which were not accepted by the eligible members for the households which refused to move; and to urge those eligible to accept their plots.

The King's Property Bureau insisted that it would deal with one group representing the entire community rather than with individual households and that it would sell the entire piece of land in a single transaction. Following a suggestion by the NHA, the Sengki community decided to form a co-operative. The co-operative was officially registered on 17 December 1986, as the Sengki Housing Co-operative. This co-operative would be responsible for the purchase of the land from the King's Property Bureau and for its resale to the individual households. It would

also collect the payments from the co-operative members and pay the King's Property Bureau every month. The co-operative committee would arrange the selection of the allottees and the allocation of the plots.

The King's Property Bureau and the Sengki Housing Co-operative signed the contract on 22 May 1987. Three members of the Sengki Housing Co-operative signed for the slum dwellers. The Sengki Housing Co-operative made a down payment of Baht 885,400 and agreed to pay the balance of Baht 3,541,600 in monthly installments over a period of 5 years. At the same time, the King's Property Bureau also sold land directly to some of its land renters, including the saw mill owner. Most of this land had not been affected by the fire and as the families still had a lease contract with the King's Property Bureau, they decided to stay outside the land sharing project. They negotiated directly with the land owner and bought much larger plots than if they had joined the co-operative, but they had to pay Baht 2,000 per sq.metre.

Table 3.4 The land sharing arrangement

Land sold to the Sengki Housing Co-operative	6,032 sq.m.
Land sold to the saw mill owner (at Baht 2,000/sq.m.)	3,692 sq.m.
Land sold to other tenants (at Baht 2,000/sq.m.)	1,656 sq.m.
Land rented by the Thai Danu Bank for a warehouse	10,376 sq.m.
Land available for commercial development	1,600 sq.m.
Main road	1,724 sq.m.
<b>Total</b>	<b>25,080 sq.m.</b>

The land constituted only one part of the project. On the community portion of the land a new settlement had to be constructed. As parts of the settlement had been built on a swamp, the land needed to be raised by approximately 35 centimetres. A main road, some secondary roads and drainage canals had to be constructed and electricity and water supply installed. The old houses had to be demolished; temporary shelters had to be erected and new houses had to be built. The National Housing Authority proposed to construct shell-rowhouses (i.e. row houses which the owner-occupant has to complete) with the possibility of extending the houses in the front. Shell houses with common walls and continuous roofs would keep costs low.

The average investment was estimated at about Baht 105,000 per household for the project without subsidy, and Baht 80,000 per household with a subsidy. It was assumed that the National Housing Authority would provide subsidies for the construction of infrastructure (at a rate of Baht 14,000 per household out of its slum improvement fund) and the cost of the temporary shelters. Moreover, on the occasion of the 1987 International Year of Shelter for the Homeless, the Netherlands Habitat Committee donated about Baht 2,700,000 to the project.

#### d. Selection of beneficiaries and plot allocation.

A crucial issue in any land sharing project is the decision who is eligible for a plot under the scheme. In this respect, the planner is faced with a difficult dilemma. The resettlement of the entire community may require high densities which can only be achieved by small plots and/or relatively expensive multi-storied structures. If only a part of the community is resettled, clear and fair criteria for the selection of allottees have to be formulated. If a selection has to be made, one or more of the following criteria can be applied:

- \* Occupancy status: only those who have a legal contract with the land owner as land renters can participate in the land sharing scheme; the others have to leave;
- \* Length of stay: only those who are or were living in the community at a certain date (irrespective of their occupancy status) can obtain a plot of land in the land sharing project;
- \* Need for land: those who can afford to resettle elsewhere (e.g. in a formal low-income housing project) are encouraged to leave so that those who cannot afford to leave can stay;
- \* Affordability: those who cannot afford to stay (e.g. because they cannot pay the price of the land and the construction of the house) are requested to leave and are paid compensation by those who are remaining behind.

