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Evaluation of the Land Sharing Project in Borei Keila

Ten years on, what have we learned?



Planète Enfants & Développement



Established in 1984, the objective of *Planète Enfants & Développement (PE&D)* is to take comprehensive action to improve the living conditions of vulnerable children by means of protective health, education, integration, and family support services. Working in four countries (Cambodia, Vietnam, Nepal, and Burkina Faso), PE&D is known today for its expertise in early childhood, social services, professional training, and mother and child health services. Through its projects, PE&D strengthens the capabilities of disadvantaged populations so that they themselves can improve their living conditions. In this way, PE&D develops experience-based training and transfers skills to its local partners. PE&D is committed to promoting and strengthening the rights of children, women, and marginalized groups. Operating in Cambodia since 1984, PE&D was the first French NGO to establish itself on a long-term basis after the country's Civil War.

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Introduction

The Borei Keila housing construction project is unique within Cambodia. Between 2007 and 2012, a large number of the residents of the Borei Keila slum district were rehoused on-site in new buildings. Moreover, having been living illegally on public land until then, without property ownership, they became owners of their new housing.

Despite the experimental nature of the project, until now there has been no official evaluation of it. Most of the academic studies that have addressed this district were undertaken before the project had completed, benefiting only from a limited perspective.

The transformation of the Borei Keila neighborhood was part of a larger policy project undertaken by the Cambodian government, which in 2003 targeted four sites to launch four "land sharing" experiments, inspired by projects in Thailand, India and Indonesia. In her dissertation, Sabrina Ouellet¹ defines land sharing as "allowing on-site rehousing of city dwellers who reside informally on a site. As part of a land sharing project, the owner retains the most commercially attractive part of the site, and the smallest part is used to rehouse the informal residents. With this mechanism, the residents can benefit from property ownership within the law." These land sharing projects have been relatively unsuccessful in Phnom

Penh, and only the Borei Keila project has reached a successful conclusion, although not without conflicts which are still ongoing today. No other project of this type has been started since.

Objectives of the evaluation

This evaluation has many objectives. Firstly, it will aim to confirm or deny whether this project has contributed to the improvement of living standards of the Borei Keila residents. This evaluation will also build on an understanding of land sharing, so that the lessons may inspire future undertakings. The evaluation is part of a larger PE&D objective to consolidate its expertise in on-site projects improving slum neighborhoods.

This evaluation will attempt to answer the following questions:

- Has the transformation of this neighborhood contributed to improved living conditions for the residents of Borei Keila?
- What is the social impact of these buildings? How is life in the buildings organized?
- What do residents think of their new surroundings, i.e. their apartment, their building and their neighborhood?
- Where is there possible room for improvement for any new projects of this type?

To respond to these questions, the evaluation was made up primarily of a survey of the residents of Borei Keila. Ninety-six households

¹ OUELLET Sabrina "L'INTÉGRATION DES HABITANTS DES QUARTIERS INFORMELS DANS LA VILLE LÉGALE: L'EXPÉRIENCE DU *LAND SHARING* À PHNOM PENH (CAMBODGE) ", (2009); RESUME de mémoire

were surveyed, or 7% of the total number of households within the properties. Individual interviews were held with people holding specific positions, such as the neighborhood

leader, and the building chief. This evaluation is also based on studies previously undertaken by researchers or students.

1. The Borei Keila project

1.1. Background of the project

The Borei Keila neighborhood (or "sports housing" in the Khmer language), is located 500 meters northwest of the Olympic stadium. This neighborhood was previously a slum area made up of dilapidated, occupied buildings (former sports housing) and shanties constructed from salvaged materials. It is inhabited primarily by families of former soldiers who had come from the northern part of the country since the 1980s and former refugees from camps on the Thai border in the 1990s. There were many attempts to evict them in the 1990s and the start of the 2000s². However, in 2003, based on the government's desire to launch land sharing programs, discussions began among representatives of the residents, NGOs working at the site, and the city of Phnom Penh. After many years of negotiations, residents received various options to resolve their circumstances: financial compensation, re-housing on-site in new buildings, or donated land outside Phnom Penh. Most of the residents chose to remain on-site in new buildings that were to be constructed.

Between 2007 and 2012, new apartment buildings were built by the state commissioned PHANIMEX Company. PHANIMEX was contracted to build the apartment buildings free of charge, on a 2-hectare site, in exchange for 2.6-hectare plot of land elsewhere in Borei Keila, where it could construct buildings for commercial purposes, thereby providing a revenue source. The company did not,

however, keep its commitments to the Borei Keila residents and the government as it built only eight apartment buildings, out of the ten which were initially planned. This created tensions which are still felt today with residents who were not re-housed.

1.2. Description of the buildings

The group of properties consists of eight six-story buildings, each divided into 28 units, yielding a total of 1,344 apartments. The buildings are separated by a small lane. Each apartment includes a bedroom, living room, bathroom, and balcony. The apartments are approximately 40 meters square. At the start of the project, the ground floors were expected to be set aside as a common area. Today they are used as parking areas for motorcycles, as well as being used for shops and sometimes even small apartments where some families live. Each building has three wide staircases leading to the upper floors and a wide central hallway. The construction seems to be of good quality, but some repairs have already been necessary (painting, brickwork, etc.). On many of the balconies, residents have erected a metal cage, which increases the exterior living space while concurrently protecting against intruders. It is hoped that these balconies are sturdy enough for such added weight. The junctions to the municipal electricity source seem to have been done as cheaply as possible, each line coming directly from the street to each apartment.

The project's cost came to \$7,000 (per apartment), due to rather low construction costs in Phnom Penh, even 10 years ago.

² RABE P.E. "Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns" (2010); p9

Photographs of the buildings in the Borei Keila neighborhood

Apartment buildings seen from the main street



Central corridor



Lane separating the apartment buildings
and ground-floor shops



Staircase



Balconies



Electrical installation



Source: PE&D, 2019

2. Survey of residents

2.1. Survey methodology

Ninety-six households were interviewed: two households per floor per building (see survey questions in Appendix 1). The respondents on each floor were chosen randomly, and they are statistically representative of all the families living in Borei Keila. It should be emphasized, however, that those surveyed are made up of households in which one of the members was present during the day. For the security of the female pollsters, the survey was done during the day because the neighborhood is considered unsafe in the evening.

In addition, a limited number of residents declined to respond to the pollsters, claiming not to have the time, or that they were not interested. We can assume that the profile of these individuals is not much different from the respondents, since their mistrust may indicate, for example, dissatisfaction with management of the apartment building.

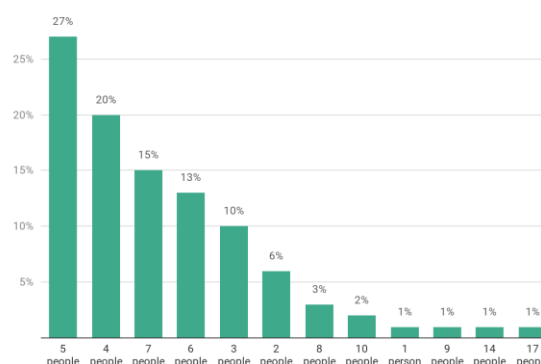
2.2. Survey results

A first analysis looks at the profile of the households surveyed, followed by their views on their housing and their surroundings. The analysis then looks at the question of whether their circumstances have improved after leaving the slum area, as well as their housing plans for the future.

