

# URBAN UPGRADING IN HO CHI MINH CITY

January 2014 / n° 002

## The Tan Hoa Lo Gom canal sanitation project

The motivation to start the THLG project was to deal with the canal's heavily polluted water. In the early 20<sup>th</sup> century, the Tan Hoa Lo Gom canal was a major navigation channel connecting southern Ho Chi Minh City to the Mekong River Delta, but its importance waned with growing urbanisation and the shift towards road-based transport. Industrial and domestic waste caused environmental degradation in and around the canal. Densely populated informal settlements sprang up along its banks and even on the canal itself. As a result of inexistent or insufficient collection systems, (solid) waste often ended up in the canal. Most dwellings were not connected to water or sanitation infrastructure, nor to the electricity grid.

Vietnamese households are ranked into four categories, ranging from official permanent citizens (KT1) to migrants with temporary residence permits (KT4). Each category has different rights and obligations, and some categories face possible restrictions, such as access to public basic services. In the area around the THLG canal, 42% of the households had the lowest status (KT3 and 4)<sup>1</sup>, and some were not registered at all. Many of the informal settlements along the canal were considered to be slums, based on the UN definition<sup>2</sup>. In 2002, the Land and Housing Department identified 150,000 low-cost houses, 93,000 of which were in poor condition in areas targeted for upgrading, and 25,000 of which encroached on the city's canals.

The project aimed at addressing the problems in a comprehensive way, including the participation of the population and taking into account the socio-economic activities causing the pollution.

1 | 415 (2001) Monitoring of resettlement and urban impact – baseline survey

2 | UNESCAP (2003) Overview of the state of implementation of Agenda 21 and JPOI in the human settlements in Asia and the Pacific, Bangkok, October 2003

## Unexpected social impact of an infrastructure project

### Key points

- The Tan Hoa Lo Gom canal sanitation project in Ho Chi Minh City was **innovative**: instead of investing in one infrastructure component spread out over the entire city, it focused on different components in a limited area.
- For the first time in Vietnam, a social housing project developed a mechanism to finance the operation and maintenance of the buildings in a sustainable way. Residents run and maintain the apartment blocks themselves, with their own management board and regulations.
- Capacity development and institutional strengthening are valuable concepts that are worth pursuing through Official Development Assistance, even if short-term results are not always tangible.
- The project seems to have had a major impact on local authorities. The interaction between residents and local authorities has improved.
- An 'infrastructure' project can have a wide, unexpected impact. The resettlement programme allowed people to progress from being slum dwellers with virtually no legal status to official home-owning residents.



What used to be a slum, changed into a residential area while the intense social contact has been kept intact.  
Photo: © BTC / Jan Van Lint



## Introduction

Following political and economic reforms (*Doi Moi*) launched in 1986, Vietnam evolved from one of the poorest countries in the world to a middle-income country. This resulted in a ten-fold increase of the per capita income in less than 25 years. From the early 1990s onwards, Vietnam could not only count on increasing Foreign Direct Investment, but also on considerable Official Development Assistance (ODA). Ho Chi Minh City (5 million inhabitants in 1996) requested assistance from the international community to tackle pollution and poverty along its canals. Major donors such as the World Bank, the Asian Development Bank (ADB) and Japan agreed to help. Belgium too contributed to the effort: between 1998 and 2006 it offered 20 million euros to address the environmental, housing and social challenges along the Tan Hoa Lo Gom (THLG) canal, the most polluted of Ho Chi Minh City's five main canals.

Upon completion in 2006, the THLG project supported by Belgium was considered a success, with most of its objectives reached. In 2012, the project site was revisited by an expert of the Royal Tropical Institute of Amsterdam (KIT) to independently evaluate the longer-term impact. Different stakeholders, including beneficiaries, local authorities and project staff, were brought together to exchange views and to look for indicators of failure and success six years after the project's closure. The results of this event are reflected in this paper.

## Focus and results

The project focused on a series of 'pilots' in one of the flood-prone areas in the old, densely populated District 6. On the

hardware side, urban upgrading activities were carried out (e.g. concrete alleys, public lightning, provision of drinking water and sewage), social housing and solid waste and wastewater treatment collection systems were set up. On the 'soft' side, the project invested in capacity development and income-generating activities.