The situation in Soi Sengki was more complicated than in most land sharing projects. At the start of the project, several categories of households could be distinguished:

- \* households which had rented land in Sengki from the King's Property Bureau before the fire, and had returned after the fire;
- \* households which had lived in Sengki before the fire without a land rental agreement with the King's Property Bureau, and had returned after the fire;
- \* households which now lived in Sengki and paid rent for land or a house they rented from others who now lived there or had lived there;
- \* households which had come to Soi Sengki after the fire and now lived there as squatters;
- \* households which now lived in Sengki on land which they had inherited from original land renters in Soi Sengki.
- \* households which now lived in Sengki had been part of a land-renting household before;
- \* households which currently did not live in Sengki, but had had a formal lease contract with the King's Property Bureau before the fire.

Table 3.5 Costs of the Sengki land sharing project (in Baht)

	Paid by dwellers	Subsidy
Land	4,427,000	-
Land transfer cost	170,440	-
Water and electricity connections	592,200	-
Infrastructure	-	3,003,000
House construction	36,612,000	-
Community centre	-	1,042,457
<b>Total</b>	<b>41,801,640</b>	<b>4,045,457</b>

Source: (NHA, 1991: 21)

So, there were two partly overlapping communities: one community existed before the fire and one came into existence after the fire. Data on

the situation before the fire are not available, except for the list of 85 households recognized by the King's Property Bureau as legal land renters before the fire. The 1984 feasibility study interviewed only 122 households, although at that moment there were 129 households in the community. The occupancy status of these 122 households living in Soi Sengki in 1984 and interviewed for the feasibility study, and the ten households which had left Soi Sengki, but rented out their houses to others, is presented in table 3.4. Note that 10 households have left Sengki, but still own a house there.

The 1984 feasibility study gave several alternative criteria to select those who would have a right to a plot of land in the scheme:

- \* only the 85 original lease holders with the King's Property Bureau;
- \* all 122 (or 129) families living in the settlement at that time;
- \* the original 85 lease holders and 23 households which rented from these 85 lease holders;
- \* all 132 families who are living in the settlement at that time or had lived in the settlement with a contract with the landowner.

Initially, the community leaders represented only the (former) land renters in Sengki, not the house renters nor the squatters. They felt that only the land renters were entitled to a plot in the land sharing scheme. They did not want to give squatters and house-renters the right to buy land in the settlement, but preferred to keep them in the community as tenants, i.e. as sources of income. However, the National Housing Authority wanted to accommodate as many households as possible. Eventually, the National Housing Authority and the committee agreed to give all households living in Sengki at least one plot, except two notorious drug dealers.

They also agreed that each household would receive a plot of a particular size and location based on two sets of criteria. First priority would be given to those who were currently staying in Sengki and who had lived there before the fire. Second priority would be given to large households of more than ten members, households currently occupying large plots and households which were very active in the community. House renters would receive smaller plots than house owners and a

household which had left the community and had rented out its house would be entitled only to a small plot, on the assumption that it shared its entitlement with its tenant household. Second households in a dwelling, such as a married son or daughter would receive a small plot. As plots along the main road and nearer to Charoenkrung Road were better situated than plots inside the settlement, it was agreed that each household would as far as possible be allocated a plot in the location where it was currently living.

**Table 3.6 Occupancy status of households in Soi Sengki**

A. Original land-renters (residing in Soi Sengki before the fire)	
1. Land-renters not affected by the fire	20
2. Land-renters affected by the fire	65+
a. Still living in Soi Sengki	55
b. Left Soi Sengki but still own a house in Soi Sengki	10
c. Left Soi Sengki entirely	?
B. Residents without a rent contract before the fire and new arrivals after the fire	
1. Sub-renters of land-renters	35
2. Squatters	5
3. Others	7
<b>Total A+B</b>	<b>132</b>

Assuming that the settlement would have to accommodate 126 households, the National Housing Authority initially prepared a layout plan for 126 plots: 125 plots of 45 sq.metres and one plot of about 22 sq.metres. However, in the course of time, more and more households obtained a right to a plot in the area and the layout plan had to be adjusted. Based on the first plan, the NHA drew a new layout plan in which 28 plots were subdivided into 56 half-plots. The new layout plan consisted of 154 plot units: 97 plot units of approximately 45 sq.metres and 57 plot units of approximately 22 sq.metres (see table 3.10). To take into account the location and the value of the plots, the settlement was divided into four zones (A, B, C, D).