2.2.1. Which households were surveyed?

Occupation of the apartments

Percentage of apartments vs. number of residents per apartment

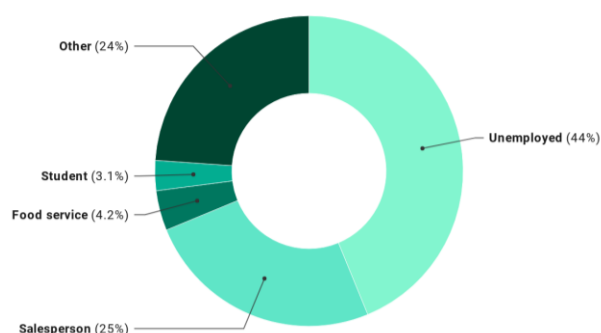


Source: PE&D, 2019

The average number of people per apartment is 5.2, resulting in an average area of just under eight square meters per person. This is well above the standards of squalor, which require an area of at least four square meters per resident. Some apartments are over-occupied, however: one apartment contains 17 people and another 14 people.

Employment per household

Employment distribution³



Source: PE&D, 2019

³ 'Other' refers to plenty of jobs as garbage collector, driver, hairdresser and so on.

Those who responded to this question did so for themselves only, not for a spouse. Since most of the respondents were women at home during the day, quite often unemployed, the data is not representative of all occupations of Borei Keila residents.

Schooling

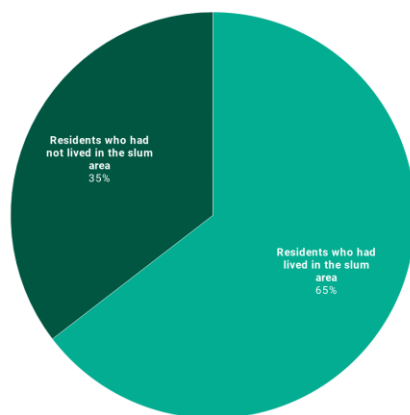
32% of households with school-age children do not send their children to school. This number seems rather high, although no explanation is available at this point.

Disability

Four households (4.2%) have at least one member with a disability. Based on on-site discussions, disability was not taken into consideration when allocating apartments.

Previous residency in the slum area

Previous residency in the Borei Keila slum area

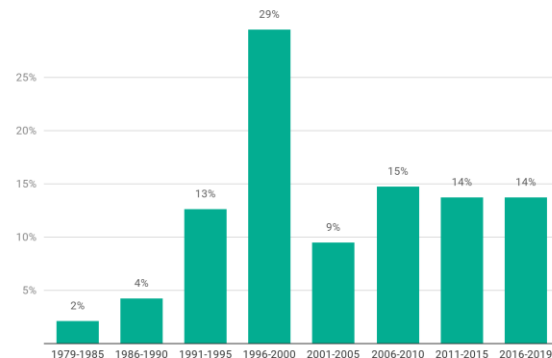


Source: PE&D, 2019

66% of residents interviewed had previously lived in the Borei Keila slum area.

Most of the residents who had lived in the slum area arrived between 1990 and 2003 (88% had already arrived by 2003).

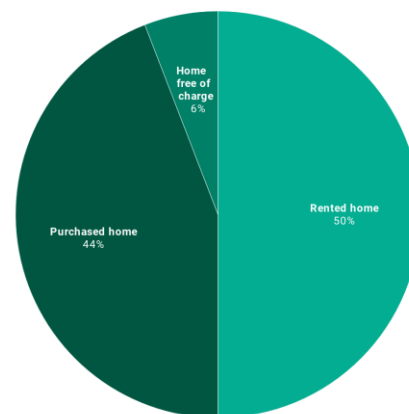
Number of households vs. date of arrival in the slum area



Source: PE&D, 2019

Status of residents who had not been in the slum area

Status of residents not from the Borei Keila slum area



Source: PE&D, 2019

Of those households living in Borei Keila who had not previously been present in the slum area, 38% had bought their housing, 50% had rented their housing, and 12% had received it free of charge.

One-third of these households rented, bought, or otherwise obtained their apartment when the buildings were completed.

Moves in and out of the Buildings

40% of the households surveyed were not the first occupants of their apartment. This number may seem significant; since the residents [first] moved into the buildings between eight and 12 years ago, it means that on average each year only 5% of the first occupants left their apartments. This ratio is relatively high but not outside of typical expectations. For comparison, in France turnover is about 3.4% annually.

Purchase price of the apartments

On average, the apartments cost \$10,000 (based on an estimated construction cost of \$7,000) with widely varying prices of between \$1,500 and \$20,000.

Use of a loan to buy the apartments

40% of the households which bought their apartment obtained a loan for it.

Rental costs

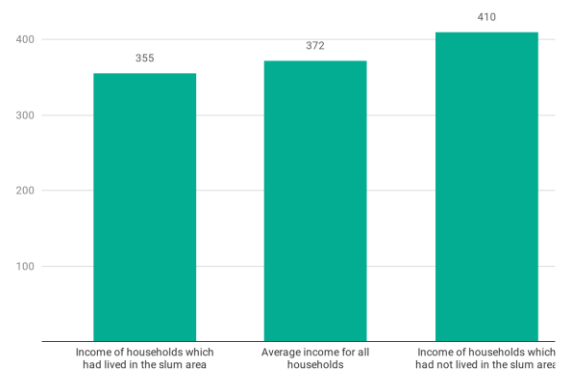
On average, rents are \$95 with wide differences of between \$60 and \$150. We have not seen a correlation between the amount of rent paid and the building nor the start of the rental period.

Household income

Average income is about \$372. This represents a daily income of \$2.40 per resident, which is above the poverty threshold (\$1.90), but remains low to be able to live reasonably in Phnom Penh.

Income of households which had/had not lived in the slum area

Income of residents (slum area/outside slum area) in \$

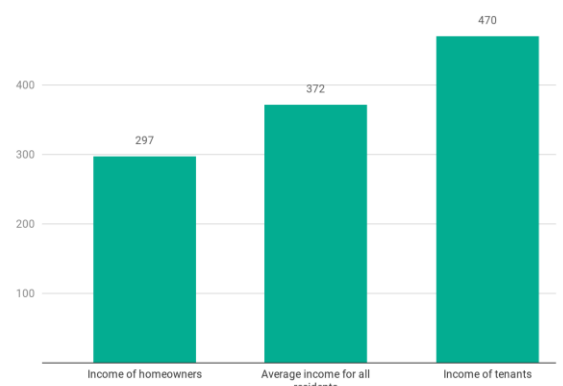


Source: PE&D, 2019

It can be seen that households which had lived in the Borei Keila slum area have a lower average income than those which had not lived there (\$355 versus \$410). It can also be seen that, on average, the earlier the households arrived in the neighborhood, the lower their income.

Income of households which own or rent

Income of homeowners and tenants



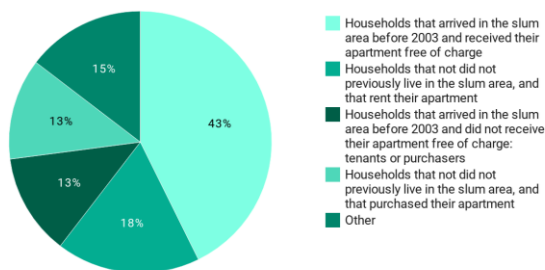
Source: PE&D, 2019

On average, the income of tenants (\$470 per month) is higher than the average household income in the building (\$372) as well being higher than those households which bought an apartment in the building (\$297 per month). Having been unable to collect all data on the

income of households surveyed, these numbers should be used with caution.