## Waste collection

The project helped to reorganise waste collection in 4 wards, which resulted in better and quicker collection and in higher wages for the collectors. A small transfer station for solid waste was built in Ba Lai, designed to process 72 tons of waste per day. After sorting waste for recycling, the rest was moved in containers to the landfill outside the city, at night. The high density of the waste made compaction redundant and allowed for cheaper equipment, while limiting smell and leakage compared to a compaction system.

A 30 ha aerated lagoon wastewater treatment plant was built in Binh Hung Hoa ward, with a capacity to treat water of the equivalent of 120,000 inhabitants. Compared to classic treatment systems, it proved to be a cheap and effective alternative (investment estimated at €27/inhabitant) with limited side effects (i.e. acceptable noise and smell levels). There have never been complaints of an increased number of mosquitoes. Initially the site was located at the edge of the city, but it is currently surrounded by newly constructed dwellings. Hence it provides a rare green area and a park in the city.



Densely populated informal settlements along the Tan Hoa Lo Gom canal in Ho Chi Minh City (before the project started).  
Photo: © BTC



Aerated water purification lagoon along the Tan Hoa Lo Gom canal in Ho Chi Minh City.  
Photo: © BTC

### Urban upgrading

An urban area of about 1 ha, suffering severe floods at least five times a year, was upgraded through the THLG project. Drainage systems were constructed, alleys were paved, street lighting was installed and drinking water and electricity was brought to the inhabitants, at low costs (only €210 per household).

To ease water flow, to prevent flooding and to facilitate boat transportation, plans were developed to reshape the canal over a distance of 300 meter, including investment in embankments, roads and alleys. However, this also implied the relocation of households. The land was publicly owned, and decisions on planning, housing and infrastructure development were made centrally, but city authorities were reluctant to act without the residents' consent and wanted to compensate all affected households. The THLG project offered different solutions: residents could either buy an apartment in situ or acquire a plot of land in a so-called sites and services scheme, for which an area was reserved in Binh Hung Hoa Ward next to the aerated lagoon, 8 km away. The scheme created the opportunity to develop a neat urban front to the lagoon and the surrounding parks and public spaces. The services included drainage, paved roads, water, electricity, sewerage connections and access to a primary school. As it took longer than planned to complete the infrastructure, affected residents could also opt for a financial compensation instead. This third option was chosen by about 5% of the affected residents, most of which left the area, and it is not known whether or not their situation improved.

The *in situ* apartments were three-storey blocks designed in consultation with the future users. The site provided semi-public open playgrounds and green areas. It also included motorcycle parking, a hawkers' market, a community house and a pontoon for boats along the canal. Because of the limited number of storeys, no expensive elevators were needed. Residents could live close to the street level, which is quite handy for their economic activities. The apartments were 30 to 40% cheaper than those of other relocation projects because of their smaller size (32-53 m<sup>2</sup>). However, homes with electricity, permanent water supplies and toilets represented a huge improvement for most households. For the residents who had chosen to move to the in situ apartments, a lottery was organised to designate which specific apartment was allocated each. By early 2005, all 72 apartments were occupied.

### Credit and savings

Access to credit was considered a major obstacle for development for the inhabitants along the canal. The cost of living in a city environment was higher as compared to rural areas, particularly for non-registered residents who had no access to basic services. The THLG project offered low-interest loans to upgrade houses and install individual septic tanks, and it provided incentive grants to offset the cost of installing electricity and water meters. A home improvement scheme allowed residents to transform their improvised dwellings into brick buildings.



In 2000, a microcredit and savings scheme with moderate interest rates was launched to provide small business loans for alternative income-generating activities. The collateral was based on group solidarity (with a majority of women), to reimburse all amounts due by its members. The scheme offered interest-free loans for children's education and medical treatment. It also included a savings component, which was very successful compared to microcredit schemes in rural areas of Vietnam. The scheme proved to be an important instrument to enhance communication and build trust between project staff and residents. It played a significant role in empowering slum dwellers to become savers and home owners.