Table 3.7 Number of plots and plot sizes by zone

Zone A	:	38.5 plot units of approximately 45.00 sq.m.
Zone B	:	27.0 plot units of approximately 43.00 sq.m.
Zone C	:	31.5 plot units of approximately 42.00 sq.m.
Zone D	:	57.0 plot units of approximately 22.00 sq.m.
<hr/>		
Total	:	154.0 plot units

The Sengki community leaders, the National Housing Authority and an official of Yanawa District of the BMA selected the allottees and made the plot allocation. Although it had been decided to use "objective" criteria, it was often left to the community leaders to take the final decision, because the National Housing Authority felt that the co-operation of the entire community was essential for a smooth implementation of the project. Once a decision had been reached internally, the community leaders would have to defend their decision before the community. So, the entire plot allocation process was conducted through negotiations and consensus with all parties concerned. Each household was offered the plot more or less in the location it was currently occupying. If all other households agreed, the plot was allocated to that particular household.

Table 3.8 Land use in the Sengki land sharing project

residential area	5,376 square metres
public space	656 square metres
total	6,032 square metres

If two or more households wanted a particular plot, a lottery would be held between those households. In zone A and B, no lottery was needed. In zone C, households had to decide in which sub-*soi* they wanted to live and the plots in each sub-*soi* were allocated by lottery. In zone D, a lottery was needed to decide who would get a plot along the main road. Households who wanted to live near each other, could send one representative to claim a plot and would get a number of plots around that plot-unit. Households had the opportunity to exchange plots, and several households used that opportunity. In cases where the exchange was made in the same zone, the co-operative collected a fee of Baht 500.

If households swapped plots between zones, the co-operative received 20 per cent of the difference in the price of the plots. One plot had three owners and two plots had two owners as the original household split into two or three households in the meantime.

After the process had been completed and plots had been allocated to the 143 member households of the co-operative, nine households did not claim their plots. The co-operative committee sent notices to these eligible households, but they still did not come forward to claim their property. They were unhappy with the size of the plot they had been allocated, because some committee members had been allocated large plots in a good location, while non-committee members who had not been affected by the fire were given small plots in a poor location or large plots in a poor location. This has created conflicts among the residents. Those who were unhappy with their plot refused to co-operate with the co-operative or with the National Housing Authority and to move out of their houses. The co-operative considered selling those plots and various committee members had already expressed interest.

Although the plots had been allocated, one problem had not yet been solved. The plots did not meet the official standards for minimum plot area. The Land Department had already informed the National Housing Authority that it would not issue title deeds for plots below the official standards of the Bangkok Metropolitan Administration. The National Housing Authority, however, decided to go ahead with the project as it was. It intended to persuade groups of nine households on the smaller plots to accept a joint title for their plots. The households could subsequently subdivide their joint plot using a loophole in the law which allows the sub-division of land into less than 10 plots irrespective of plot size.

e. **Financing the land purchase.**

The area was divided into four zones with different land prices, while the plots within each zone except zone D were also priced according to their location in the zone. In zone A, each plot had its own price per square metre; the plot nearest to Charoenkrung Road cost Baht 1,000 per sq.metre, the second plot Baht 995 and so on to the last plot in zone A which cost Baht 775 per sq.metre. In zones B and C, the land price differed by block of plots. In zone B, the prices ranged from Baht 725 to 850 per sq.metre; in zone C, from Baht 625 to 700 per sq.metre. In zone

D, there was a flat rate of Baht 625 per sq.metre (see Table 3.11).

Although this cross-subsidy arrangement seems complicated, it had several advantages. Those who wanted a better-situated plot had to pay more for the land than those who accepted a small plot inside the settlement. Those who wished to live near Charoenkrung Road had to pay more than those deeper inside Soi Sengki. The arrangement allowed for differences in the cost of land, without great differences in price between two adjacent plots.

Table 3.9 Average cost of plots per zone (in Baht).

