# Safe shelter in Vietnam

## Situation and solution for dangerous apartment in Hanoi



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# Shelter Situation Analysis

## **Basic General Data**

The Socialist Republic of Vietnam is a single-party state. The central role of the Communist Party was reasserted in all organs of government, politics and society. Area: 331,114 sq. km.

POVERTY and SOCIAL	Vietnam	East Asia & Pacific	Low- income
Population, mid-year (millions) GNI per capita (Atlas method, US\$) GNI (Atlas method, US\$ billions)	84.1 690 58.0	1,900 1,863 3,539	2,403 650 1,562
Average annual growth, 2000-06			
Population (%) Labor force (%)	1.3 2.1	0.9 1.3	1.9 2.3
Most recent estimate (latest year available, 2000-06)			
Poverty (% of population below national poverty line) Urban population (% of total population) Life expectancy at birth (years) Infant mortality (per 1,000 live births) Child malnutrition (% of children under 5) Access to an improved water source (% of population) Literacy (% of population age 15+) Gross primary enrollment (% of school-age population) Male Female	29 27 71 16 28 85  95 98 98	42 71 26 15 79 91 114 115 113	 30 59 75  75 61 102 108 96
KEY ECONOMIC RATIOS and LONG-TERM TRENDS	1000	0005	0000
1986   GDP (US\$ billions)   26.3   Gross capital formation/GDP   14.4   Exports of goods and services/GDP   6.6   Gross domestic savings/GDP   4.5   Gross national savings/GDP      Current account balance (CDD)	40.9 17.1 19.8	2005 52.5 35.6 69.4 31.4 35.8	2006 59.3 35.7 73.5 32.4 36.9
Current account balance/GDP -2.5   Interest payments/GDP 0.0   Total debt/GDP 0.7	-10.5 0.4 106.5	-0.9 0.6 36.7	-0.3  

(World Bank 2007)

## Shelter Related Fact and Figures

## Access to Shelter

In 1999, in Vietnam there was a survey for population and housing situation the whole country. The result was evaluated by General Statistics Office (GSO):

Table 1: Number of householder in 1/4/1999

Househo				Householder
	Total	Households with house	Households without house	Not stated
In all country	16661366	16649989	11233	144
Hanoi	641863	641479	379	5

Table 2: Number of houses divided as type of house

	Total	Permanent	Semi- use wood permanent frame		Temporary
In all country	100%	12.8%	50.4%	14.1%	22.7%
Hanoi	100%	49.9%	45.3%	2.8%	2.0%
Hochiminhcity	100%	20.9%	63.7%	3.5%	11.9%
Hai Phong	100%	24.2%	67.1%	3.2%	5.5%

As the Table 1 the lacking house households is a small group 0.067% in all the country and 0.059% in Hanoi, but in Table 2 the permanent housing has only 12.8% in all country. Hanoi has 49.9%, the highest permanent housing group.

In 2004, there was another survey lead by GSO in 45,900 households. As a result the permanent housing was improved to 20.77%, but the temporary group is still high as 20.45%.

	Total (%)	Permanent	Semi-permanent	Temporally	
All	100.00	20.77	58.78	20.45	
Quintile 1	100.00	5.89	57.22	36.89	
Quintile 2	100.00	13.07	61.03	25.90	
Quintile 3	100.00	16.04	63.55	20.41	
Quintile 4	100.00	24.04	60.46	15.50	
Quintile 5	100.00	41.16	52.22	6.62	

Table 3: Share of household having house by type of house, and living group

Every quintile has 20% total of householders

. ...