### Decision making and management

The daily management of the project was the responsibility of Project Management Unit 415 (PMU 415), reflecting the tradition of appointing a PMU for every city project. PMU 415 was made up of full-time Vietnamese staff (engineers, architects...), mostly detached from the city administration, and some long-term Belgian experts. The PMU was in charge of developing and implementing pilot projects, approved by a steering committee chaired by the highest city authority. Funds were available to engage additional Vietnamese and foreign expertise. In order to propose appropriate but state-of-the-art solutions, the PMU searched for expertise and proficiency worldwide, not only by inviting experts to Ho Chi Minh City, but also through visits abroad of both PMU staff and city authorities.

The main challenge for PMU 415 was to constantly deal with conflicting interests of different authorities and residents. Although senior officials in the HCMC Peoples' Committee were fully supportive, at district and ward level officials were rather reluctant. The latter resented the wages and autonomy enjoyed by project employees, calling it a 'VIP project'.

Getting rid of the slums was a priority for some departments, because they wanted a larger canal bordered with wide roads (> 4 m) for which major resettlements were required. As similar programmes in South East Asia have shown, slum upgrading activities can result in gentrification. Poor residents are displaced and kept out by families that can pay higher rents, property prices and taxes. Businesses that can afford these higher rents cater to more affluent consumers, further increasing the appeal for higher-income migrants and reducing accessibility for the poor. Owner-occupiers who cannot pay taxes, are often forced to sell their homes and move to cheaper areas. In principle, gentrification is attractive for authorities because it opens up opportunities and potential new resources, but in the short term this is not an advantage for affected residents.

To deal with these tensions, a team of social workers was recruited between 2001 and 2006. Their mission was to better understand the different needs and expectations of all parties and to encourage reflection and negotiation on the socio-economic aspects of urban upgrading. Residents were



New three-storey apartment buildings were designed in consultation with future users.  
Photo: © BTC / Jan Van Lint

initially suspicious, believing the social team was 'on the government's side', but trust and communication quickly improved, in particular after the launching of the savings and credit programme. A lot of attention was paid to continuous communication throughout the different pilot projects. However, the pilot investment projects sometimes resulted in solutions outside national standards or habits, such as smaller apartments to make them affordable. Combined with the numerous administrative bodies involved in the approval process, including at the national level, these factors obstructed informed decision-taking and caused delays.

## Sustainability and impact

### Infrastructure

In 2012, the visit to the pilot investment projects in District 6 showed that the infrastructure was still in a good condition. The low-cost housing site looked better than ever before. Residents said that the new environment had a positive impact on their health, although this is difficult to prove with data. The low-cost slum upgrading approach was new for Vietnam, but the positive experience of the THLG project enabled the World Bank to convince local authorities to approve the Vietnam Urban Upgrading Project, a large low-income areas upgrading program including a similar approach.

The three-storey apartments seemed to be the most successful of the resettlements schemes. In the first place, relocated residents mentioned the absence of flooding, despite heavy seasonal rains and the polluted canal nearby. They also enjoyed the fresh air on the upper floors. Only 13% of the original inhabitants had moved out by 2012, which is minimal compared to almost 90% of any other relocation scheme in the City<sup>3</sup>. The main reason for leaving anyway, was because tenants could not afford to repay the loans.

The apartments looked clean and nicely decorated. Their value is rising. An apartment manager claimed that the area could no longer be considered as a slum. He said that it was changing into a residential area, like a hamlet, but that the atmosphere of the former neighbourhood of individualized small units and alleys with intense social contact had been kept intact. Most households in the high-ceiling apartments had virtually doubled their floor space by installing mezzanines, others had built kitchens and bedrooms in the corridors, and several rooms were used for small businesses. There were some complaints about the lack of space and privacy (open corridors), and one resident noted that the overhanging roof made the building look like a stadium. However, all interviewees agreed that they were far better off than before.

For the first time in Vietnam, a social housing project also developed a mechanism to finance the operation and maintenance (O&M) of the buildings in a sustainable way. Residents run and maintain the apartment blocks themselves, with their own management board and regulations. Money is raised by renting out the public spaces for events (e.g. wedding parties) and for parking. Revenues are sufficient to finance three apartment managers and minor maintenance, and to build up a savings account (+ \$2,000 in 2012). Apart from suggesting their preferred candidates for the apartment managers' posts, the input of local authorities is limited.