Zone	Average plot price	Down payment	Loan required for land and housing	
			With subsidy	Without subsidy
A	43,915	10,000	85,994	99,236
B	38,140	8,000	72,219	95,461
C	31,062	5,000	68,141	91,383
D	15,883	2,500	41,206	54,096

The National Housing Authority and the community committee decided to charge the residents interest of 13.5 per cent per annum on their loan instead of the 9.75 per cent which the King's Property Bureau charged the co-operative, as this was the rate which the NHA charged for housing finance loans in all of its housing projects. The NHA had already announced this interest rate to the Sengki residents before it reached agreement with the King's Property Bureau. It was in any case difficult to explain to the residents that they had to pay interest to the King's Property Bureau over the five years which it would take to pay the total cost of the land; it was equally difficult to explain to them the concept of a floating interest rate. The NHA and the co-operative decided to use the difference between the interest charged by the King's Property Bureau and the co-operative to create a reserve fund against defaults by the households.

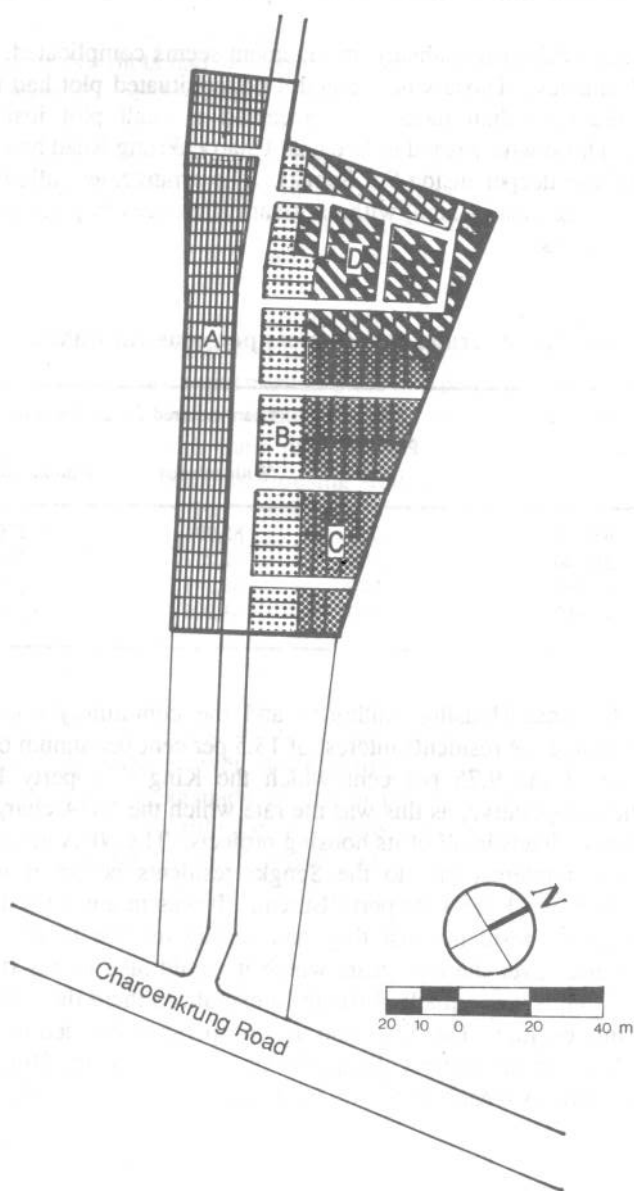


Figure 3.2 Land sharing plan for Soi Sengki

Table 3.10 Down payments per zone (in Baht)

Zone	First Installment	Second Installment	Third Installment	Total downpayment
A	3,500	3,500	3,000	10,000
B	2,800	2,800	2,400	8,000
C	1,800	1,800	1,400	5,000
D	850	850	800	2,500

The plot allottees were allowed to make their down payment in three installments, an arrangement which proved highly successful. By October 1986, 64 per cent of the allottees had made their full down payment, 13 per cent had paid two installments, 14 per cent had paid one installment and 9 per cent had not paid at all. A total amount of Baht 613,900 had been paid. Eventually, all households were able to pay the entire down payment. Thus, on the day of the purchase of the land from the King's Property Bureau, the co-operative made the down payment of Baht 885,400, the balance of Baht 3,541,600 to be paid over five years in monthly installments of Baht 74,813 before the fifth day of each month beginning from 5 July 1987. The interest from the down payment since December 1986 (Baht 27,065.74) was used to pay for the unoccupied plots (Baht 4,539.91), while the balance of Baht 22,525.83 remained in the co-operative's account for community activities.