Status of residents

Current and Past Status of Residents



Source: PE&D, 2019

The past status of the residents (whether they had lived in the slum area or not) and their current status (tenants or owners) was complicated to track. While only able to base our conclusions on the statements of those households that chose to respond (assuming that those who declined to respond were potentially more reluctant to discuss certain subjects) and at times having to confront contradictory statements from some residents on the course of their lives, in the table above we have attempted to provide the clearest possible description of respondents' status, past and current. Once again, this data should be viewed with the necessary caution.

This data confirms what can be noted in many studies, especially that of P.E. Rabé⁴. Even if only a minority of residents appear to be involved, some households re-sold "dwelling rights" to some residents of the slum area (a

⁴ RABE P.E. "Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns" (2010); p11.

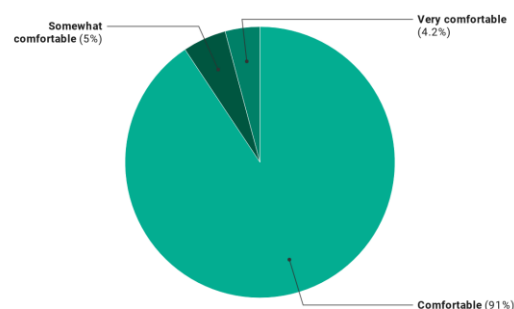
portion of the households shown in green in the table), some households received their apartment free of charge without actually having lived in the Borei Keila slum area previously (households shown in orange in the table), and, paradoxically, some households that moved into the slum area before 2003 had to buy or rent an apartment in one of the Borei Keila buildings (households shown in red in the table).

2.2.2. How residents view their apartment and surroundings

Housing

Comfort of the apartment

Resident's sense of comfort



Source: PE&D, 2019

95% of the households felt comfortable or very comfortable in their apartment. 5% felt somewhat comfortable, and no respondent stated that they felt uncomfortable.

Utilities and fees

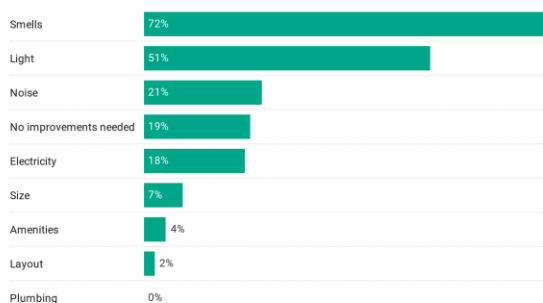
On average, households spend:

- \$12 per month on fuel, with a wide range from \$2 to \$120.
- \$32 per month on water and electricity, with a wide range from \$5 to \$250.

What improvements could be made in your apartment?

Smells and lighting were the most common responses mentioned by 72% and 51% of the households respectively. Noise and electricity were mentioned by 21% and 18% respectively.

Areas of apartment improvement



Source: PE&D, 2019

The size of the apartment and its layout, plumbing, and facilities were barely mentioned.

For 19% of households, no improvements were needed.

The apartment building and neighborhood

General assessment

97% of households are satisfied with their apartment building, and 99% of the tenants feel comfortable in the neighborhood

Stress related to the apartment building

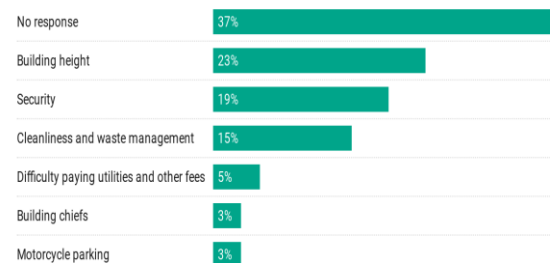
This was an open question, with no suggested responses, which certainly explains the high rate of non-responses (almost 40%).

24% of residents highlighted the height of the buildings. Presumably, it was particularly the tenants living on the highest floors who gave this response.

Also highlighted were security (20%) and cleanliness/waste management (16%).

What causes you the most stress living in an apartment building?

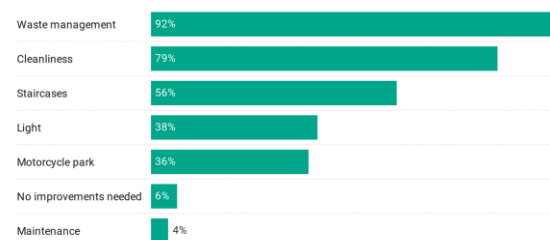
Stressors associated with living in an apartment building



Source: PE&D, 2019

Areas for improvement

Areas of building improvement



Source: PE&D, 2019

92% of households feel waste management could be improved, and 79% think the same for cleaning. These were the two principal areas of "dissatisfaction."

Staircases (56%), lighting (38%), and motorcycle parking (37%) were also mentioned. Building maintenance and access received very little criticism.

According to 6% of households, nothing in the buildings needs improvement.

The residents proposed improvements in the following areas:

- 32 respondents think **better cleaning** of the building is needed, 11 paid particular attention to the staircases,

and five mentioned cleaning in general.

- 11 respondents think **security must be improved**, among which 8 were in favor of security guards and 1 in favor of security cameras.
- 5 respondents think more lighting is needed, especially in front of apartment doors, and it must be kept in working order.
- 3 respondents want a reduction in motorcycle parking fees.
- 3 respondents want elevators installed.

Currently, maintenance of the common areas is managed by PHANIMEX. The company asks some residents directly to clean the common areas in return for a small monthly payment, the amount of which has not been disclosed.

PHANIMEX is in charge of management and rental of the ground-floor businesses.

There are no safety measures in place.

Areas for neighborhood improvements

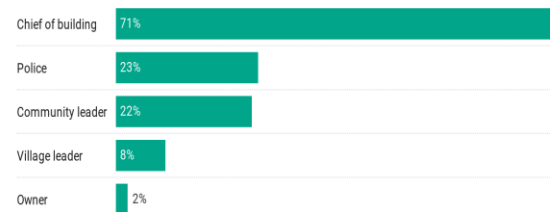


Source: PE&D, 2019

With respect to the neighborhood, residents also highlight improvements are needed in terms of waste management (77%), cleanliness (74%) and security (55%).

Who do you contact with problems in your apartment building?

Contact people in the apartment building



Source: PE&D, 2019

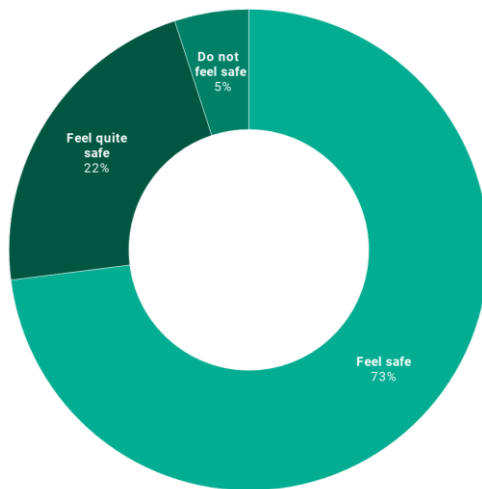
The building chief is the contact person for residents when they have problems, as answered by 70% of residents.

Each building is represented by a chief; these are residents who were chosen by PHANIMEX at the start of the project. The same people have held these positions since the buildings were constructed, and they are remunerated for their work. Their role is to act as a liaison with the police should any crimes be committed, to act as a go-between for residents and service providers such as water and electricity companies, as well as to supervise building maintenance. They must report on their activities to the head of Phum (called "village leader"), who represents the government at the local level.

In addition to official positions, there are informal leaders called "community leaders." These are influential people within the neighborhood, often working with NGOs. 21% of residents responded that they would contact these people if they had a problem.