The THLG project had planned to build more 3-storey apartment blocks, but the city decided to design 12-storey blocks instead. The prevailing argument was the waste of highly valuable land by spreading instead of concentrating people. However, in 2012, the sharp contrast of an unfinished empty 12-storey block, right next to the tidy and lively low-storey blocks of the THLG project, was striking. When or if the 12-storey construction site would start up again, was not clear.

In contrast, 40% of the relocated slum dwellers who moved to the sites and services area, were replaced by richer households. An important reason for this was the lower income due to the greater distance from their old markets and trade networks. It seemed that the sites and services approach was suitable for those with stable employment, but not for petty traders.

The small transfer station in Ba Lai is well maintained by the district authorities and the waste collectors seem well organised. The authorities of District 6 were pleased with the station and built another similar station. The wastewater lagoon is still operational, but some maintenance is necessary. However, the system cannot deal with the wastewater of the additional dwellings downstream, and sooner or later the authorities will have to replace the plant by a bigger system to treat the water of the entire basin. It is hoped for that in the long run the site will serve as the major public green area of the inner city.



3 | Wust, S. (2001) Métropolisation, habitat précaire et relogement forcé: entre phénomènes d'exclusion et tactiques populaires d'intégration, Ho Chi Minh Ville, thèse de doctorat, Lausanne

Resettlement allowed people to progress from being slum dwellers with virtually no legal status to official home-owning residents. Photo: © BTC / Benoît Legrand



The project also yielded unexpected results, including improved status of residents and better interaction between authorities and the population. Photo: © BTC / Jan Van Lint

### Residents

For many interviewees, the impact on the status of affected slum dwellers was one of the major achievements of the project. Ho Chi Minh City not only compensated all residents who lost their homes, even if they had no ownership papers or KT status. The resettlement also allowed people to progress from being slum dwellers with virtually no legal status to official home-owning residents. Regularisation of illegal residents meant that they obtained access to public services. Following the provision of electricity and water connections in the slum upgrading area, it enabled residents to acquire KT1 or KT2 status.

The credit and savings scheme remained operational and membership increased even after the project's end, despite the lack of involvement of any formal financial institution. This indicates that the scheme really responded to a need. Annual meetings are conducted by the people in charge to review results and compete for the best financial returns.

### Authorities

The project seems to have had a major impact on local authorities. Despite or maybe because of many discussions, the District 6 authorities were finally most satisfied with the results. The interaction between residents and local authorities had improved. A senior official in District 6 noted its success as a pilot and a model for the city, as the first upgrading project in HCMC where people did not complain.

The impact at city department level is less clear. The People's Committee of the city, the departments, the district and ward authorities and the urban services companies, have mixed views on the apartment scheme. The appreciation of the slum upgrading still ranged from praise to incomprehension and rejection. Some interviewed senior city department officials

reported that the decision to only move a limited number of households represented a significant policy change. However, most believe that larger buildings are more suitable and economical to build. This view was translated in the approach applied by the Vietnam Urban Upgrading Project (VUUP), a much larger World Bank-funded initiative in four pilot cities. In Ho Chi Minh City, VUUP focused on five slum areas around the THLG canal. At the start in 2009, experiences of the THLG project were assessed and valued, but in the end the World Bank accepted the decision to relocate 2,000 households to high-rise apartments in the suburbs, despite recognised failures of such relocation projects.

Some officials criticised the handover of the pilot investment projects, complaining that more should have been done to prepare officials and beneficiaries, to clarify the expectations and roles and to transfer the software and lessons learned. The main problem seemed a lack of information of the agencies involved and the exchange of relevant technical information.

### The expertise

The PMU 415 did trigger some innovations at the government level, such as obligatory preliminary social surveys and the creation of an inter-agency compensation and resettlement committee. The need for social surveys and negotiations with local residents has also been adopted in new projects funded by the World Bank. It was expected that some of the PMU 415 staff members would join the VUUP project, but finally this was not the case, largely because they felt unable to adjust to the more rigid, centralised approach.