After making the downpayment, some households experienced difficulties paying their monthly installments. So, the co-operative committee agreed to collect small sums of Baht 5 to Baht 10 per day or Baht 20 per week from those families. Other households saved amounts of Baht 50 to 100 with the co-operative committee in order to be able to pay their installments when they were due. Arrears created problems for the co-operative, as it has to pay an installment to the King's Property Bureau every month. Fortunately, some households were able to make a lump sum payment and their money was used to make the payments to the King's Property Bureau.

In February 1988, the cooperative decided that any household which had not paid three consecutive installments would lose its rights to a plot, but to date no such action has been taken against defaulters. By the end of 1991, the repayment of the loan for the purchase of the land was still

on schedule; the loan will be fully repaid by May 1992. However, some households, particularly those who had been allocated small plots, have already sold their property.

**f. Lessons and conclusions.**

Provided a slum community and a land owner can agree on a price for the sale of a portion of the land currently occupied by the slum, land sharing is probably the only way in which the urban poor can gain formal access to land and security of tenure within a city without a substantial subsidy. In this respect, land sharing is an efficient way to improve the housing conditions of the urban poor: the number of land transactions is limited to a minimum as the land owner sells the land directly to the slum dwellers. House construction is usually the responsibility of the slum community or its individual members. The authorities are involved in the planning of the new settlement and the provision of basic services, not in actual land transfer. Many important lessons in land sharing have been learned in earlier land sharing projects. A number of new lessons emerged with particular force in the Sengki land sharing project.

**The agreement as a divisive element.**

Through land sharing, the negative energy generated by the eviction threat is transformed into positive energy to unite a slum community to find a solution for its problem, to gain access to land in the city and to improve living conditions. In fact, the greater and the more imminent the threat of eviction, the stronger and more assertive the slum community will become. Land sharing is, therefore, only possible in slums under a serious threat of eviction. Where no such threat is present, the slum community feels no need for land sharing.

In slums which united in the face of eviction and negotiated a land sharing arrangement, the agreement can, and often does, remove the urgency for the community to see the project implemented. Once the threat of imminent eviction disappears, the slum community tends to lose its cohesiveness and differences of interest which already existed but were suppressed during the struggle for land sharing, reappear. Differences in income which may lead to differences of opinion over payment schedules or standards of services are examples of causes of discord in the community; so are differences in tenure status.

A slum community in Bangkok often consists of both house owners (who are land renters) and house renters. House owners have no interest in seeing their tenants becoming land owners and build their own houses. They may thus try to exclude the house renters from the arrangement. For house renters, land sharing may be the only opportunity in their life to acquire a plot of land. If, on the other hand, house renters belong to the lowest-income groups, they will find it difficult to pay for land and home ownership. Some may not want to become land and house owners at all in view of the great financial burden involved.

Differences of interests also exist between the slum dwellers whose houses are located on the land owner's portion of the land and those who live on the community's land. Once a land sharing agreement has been reached, the slum dwellers on the community portion have gained almost complete, though *de facto*, security of tenure, while those on the land owner's portion face even more imminent eviction. In order to accommodate the evicted households, those not affected by the eviction have to demolish and rebuild their houses, although the *status quo* may, at least for the time being, be good enough for them.