Security

Safety feeling in the building



Source: PE&D, 2019

73% of households feel safe overall in their building. 22% feel quite safe, and 5% do not feel safe.

At the same time, residents told us of some concerns:

- 76% are concerned about theft
- 48% are concerned about assault

In addition, in 25% of households, at least one member has actually experienced theft or assault in the building or the neighborhood.

Among those households which have experienced theft or assault, 43% responded that they feel "quite safe" or "not safe," versus 27% on average. Having experienced an assault quite logically increases the feeling of insecurity. Income level also seems to play a role in the perception of insecurity. People feeling safe have a higher income (\$381) than those who feel fairly safe (\$365), and much more than those who do not feel safe (\$225).

To improve security, residents propose:

- Greater police presence (10 respondents)
- Hiring security guards (10 respondents)
- Greater investment in this field by

authorities (village leader and building management) (9 respondents)

- Installation of security cameras (8 respondents)
- Improvement of lighting (1 respondent)

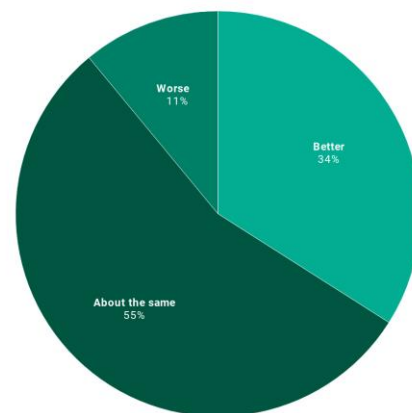
Relationships with neighbors

All the households are satisfied with the relationship with their neighbors.

91% think that when something happens in an apartment building, neighbors help each other.

Relationships between neighbors among residents of Borei Keila seem somewhat better today than during the period of the slum area. The residents do not feel that community ties were stretched thin, contrary to what one might have thought.

State of relations with the neighbors compared to those in the slum area



Source: PE&D, 2019

Involvement in building activities

Residents regularly attend meetings on the operation of their building. 60% regularly attend, and 14% attend sometimes. It is noticeable that tenants are much less likely to attend these meetings; only 30% of them attend, be that regularly or occasionally.

These meetings, which are meant to take place

monthly, actually only take place every three or four months. Their objective is to discuss questions concerning rules, and especially concerning safety inside the buildings. Residents can take advantage of these meetings to bring up problems or make suggestions, although decisions are not made at this level, but by the management company.

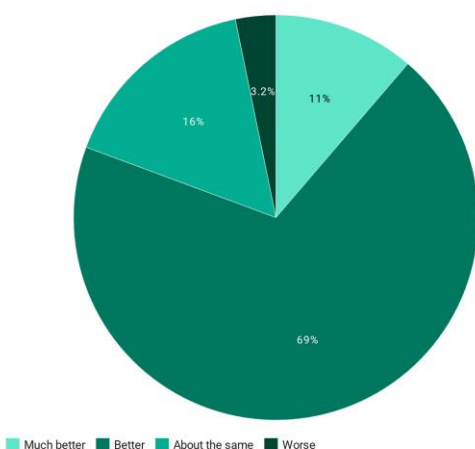
Other relationships

It is noteworthy that, in comparing responses from each building, there are no significant differences in residents' responses. Areas for improvement differ only somewhat. Based on feedback from residents. It does not appear that some buildings function better than others. In addition, residents' perceptions of their surroundings (housing, building, and neighborhood) are only slightly correlated with income, housing status (tenant or owner), or whether residents did or did not previously live in the Borei Keila slum area.

2.2.3. What are the residents' life trajectories?

Improvement of their living conditions

Evolution of living conditions compared to those in the slum area

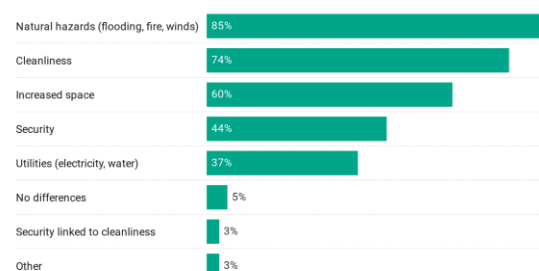


Source: PE&D, 2019

80% of households believe that their living conditions are better or much better than when they lived in the slum, while 4% of them feel that their conditions have deteriorated. Their arrival in new housing and the associated new living conditions have certainly influenced this more positive perception.

85% of residents highlighted a reduced risk of natural hazards (flooding, fire, winds), with 74% mentioning cleanliness, 60% mentioning the increased space, 40% highlighting security and 37% answering with utilities (electricity, water). However, very few residents named tenure security as one of the improvements. Housing standards seem to be far more important than the legal status of their apartments.

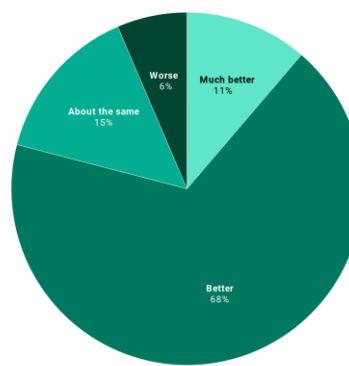
Main improvements compared to the slum area



Source: PE&D, 2019

Changes in their financial situation

Changes in the financial situation since leaving the slum area



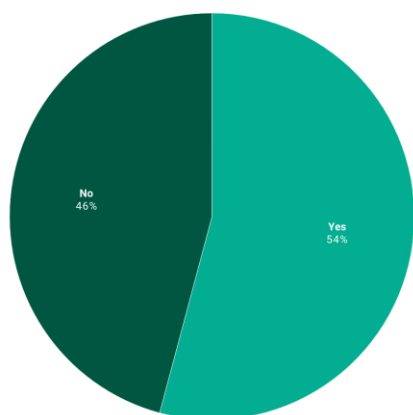
Source: PE&D, 2019

79% of households deem their financial situation to have improved since they moved out of the slum while 6% of them think that it has deteriorated.

There is a strong correlation between the improvement of living conditions and the improvement of economic conditions. It can be assumed that the improvement of living conditions has made the improvement of economic conditions possible which, in turn, has facilitated the improvement of the overall living conditions. Unsurprisingly, households who have not seen any financial improvement have also seen significantly less improvement in their living conditions. 54% of them nevertheless saw an improvement in their living conditions. It could be viewed that, despite a deteriorated financial situation, the improvement of their housing conditions gives them the feeling that their living conditions have improved.

Prospects for the future: moving elsewhere

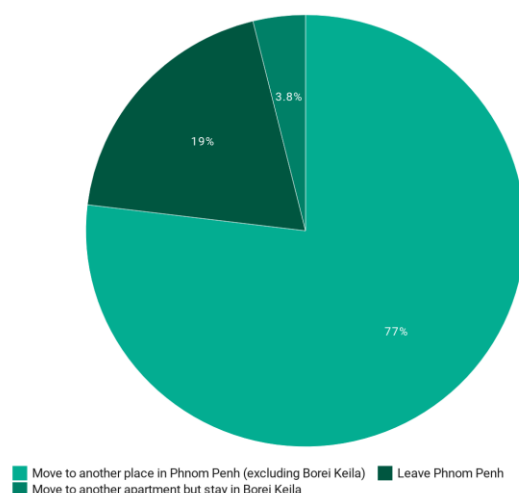
Share of people considering relocation



Source: PE&D, 2019

Despite a high level of satisfaction in their apartments and their environment, a significant number of households (54%) are considering leaving the building.