The social workers played a key-role in building trust and confidence between the project and the stakeholders. Photo: © BTC / Jan Van Lint



A so-called sites and services scheme created the opportunity to develop a neat urban front to the lagoon and the surrounding parks and public spaces. Photo: © Kelly Shannon

Of the more than 30 staff member at one time involved in PMU 415, several currently hold senior positions with different institutions (e.g. Ho Chi Minh City, universities, NGOs, associations...) or as consultants. They seem to be the most enthusiastic defenders, who have integrated project experiences in their new positions. PMU 415 staff and the social team felt the need to better document the results through a more detailed survey and to continue to share lessons learned, particularly with the authorities.

The holistic approach of the THLG project generated interest in academic circles and resulted in some MSc and PhD theses at Vietnamese, Belgian, and American universities. The experience is currently included in three university programmes (HCMC Polytechnic, the Catholic University of Leuven and the Texas A&M University), and has been discussed at several international conferences (UN New York in 2008; ISOCARP Antwerp in 2007; Manila in 2012).

## Conclusion

For outsiders the THLG project, which was supported by Belgium for nearly a decade, was an infrastructure project which provided tangible results. Six years after the project's closure, the infrastructure is still operational and in relatively good condition. However, the project had a much wider impact. It also yielded unexpected results, including improved status of residents, sustainable operation and maintenance mechanisms, better interaction between authorities and the population and capacity development at different levels. It certainly provided evidence that capacity development and institutional strengthening are valuable concepts that are worth pursuing through ODA support, even if short-term results were not always tangible.

The project was innovative in focusing on different components in a limited area, rather than investing in one infrastructure component spread out over the city. Compared to other donors involved in this sector, the Belgian support was mod-

est, though considerable to Belgian standards. However, as it was a grant, it could be used in a different way. All pilot investment projects were developed in a participative way, supported by peer exchange and as results of studies and research. Initially this approach caused delays, but stakeholders have since long focused on the results obtained. Positive experiences of pilot investment projects were no guarantee for large-scale applications. But at least they provided arguments for discussion, and the approach definitely proved to be more suitable to protect the interests of the poor in their confrontation with some authorities and their vested interests.

Evaluating longer-term results and impact is unusual in the Belgian Development Cooperation. The current exercise was relatively simple and inexpensive, and it provided insights that are not always obvious during implementation. In addition, it illustrated the relativity of evaluations that stick to a rigid set of indicators defined at the start of a project.



**BTC**

BTC, the Belgian development agency, supports and provides expertise for development programmes for the account of the Belgian State and other commissioners.

Rue Haute 147  
1000 Brussels, Belgium  
T + 32 (0)2 505 37 00  
info@btcctb.org  
www.btcctb.org

**Have contributed to this publication**

Benoît Legrand, Le Dieu Anh, Dinh Thi Le Nga, Jan Van Lint (PMU 415), Gérard Baltissen, Martijn Ter Heegde (KIT), Tom Smis, Guido Couck, Paul Verlé (BTC Brussels)

**Internet link**

[www.btcctb.org/en/reflection-papers](http://www.btcctb.org/en/reflection-papers)



This publication is published under Creative Commons Licence "by/nc/nd"

## References

Anh, L.D., Legrand, B. & Van Lint, J. (2007) *Tan Hoa Lo Gom – building a new life 43<sup>rd</sup> ISOCARP congress 2007*.

PMU 415 (2001) *Monitoring of resettlement and urban impact – baseline survey*

UNDESA (2003) *Overview of the state of implementation of Agenda 21 and JPOI in the human settlements in Asia and the Pacific*, Bangkok, October 2003

Wust, S. (2000) *Métropolisation, habitat précaire et relogement forcé: entre phénomènes d'exclusion et tactiques populaires d'intégration, le cas du canal Nhieu Loc-Thi Nghe à Ho Chi Minh Ville, au Vietnam*. Thèse de doctorat ès sciences, Institut de Recherche sur l'Environnement Construit, Lausanne.



Royal Tropical Institute

THE BELGIAN  
DEVELOPMENT COOPERATION **.be**