#### The dilemmas of plot allocation.

Land sharing implies that the slum dwellers have to be accommodated on a considerably smaller plot of land than the one they were occupying before the land sharing agreement. This places the project planners in a difficult dilemma. Should they urge the slum community to negotiate for as much land as possible, at the risk of securing none? Should they try to accommodate all households at high cost in multi-storey buildings or at lower cost on very small plots? Should they reduce densities by limiting the right to land of certain households or by excluding some households from the scheme? In the Sengki project, the National Housing Authority and the community negotiated with the land owner for more land. This made it possible to accommodate virtually all households, though some of them in two storey row houses on very small plots. The decision to aim at resettling all households within the scheme was taken by the NHA and the United Nations Centre for Human Settlements (Habitat) rather than by the community or its leadership. Such decisions cannot be expected in all land sharing projects.

Participation of the poorest households and the house renters in the scheme does not depend on a decision by an agency; the resources and

priorities of the households concerned must be taken into account. A housing project cannot change existing inequalities in the community by providing access to land or housing; it may, in fact, even create greater inequalities. Land ownership, desirable though it may be, increases the cost of housing, in particular for house renters, who may belong to the lowest-income groups in the community. It is not unlikely that the poorest households will be the first to leave the community after the land sharing project has been launched, while those who could actually afford to acquire land and settle elsewhere, will stay.

It may be better to preserve the existing relationships between land renters and house renters or, if possible, give house renters the choice between access to land, access to rental housing or compensation. If house renters are generally the poorest households in the community and are likely to have a problem paying for the land and the construction of their houses, they may in fact prefer to continue renting their house after land sharing instead of being forced out of the community or into home ownership. The other households can become plot owners who rent (part of) their house or plot to the poorer households.

### **The drawbacks of community consensus.**

Plot allocation is another key part of the densification process. It can be assumed that most households have to accept a smaller plot than they had before. Criteria for the allocation of plots of different sizes and locations have to be established. Various principles can be applied, taking into account need, paying capacity and current tenure status. In the Sengki project, all these criteria were applied simultaneously. Moreover, the National Housing Authority took the position that the final allocation could only be achieved by consensus of the entire community rather than by the imposition of rules by the agency. This strengthened the position of the people who could veto the scheme and weakened the power of the National Housing Authority and the community leadership to enforce solutions which stressed the common good. The lengthy discussions led, however, to delays in implementation and to higher costs. The staff of the NHA had to remain involved in the project much longer than anticipated. Such delays may be inevitable when consensus among a large group of people is concerned, but the costs need to be taken into account as hidden subsidies to the project.



**The problem of enforcement.**

As part of land sharing, some households have to shift their houses from the land owner's to the community's portion of the land. Usually, almost all households have to demolish their houses and to rebuild them on their new plots to make this possible. Some may object to such a move if their new plot of land is much smaller or less suitably located than the plot of land they occupied before. What sanctions do the community and the National Housing Authority have to force the individual households to agree to the plans? As long as community consensus is required for all major decisions regarding the project, no sanctions are available and each household can veto a community decision and obstruct the implementation of the project by refusing to demolish its house. In fact, as long as there are no clear rules, each household can negotiate indefinitely for a better plot in the scheme.

The only realistic course seems to be to limit the power of the community and to make it clear from the outset that all have to abide by certain rules for the planning and implementation of the project: minimum and maximum plot sizes, deadlines for decisions and plan implementation, and eventually the expulsion from the project of individual households which refuse to conform with majority decisions. This implies that community participation has its limitations. The National Housing Authority cannot give complete decision-making power to the community leaders and at the same time expect the community leaders to follow such principles as ensuring the right to land for every household in the community or democratic decision-making taking account of the interests of all. If an agency wants the community leadership to adhere to such principles, it has to impose these on the community leadership and set limitations to community participation and consensus.

**The selling-out issue.**

In an open-market economy, sufficiently well-located land will sooner or later be used to pay its full market price. That land use is anything but low-income housing. Starting with the poorest households in the community, the plot-holders in a land sharing project can be expected gradually to sell their plots in view of the high land values and the relatively low price for which they bought the land. Initial transactions may be between the poorest and the somewhat richer households in the community; subsequent deals will be with outsiders buying the land for

commercial development rather than for housing. The sale of land to outsiders from the higher-income groups or to commercial developers obviously defeats the objective of land sharing: land to house the poor in the city.