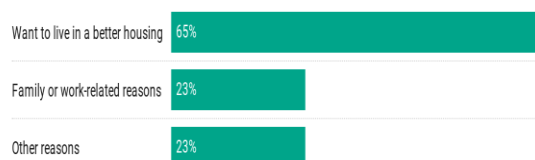
Places that people would want to move to



Source: PE&D, 2019

Of these households, 77% would like to move elsewhere in Phnom Penh, 19% would like to move out of Phnom Penh and 4% would like to move into a new apartment in Borei Keila.

Reasons why people would want to move



Source: PE&D, 2019

Of the households looking to leave, 65% of them would like to live in better housing while 23% cite family or work-related reasons. No household wants to sell the apartment due to financial constraints. Other reasons mentioned by the residents primarily include security (50% of the “other reasons”) because they would like to own a house (17% of “other reasons”) for the households who currently rent in Borei Keila.

A more detailed analysis of the profiles of households who are considering leaving Borei

Keila shows that residents with the following profile are overrepresented:

- they rent their apartment (+ 11 points compared to the average household)
- their living conditions have been improved (+10 points compared to the average household)
- they are dissatisfied with their housing and they emphasize that their dissatisfaction is due to waste management (+6 points), noise nuisance (+4 points) and lack of light in the apartments (+9 points).
- they have been more regularly victims of assault (+5 points)
- they never lived in the slum (+4 points)
- they have higher incomes (+\$44 per month compared to the average household).
- they arrived at Borei Keila between 2003 and 2012 (neither very recently, nor a long time ago) (+15 points compared to the average household)

This overrepresentation nevertheless contains a relatively small proportion (between +4 points and +15 points according to criteria) bearing in mind that certain criteria overlap. For instance, residents who did not live in the slums also correspond to households with higher than average incomes. Despite not having any data available, criteria such as age could likely explain why some households wish to move out more than others.

It is worth mentioning that among the households which are not considering moving out, 30% told us that they would like to move into better housing and/or that they cannot afford to leave the building.

Therefore, if we combine both, almost 70% of households would like to leave Borei Keila and the remainder are not considering it primarily because they cannot afford it.

Borei Keila is therefore seen by some households as a step in their housing trajectory, in particular by those who do not own their apartments or who do not have sufficient

financial means to move into other housing and who did not live in the slums. This could mean that they feel less attachment to the neighborhood.

Key points of the survey to keep in mind

Residents' profile

- The current status of residents in Borei Keila can be divided into 3 categories: those who received their apartments for free (65%), buyers (16%) and tenants (19%).
- 40% of residents have changed since the provision of housing, which shows a relatively high turnover (about 5% per year).
- The way in which housing was provided initially lacked transparency, corroborating studies conducted by different researchers.
- Prices of apartments for sale (\$10,000 on average) and for rent (\$95 on average) vary widely. Housing prices have not skyrocketed and there is no speculation so far despite Borei Keila being in a central and appealing location in the city.
- New arrivals in the buildings are somewhat richer than those who previously lived in the slum.

Residents' perception of the building and its environment

- Households are generally satisfied with their building and housing.
- Dissatisfaction is related to smells, lighting and noise, as well as waste management, cleanliness, security of the building and the surrounding areas.
- The height of the building only seems to be a problem for some tenants.
- Neighborly relationships seem to be good and trusting.
- It is important that the residents of the building (except for tenants) attend neighborhood meetings.
- There is no significant difference in operation between the eight buildings.
- In general, there are no substantial differences in the perception of the building by the households who lived in the slum and those who didn't (even in relation to the height, for example).

Residents' life trajectories

- Most of the households which lived in the slum reported an improvement in their living conditions and their incomes since moving in. They are satisfied with the lack of natural disasters and appreciate the improved cleanliness and the building's height.
- 70% of households would like to move out while 54% of them are considering doing it.
- Most of these households seek a better-quality building in Phnom Penh, therefore, Borei Keila is a step in their housing trajectory.
- Households considering moving out are generally those which have more money and arrived in Borei Keila around a decade ago (between 2003 and 2012) and did not live in the slum.

3. Results of the Borei Keila project

Further to the field investigation, in this third section we will analyze which elements have contributed to the successes of, and issues within, the Borei Keila project. We will then explore some possibilities for improvement.

3.1. A successful transformation of a slum

This land sharing project is, so far, the only one to have come to fruition in Cambodia. The operation has been largely inspired by similar projects in Asian countries (India, Thailand, Indonesia) during the 1970s. The Borei Keila slum has been representative of the recurring problems seen in Phnom Penh and which can still be seen today in slums: highly precarious dwellings illegally built on state-land owned and occupied by low-income families.

On-site rehousing and improvements to living conditions

Assessors have considered this project to be a success on the whole, as a great number of families have been rehoused on-site in solid buildings. The project responded to popular demand by many families to remain in the areas familiar to them and their relatives, where they could continue with their day to day lives, while sensibly improving their comfort in terms of housing and thus their economic situation, as the study showed. Furthermore, a significant number of people who have been questioned (43% of those who lived in the slum) are considering leaving Borei Keila to move to better quality housing in Phnom Penh, which is not a sign of dissatisfaction but rather a demonstration of the improvement of social trajectories.

Operational logistics

The logistics behind the Borei Keila project are ingenious since the entirety of the building costs have been shouldered by a private company, PHANIMEX, which has also pledged to build a 400-meter tarmac road to reach the buildings. They also pledged to temporarily house the inhabitants until the buildings had been completed. In exchange, PHANIMEX has been offered land in Borei Keila by the State (2.6 hectares on top of the 2 hectares on which they constructed the buildings to rehouse the inhabitants). The company has been able to develop on said land and make profits to offset the cost of the project. The city of Phnom Penh and the State have also benefited from the arrangement since a slum has been converted into a proper housing area and roads have been modernized without the need to spend public resources and money (aside from the provision of 4.6 hectares of land and the eventual connections to the network that will need to be made for the new zones). The state has also conserved the remaining plot of land (around 8 hectares) which has now become usable.

District's location

The location of Borei Keila, close to the center of Phnom Penh, has been particularly beneficial to the project, with a high land price allowing PHANIMEX to clear the money needed for the building's construction for the slum's inhabitants. Considering the rise of land and real estate costs in Phnom Penh during recent years, projects such as this would be even more beneficial today. The higher the value of the terrain, the more it will interest real estate developers who will then seek deals with the inhabitants to quickly secure and develop it, so long as the inhabitants are organized and

protected enough to be able to negotiate with them fairly and without pressure.

Erection of a tall building in Borei Keila (December 2019)



Source: PE&D, 2019

The size and shape of the area

The size and shape of the Borei Keila slum was very adequate for the project since it was a large plot with a lot of potential for real estate. This meant that the inhabitant's rehousing could be done alongside the development of commercial activities from private real estate developers, on the same land. This would have been more complex on smaller or more complexly shaped plots. This is one of the reasons put forward by Paul Rabé⁵ when discussing the failure of the three other land sharing projects that the government was aiming towards in 2003.

The project's integration of the inhabitants

One of the other positive points of the project is that the conflict with the slum inhabitants, who were being threatened with eviction for years,

has now been settled, and the result is acceptable for everyone involved. Different studies of the district have shown that not everything happened in a transparent manner. Nevertheless, the efforts dedicated to taking the inhabitant's wishes into account in the project as well as the paradigm shift in relation to the many evictions in 1990 should be noted.