Some argue that this is therefore undesirable and must be prevented which can be done by limiting the possibilities for land transfers after a land sharing project: the plotholder would be not allowed to sell his or her plot at all or only after some time, or could only sell it to a plot-holders' co-operative. Apart from the ever-present opportunity to sell a plot illegally, one may question the legitimacy of denying the poor what the rich are doing all the time: buying, selling and speculating with land. Furthermore, such a development may not be completely undesirable, if a plotholder can sell the land at market value and earn a significant sum of money. The money can be used to buy land and housing elsewhere, or to start or improve a business.

However, if this is an acceptable outcome of a land sharing project, there are more effective and efficient ways to achieve it: the land could have been sold immediately after it had been bought from the land owner for a windfall gain, without having to go through the lengthy and cumbersome process of land subdivision, plot allocation and house construction. In the case of Soi Sengki, the slum community bought 6,032 sq.metres of land for Baht 4,427,000, while the value of the land was estimated at Baht 2,000 per sq.metre. Sold at market price, the land would have earned the 143 plot holders about Baht 7,500,000, or Baht 50,000 per household. If the land would be sold after the five-year repayment period, their profit would even be higher.

---

#### Note.

This chapter is an abridged version of an interim evaluation report on the Sengki land sharing project which Shlomo Angel and Yap Kioe Sheng prepared for the United Nations Centre for Human Settlements (Habitat) in 1988. Data for the report, and consequently, for this chapter were obtained from a large number of internal and unpublished reports, some of which have been included in the References. Unfortunately, the data were not always consistent.

Table 3.11 Plot distribution in the Sengki land sharing project

Zone	Number of plots	Plot size	Number of plots	Plot size	Number of plot units
A	31 x	45 sq.m.	31 x	1.0 plot unit =	31.0 plot units
	2 x	65 sq.m.	2 x	1.5 plot unit =	3.0 plot units
	1 x	90 sq.m.	1 x	2.0 plot unit =	2.0 plot units
	1 x	112 sq.m.	1 x	2.5 plot unit =	2.5 plot units
Sub-total	35				38.5 plot units
B	6 x	22 sq.m.	6 x	0.5 plot unit =	3.0 plot units
	13 x	45 sq.m.	13 x	1.0 plot unit =	13.0 plot units
	2 x	65 sq.m.	2 x	1.5 plot unit =	3.0 plot units
	1 x	67 sq.m.*	1 x	1.5 plot unit =	1.5 plot units
	2 x	90 sq.m.	2 x	2.0 plot unit =	4.0 plot units
	1 x	109 sq.m.	1 x	2.5 plot unit =	2.5 plot units
Sub-total	25				27.0 plot units
C	28 x	42 sq.m.	28 x	1.0 plot unit =	28.0 plot units
	1 x	63 sq.m.*	1 x	1.5 plot unit =	1.5 plot units
	1 x	84 sq.m.	1 x	2.0 plot unit =	2.0 plot units
Sub-total	30				31.5 plot units
D	51 x	21 sq.m.	51 x	0.5 plot unit =	51.0 half units
	1 x	45 sq.m.	1 x	1.0 plot unit =	2.0 half units
	1 x	90 sq.m.**	1 x	2.0 plot unit =	4.0 half units
Sub-total	53				57.0 half units

Total : 143 plots for 147 households occupying 97 plot units and 57 half-plot units.

\* : 2 households

\*\* : 3 households

Table 3.12 Land prices in the Sengki land sharing project

Plot size in sq.m.	Zone	Number of plots	Number of households	Price per sq.m.
45.00	A	31	31	775 to 1000
67.52	A	1	1	895
67.52	A	1	1	857.5
90.00	A	1	1	820
112.52	A	1	1	850
22.52	B	6	6	725
43.12	B	13	13	750 to 850
64.68	B	1	1	750
64.68	B	2	3	800
90.24	B	1	1	800
90.24	B	1	1	850
108.76	B	1	1	775
42.20	C	28	28	625 to 700
63.28	C	1	2	625
84.36	C	1	1	625
22.52	D	51	51	625
45.00	D	1	1	625
90.04	D	1	3	625
Total		143	147	