Maintaining neighborhood life and community bonds

Our study highlighted that inhabitant relations are viewed as the same (55%) or better (34%) in the new buildings in comparison to the slum. This observation goes against the studies led⁶ on the relocation projects from slums to new buildings. Calderon Arcila emphasizes two elements in his studies: the disruption of the community and of social capital, and the disappearance of space for trade. We can hypothesize that in Borei Keila, the fact that the relocation happened in the same space, in somewhat packed buildings and with a significant number of previous slum inhabitants compared with a low number of inhabitants arriving from outside contributed to the stability of the community. Besides, it is possible that the continuation of small commercial activities on the ground floor and more informally on the other floors in the building allowed those who had a business in the slum to continue their activities in the new building. After observing the liveliness around commercial activities (whether on the ground or the upper floors), it seems that they become the center of community life in the neighborhood.

⁵ RABE P.E., "Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns" (2010).

⁶ CALDERON ARCILA Camilo Andres, "Learning from slum upgrading and participation"(2008); p26.

Businesses on the ground floor



Source: PE&D, 2019

Business on an upper floor, connected to an apartment



Source: PE&D, 2019

3.2. Issues

While this project has been met with overall success, there have been some issues too.

PHANIMEX not respecting its commitments

Primarily, PHANIMEX did not respect its commitments to the inhabitants and authorities by building all the agreed buildings. In reality, only eight buildings were built instead of the ten that were agreed. PHANIMEX justified their halt in construction by declaring financial

difficulties. This resulted in 330 families being left with nowhere to go. This created a lot of tension between the inhabitants on one side and PHANIMEX, the town and the State on the other, as it was agreed between the parties that those who wished to remain on the site could do so within the new buildings. These families have been excluded from the new apartments, with some not being offered any compensation. These tensions can still be felt today in the neighborhood as some of the issues have still not been resolved. The construction timeframes were not respected by PHANIMEX either, creating a complicated situation where many of the slum inhabitants had to remain in very difficult conditions while awaiting their relocation⁷. The extended timeframes also created a situation where many inhabitants, not seeing the project go anywhere, decided to sell their right to the new apartments, creating a climate of suspicion in the neighborhood.

Furthermore, PHANIMEX did not uphold another of its engagements, which was to build ground floor community spaces for the inhabitants. PHANIMEX appears to have appropriated these spaces for themselves and are instead renting them for businesses or small lodgings⁸. During our on-site visits we were able to observe that businesses were indeed being rented and that some families seemed to live there. PHANIMEX is still present on the site and they are in charge of the buildings' management.

The circumvention of housing allocation rules

As we have observed in our study, some families managed to obtain lodgings in the building without having lived in the slum before

⁷ CARRIER Adeline, "Phnom Penh and its informal settlements: A chronological overview of key events (1992-2012)", (2013); P18.

⁸ University College of London, "Cambodia [ZERO] 14" (2016); p64

2003. As early as 2010, Paul Rabé⁹ had already observed this phenomenon in his field study, showing that the housing allocation process was not transparent enough and that some families from the slum had sold their right to housing to some other families, who would not normally be authorized. This is an understandable decision by the families who would rather have the money than housing. However, the way these transactions were handled, the lack of transparency and the circumvention of the rules led to some significant tensions in the slum, as well as with the Municipality and Government creating a toxic climate in the neighborhood.

Limited inclusion of the inhabitants in the project

To conclude, Paul Rabé¹⁰ and Adeline Carrier¹¹ have noted the many requests and questions of the inhabitants in relation to the buildings' architecture, complaining about how PHANIMEX did not collaborate with them as was previously agreed. As our study showed, it appears that there have been a few oversights in terms of waste management, security, lighting, smells and noise. Furthermore, the inhabitants are mostly represented through the building chiefs, who were not elected but rather were appointed by the company.

⁹ RABE P.E. "Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns" (2010); p11

¹⁰ RABE P.E. "Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns" (2010); p20

¹¹ CARRIER Adeline, "Phnom Penh and its informal settlements: A chronological overview of key events (1992-2012)", (2013); P18.

3.3. Improvement areas

3.3.1. Proper definition of the guidelines

Allocation rules

The deficiencies observed in housing allocation have demonstrated the need for a clearer, more transparent allocation process to ensure that the renovated lodgings are allocated to the slum inhabitants. The "circular no.3 on squatter settlement resolution" from May 2010, which had not yet been written at the conception stage of the project, is a legal tool which can support the different players within the land sharing projects. It mentions that illegal dwellings must be dealt with in dialog with the community representatives and the NGOs and that a list of the families inhabiting illegal dwellings and who are offered relocation or compensation must be shared between all the stakeholders and partners. The circular shows that inhabitants are identified through their photo and their fingerprints, much like the authorities working on the census, to avoid fraud.¹² The set up of these shared lists between partners and the traceability guarantees they bring could be the first step to guarantee more transparency in the allocation process and would prevent the sale of rights or the relocation of households who did not previously inhabit the slum.

Respecting commitments

It is necessary to ensure that each partner upholds and respects their commitments. In terms of Borei Keila, if PHANIMEX had built the last two missing buildings as agreed, the

¹² BENG HONG Socheat Khemro "Housing Policy and Circular No. 3 on Squatter Settlement Resolution", PP presented at the Summer School (12-13 November 2014)

agreement between all partners could have been achieved.

The consultation process

If there are future land sharing projects, the consultation process with the inhabitants could be improved, better taking their needs into account. For example, we have observed that disability within a family was not taken into account and some were given apartments on higher floors.

The inhabitants could have been more involved in the design and set up of the building. Cleanliness, waste management, lighting, building height and security, the dissatisfaction areas for the Borei Keila inhabitants, could have been better anticipated. A land sharing project is a unique opportunity to involve the future inhabitants in the construction of their building, in a way which is identified at the outset.

3.3.2. Providing social support for residents and managing building common areas

Throughout our survey with the residents of Borei Keila, we have observed that neighborhood relationships and community life do not appear to have been affected by the relocation in the buildings. As previously stated, residents instead raised their complaints about the maintenance, waste management and security, all of which could be improved.

Social support for residents

Moving from a poor habitat to a solid apartment building involves important changes in terms of daily routine in the building and in the management of shared spaces. In land sharing projects, as new residents move into

their new dwellings, it could be a good time to raise their awareness on waste management, provided a functioning garbage collection is put in place. The energy cost is a significant budgetary item for households with limited resources (during our survey a number of residents complained about the high cost of electricity). A specialized organization could also develop an awareness program on eco-friendly behaviors as the new residents move into their accommodation.

Furthermore, workshops on rules of cohabitation could also be offered to the residents allowing them to draft building regulations for everyone. It seems there are no building regulations in Borei Keila, other than a plaque on a wall (see picture below). Conflicts or issues seem to be managed by the building chief or by the village chief if they are considered more serious. Having the residents draft the cohabitation rules could support the mediation task of the building chief, provided households take full ownership of these rules and refer to them in cases of conflict.

Building rules



Read: 'no violence, no drugs', and so on

Source: PE&D, 2019

“Circular Nr. 3 on squatter settlement resolution” from May 2010 mentions the role of participating NGOs in the transformation operations of the neighborhoods, to continue

offering support to the resident community in getting organized during the relocation project. NGOs specialized in environmental topics and resident participation could undertake these awareness campaigns with the participation of the residents.

Managing common spaces

Standards on managing common spaces are quite different in Cambodia to the Western world. As stated by Sabrina Ouellet¹³, the principle of co-ownership is not very developed in Cambodia. In Borei Keila, it has been difficult to understand who the common spaces of the building belong to and how they are managed; the residents themselves did not know. In fact, PHANIMEX still owns offices in one Borei Keila building. It manages the common spaces, but we are not sure if it is officially and if PHANIMEX owns these areas legally as well as all the spaces on the ground floor. PHANIMEX collects the charges for water and electricity from the different residents through the building chiefs, it also pays the residents for cleaning the premises and is in charge of some sort of maintenance of the buildings. It also appears that if a resident would like to undertake some type of work in their apartment, a request must be submitted to PHANIMEX¹⁴ for approval. Thus, the company becomes de facto owner-manager of the whole common areas of the building. PHANIMEX does not have a mandate from the owners of apartments, as it is generally the case in France, where owners collectively own the common spaces.

Homeowners would thus become some sort of tenants of the common spaces of Borei Keila. PHANIMEX's involvement, although somewhat vague, makes it possible to maintain the buildings' common areas for now. Without PHANIMEX's intervention, the residents would have found it difficult to organize themselves to successfully manage everything. Nevertheless, it is fair to question the position of PHANIMEX as being behind all the services of the residents of Borei Keila, considering the past litigations. Regular meetings are organized by the building chief on the operation of the building and common areas. As shown in our survey, many residents who are property owners participate in these meetings. During these meetings, the residents of Borei Keila bring to light deficiencies and voice their complaints. However, considering the deficiencies within the building, regarding maintenance, cleanliness, lighting, security and waste management, we are not sure the residents' complaints to improve these issues will be heard. Furthermore, will PHANIMEX undertake all the necessary work to make sure the buildings do not deteriorate? Finally, managing the buildings in Borei Keila will require more transparency. The role of the administrator must be clearly defined as there is a risk of seeing the building deteriorate if it is not and if the administrator does not respond to the residents' expectations.

3.3.3. Possible alternative to free housing

There is an interesting provision in the Borei Keila project, contrary to other land sharing projects in Asia, as apartments were not sold at a moderate price to relocated households but were instead given out for free. This generous idea allowed all households living in the slums to access property, regardless of their income.

¹³ OUELLET Sabrina "L'INTÉGRATION DES HABITANTS DES QUARTIERS INFORMELS DANS LA VILLE LÉGALE : L'EXPÉRIENCE DU LAND SHARING À PHNOM PENH (CAMBODGE) ", (2009); p67

¹⁴ BOANO Camillo, TALLOCI Giorgio, "The de-politicisation of housing policies: the case of Borei Keila land-sharing in Phnom Penh, Cambodia", (2016); p11.

Knowing whether they would be able to repay a loan or pay rent was not an issue.

Other solutions could have been considered, such as selling dwellings at a low price, as was the case in land sharing projects in Thailand or setting affordable rent as is seen in social housing.

Selling dwellings

Selling dwellings at a low cost is a good option. The quality and/or size of the dwellings would have been better if this option had been considered for Borei Keila. Selling housing can be considered, providing the families are sufficiently solvent and that they have access to a suitable loan scheme, with reasonable interest rates. According to the figures we gathered on Borei Keila, the construction cost for one rental unit is \$7,000. If residents had bought their apartment for \$3,000, PHANIMEX would then have \$10,000 in hand to build each unit. This money could have been used to improve the security of the building, electrical installations, sound insulation or lighting. This \$3,000, could have been borne by each household, paying \$50 each month (a reasonable amount, considering it is the amount for a low rent room in Phnom Penh) for seven years, which adds up to \$3000 with a 10% interest rate.

There are two advantages to this option, in addition to improving the quality of the apartments and the building: the possibility to adapt the size of the apartments to the families and to prevent resale of the residency rights to outsiders who came to the slum after the project had commenced. As the apartments would have to be paid for, we can assume that households from outside the slum would be less interested in purchasing the rights from the residents from the slum. Furthermore, we observed in our study that all apartments were

the same size, although family sizes were very different, from between 1 and 17 members, meaning there is both over-occupation and under-occupation. We presume that handing over a dwelling to each household compelled the authorities to respect some sort of equality, in giving the same size apartment to everyone. In the framework of a partially purchased apartment, the part that is purchased could vary according to the size of the dwelling. Large families of 6 individuals or more could buy 10 or so additional square meters, for a higher purchase price (e.g. \$4,000 instead of \$3,000).

Rented apartments according to the public social housing model

Instead of giving out the apartments to the residents, they could have been rented out with a cheap rent (ex: \$50 per month + rental charges) as per the public social housing model, which guarantees security of tenure for the tenant. A manager is then selected to collect the rents and undertake management and maintenance of the building.

This option has its drawback as it is more demanding in terms of management. Collecting rents may become troublesome if tenants do not pay their rent. It also requires mechanisms to be put into place to ensure that any rent collected is clearly allotted to cleaning and maintenance of the building or the refund of loans taken for the construction.

Nevertheless, there are definite advantages to this option. Similar to selling apartments at a low price, these apartments could have different sizes to better fit family size. The rent would therefore depend on the size of the apartment in addition to other factors, such as position in the building, for equality.

Social housing would also limit the resale of the right to housing. From an external household standpoint, paying a low rent is less attractive

than being the owner of an apartment. Families living in the slums looking for financial assistance would have no other choice than to accept the State's compensation.

This mechanism would limit the risk of damage to the building as part of the rent would clearly be designed for its repair and maintenance. As previously stated, there is a real risk that the buildings will deteriorate with time, even more so, as the families living on these premises have a limited income and will not be able to afford serious unplanned infrastructural works.

Finally, social housing is also a way to prevent speculative bubbles, where the poorest households are ultimately made to leave the neighborhood, as seen in many central zones in major cities across the world. During our survey, we have noticed that it is not yet the case in Borei Keila, where apartments are sold on average for \$10,000, which is not unreasonable considering the central location of the neighborhood, and where no notable increase has been recorded over the past years. Borei Keila's "bad reputation" could well protect the neighborhood from this type of speculation. But seeing the recent transformation of the neighborhood and the current construction trend of more luxurious buildings, the apartments could see an increase in their resale value.

Development of social housing projects is now enshrined in the 2017 housing "Policy on Incentive and Establishment of National Program for Development of Affordable Housing". Item 4 of the future "National programs on the affordable housing development" foresees the development of rental social housing for the most underprivileged households. The State could seize the opportunity on the implementation of land sharing projects to test the social rental housing projects. The State could select a

manager, establish rules to determine rents and who would have access to this housing scheme, as well as how it would be managed. A mechanism could be created ensuring that these apartments would be made available primarily for those relocating from a slum within a *land sharing* project. Later, as these families gradually leave these social housing units, they could become available for other families who are relocating from other slums either temporarily (relocation while a building is under construction) or permanently. The network of social rental housing would thus expand, and Phnom Penh City would therefore have a stock of social rental units available for relocations from the slums. This is more or less what happened in France in the fifties and the sixties where many social dwellings were built. They helped gradually absorb underprivileged households from the slum areas into new buildings.

3.3.4. An opportunity to redesign the City

A land sharing project like Borei Keila could be even more ambitious if global brainstorming on the transformation of the whole neighborhood were undertaken by the government. The State, in its role as the landowner, could, prior to launching the project, plan all future development in this "piece" of the city (as a reminder, it controls over 12 hectares in Borei Keila!).

The land cleared by the slum could become a neighborhood in the City, with mixed areas including housing, shops and offices, also public facilities which are desperately needed in Phnom Penh (public parks, public facilities, structured rail network).

New socially mixed neighborhoods would be created (apartments for households relocated from the slums and more upscale housing built by private developers). The funds received by

the State for selling the land to developers would balance this urban operation, as it would fund the construction of housing for the relocated households from the slums and other public facilities.

With a large share of land made available through land sharing projects, such as the one

in Borei Keila, real opportunities arise for developing global and coherent urban projects. It is a unique opportunity to redesign the city within the city, to modernize it and to develop facilities which meet the needs of its inhabitants.

Bibliography

BENG HONG Socheat Khemro “Housing Policy and Circular No. 3 on Squatter Settlement Resolution”, PP presented at the Summer School (12-13 November 2014).

BOANO Camillo, TALLOCI Giorgio, “The de-politicization of housing policies: the case of Borei Keila land-sharing in Phnom Penh, Cambodia”, (2016).

CALDERON ARCILA Camilo Andres, “Learning from slum upgrading and participation”, (2008).

CARRIER Adeline, “Phnom Penh and its informal settlements: A chronological overview of key events (1992-2012)”, (2013).

CLERC Valérie, “A Competition for Land Policies Towards Informal Urban Settlements in Cambodia, from Regularization to Eviction, Chapter 16” in J.-C. BOLAY et al. (eds.), *Learning from the Slums for the Development of Emerging Cities*, Springer International Publishing Switzerland, (2016), p.173-187.

OUELLET Sabrina “L'INTÉGRATION DES HABITANTS DES QUARTIERS INFORMELS DANS LA VILLE LÉGALE : L'EXPÉRIENCE DU *LAND SHARING* À PHNOM PENH (CAMBODGE)”, (2009).

RABE P.E. “Land Sharing in Phnom Penh and Bangkok: Lessons from Four Decades of Innovative Slum Redevelopment Projects in Two Southeast Asian Boom Towns”, (2010).

ROYAL GOVERNMENT OF CAMBODIA, “Policy on Incentive and Establishment of National Program for Development of Affordable Housing”, 24 November 2017.

UNIVERSITY COLLEGE OF LONDON, “Cambodia [ZERO] 14”, (2016).

Appendix 1

Survey Borei Keila

Hello, we work for an NGO called "Planète, Enfants et Développement" which helps people to have a better condition of housing, among other things. With the support of Phnom Penh City Hall, we are running a survey on the Borei Keila housing project. Borei Keila is an innovative slum upgrading project. This is the only one in Cambodia so far. This evaluation is very important, it will make projects like Borei Keila possible the future. We need to ask you some questions to make the evaluation. As a resident living in the building, you are the best person to inform us. We guarantee you that the survey is anonymous. The interview will only take 20 minutes to complete our survey. If you answer the survey, we will offer you a little gift.

Family information

* 1. How many people live in your apartment?

2. What is your job?

3. How much do you earn per month?

in dollars

3.bis How much does the whole family earn per month?

* 4. If you have children between 6 and 14, do they attend school?

☐

a. Yes

☐

b. No

☐

c. I don't have children of this age

* 5. Does a member of your family have a disability?

☐

a. Yes

☐

b. No

History

* 6. Did you live in the slum of Borei Keila?

☐

a. Yes

☐

b. No

☐

c. Prefer not to say

7. When did you move into the new building?

7.1.1. When did you come to Borei Keila?

* 7.1.2. Are your living conditions better than before (in the slum)?

- ☐ a. Much better
- ☐ b. Better
- ☐ c. About the same
- ☐ d. Worse

7.1.3. What are the main differences?

- ☐ Tenure security
- ☐ Hazards (flooding, fire, winds)
- ☐ Security
- ☐ Utilities (electricity, water)
- ☐ Cleanliness
- ☐ Space
- ☐ Other
- ☐ No difference

7.1.3.bis. If other, please specify.

7.1.3.1. Can you specify for each item if it is better or worse in the building than in the slum?

	Better	Worse
Tenure security	<input type="radio"/>	<input type="radio"/>
Hazards (flooding, fire, winds)	<input type="radio"/>	<input type="radio"/>
Security	<input type="radio"/>	<input type="radio"/>
Utilities (electricity, water)	<input type="radio"/>	<input type="radio"/>
Cleanliness	<input type="radio"/>	<input type="radio"/>
Space	<input type="radio"/>	<input type="radio"/>

7.1.4. Has your financial situation changed since you moved to the building?

- ☐ a. Much better
- ☐ b. Better
- ☐ c. About the same
- ☐ d. Worse

* 7.2.1. Did you buy your apartment or do you rent it?

- ☐ a. Bought
- ☐ b. Rented
- ☐ c. Nether, apartment was gift

7.2.1.1. How much did you pay for it (dollars)?

(dollars)

7.2.1.2. Have you taken out a loan to buy it?

- ☐ a. Yes
- ☐ b. No

7.2.2. How much is your rent?

Environment

8. What is the most stressful part of living in the building?

9. Are you comfortable in your apartment?

- ☐ a. Very comfortable
- ☐ b. Comfortable
- ☐ c. Somewhat comfortable
- ☐ d. Not comfortable

10.1 How much money do you spend each month on gas?

10.2 How much money do you spend each month on electricity and water?

10.3 How much money do you spend each month for building taxes ?

11. What could be improved in your apartment?

- ☐ a. The size
- ☐ b. The layout of the apartment
- ☐ c. The amenities
- ☐ d. The plumbing
- ☐ e. The electricity
- ☐ f. The noise
- ☐ g. The lighting
- ☐ h. The smell
- ☐ i. Other
- ☐ j. Nothing (everything is fine)

11.bis. If other, please specify

12. Are you satisfied with the building?

- ☐ a. Yes
- ☐ b. No

13. What could be improved in your building?

- ☐ a. The cleanliness
- ☐ b. The maintenance
- ☐ c. The motorcycle park
- ☐ d. The lighting
- ☐ e. The waste
- ☐ f. The access
- ☐ g. The stairs
- ☐ h. Other
- ☐ i. Nothing (everything is fine)

13.bis If other, please specify.

14. Do you feel safe in the neighborhood?

- ☐ a. Yes
- ☐ b. No

15. What could be improved in your neighborhood?

- ☐ a. The cleanliness
- ☐ b. The waste management
- ☐ c. The access
- ☐ d. The security
- ☐ e. The shops
- ☐ f. The services
- ☐ g. Other
- ☐ h. Nothing (everything is fine)

15.bis. If other, please specify.

16. What services would you like to have in your neighborhood?

17. Who do you contact if you have a problem in your apartment or your building?

- ☐ a. Building leader
- ☐ b. Community leader
- ☐ c. Police
- ☐ d. Other people

17.bis. If other people, specify.

18. Do you feel safe in the building?

- ☐ a. Safe
- ☐ b. Quite safe
- ☐ c. Not very safe
- ☐ d. Not safe at all

19. Are you afraid of ... ?

- ☐ a. Robbery
- ☐ b. Attack/physical assault
- ☐ c. No

20. Have you or a member of your family ever been attacked/assaulted or robbed?

- ☐ a. Yes
- ☐ b. No

21. What could improve your safety?

Relationship

22. How are your relationships with your neighbors?

- ☐ a. Good
- ☐ b. Bad
- ☐ c. None

23. When something happens, do people living in the building help each other?

- ☐ a. Yes
- ☐ b. No

24. How are the relationships in the building compared to the slum ?

- ☐ a. Better
- ☐ b. About the same
- ☐ c. Worse

25. Do you attend meetings about the management of the building?

- ☐ a. Yes
- ☐ b. Sometimes
- ☐ c. No
- ☐ d. I don't know such meetings took place

Future

26. Are you considering leaving the building?

- ☐ a. Yes
- ☐ b. No

26.bis Where would you move?

- ☐ a. Another apartment in the same building
- ☐ b. Elsewhere in Phnom Penh
- ☐ c. Outside of Phnom Penh

27. Why?

- ☐ a. I need a better place
- ☐ b. I need to sell the apartment for money
- ☐ c. Job or family reason
- ☐ d. Other

27.bis. If other, please specify