Yearly percentage increase in number of dwelling units; Housing standard; Floor area per person:

By the project "National housing strategy to 2010" (Programme KC-11 in 1994) run by Ministry of Construction, the floor area per person in 2010 would be: 8m2 in urban area and 10m2 in rural area. To reach that arm, every year (from 1995 to 2010) 10 million of housing m2 needs to be build. As the newest report of Ministry of Construction (2008): in 2007 housing area has more 27 million m2, floor area per urban person is 10.8m2 (260 million urban housing m2 in total), floor area per rural person is 10.5m2 (630 million rural housing m2 in total); and the target for year 2008 is 12 m2 /person. All data about maybe refers to permanent housing since the floor area/person in GSO's data is higher:

Table 4: Floor area per person:				M2
	1993	1998	2002	2004
			12.	13.
All country	8.3	9.7	5	5
		10.	14.	15.
Urban	8.2	4	7	8
			11.	12.
Rural	8.4	9.5	8	8

Table 4: Floor area per person:

#### Tenure of households

As "Housing law" in 2005, but having effected from 1st July 2006, if householder owns a house, it can use, sell, rent, present, change, and mortgage the house. It also can maintain, renovate, rebuild and use house space but following urban and architectural principles. If the householder is a renter, it can require the owner to repair the house, in the case the house was degraded not by renter's fault. When the owner needs to maintain the house, he or she must have the agreement of tenant. In other hand, the renter has to create good condition for the owner.

#### Rental (formal and informal)

In Vietnam, houses were built before 1986 by government only for rent. The renters are people from government sector, not in private sector. These houses are not commercial houses. It was as a subsidy in the housing field. As a result, the rent price is too low for maintaining the house. It became the financial burden for the government. Hence, the government has the decision No 61/CP 5th July 1994 trying to sell houses owned by government for renters. Up to 31st Dec. 2007, 256,000 houses (70.9% housing stock owned by government) were sold. As the new decision

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from government No 17/2008/QĐ-TTg dated 28th Jan. 2008, Villa rental price costs from 11300 to 24800dong/month, House rental price costs from 4100 to 6800 dong/month. This price for only old houses built before 1986, and for who still not buy or in buying process follow the decision No 61/CP. This price is smaller than 100 time price in real market, so the renters are not allowed to sub-rent. It can be imply that the government doesn't have interest in housing rental.

In the private sector, the rental market is crowded. The rental housing advertisements can be easy to find in internet. The renters are foreigners, students, labours from rural areas. The prices are normally based on housing style and location. Students and workers like to rent temporary houses near their universities, or their working places. The price of 6m2 room sharing toilet is around 300,000dong (1)/month in Hanoi, and it is still difficult for renters to find a free room. The principles of rent are mainly based on agreement from both sides. The contracts between private household and student or worker are normal simple and for short period since it do not require the administration paper and the knowledge of law. In addition, almost rental houses for workers and student have lower living condition than in "Housing law". The requirement is that all rental houses have an individual toilet, but in fact they must share for lower rental prices.

#### Ownership (formal and informal)

In "Housing law", if housing ownership is government and is sold for low income to civil servants, officials, soldiers the house will be called social house. But if house for civil servant for only temporary time, it will be called State civil servant houses.

If house was built by family itself, it will be called individual house.

If houses were built for sale, they will be called commercial houses.

#### House price to income ratio

As Mr. Nguyen Ngoc Ban, Head of realistic survey board for residential house for officials who are members of Official Trade Union in Vietnam: Accumulation from salary for residential house for officials, officers is 2 million of VND/household/year in Hanoi and 3.7 million VND/household/year." With this yearly accumulated amount, comparing with actual price of land in the market, for tens of working years,

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<sup>&</sup>lt;sup>1</sup> Dong is Vietnam Dong (VND), 1USD = 16,175 VND (May 2008). 300,000 VND≈18.55 USD

they are difficult to buy an apartment, certainly not land to build up a house" (Nguyen Dao 2004)

## Land (formal/informal)

The owner of all land is government. People and organisations have only right to use the land. Formal land is land having paper of using right. Informal land has two styles: Illegal occupied land and wrongly used land (land used for other functions but not for housing).

## Housing construction

From 1986, the government removed housing subsidy policy. In 1990, in urban area there is 1/3 houses built by private money. In Hanoi, from 1991 to 1994 there was built 700000 housing m2, 70% of it was built by householders.

## **Building materials**

Brick, concrete, steel is main material now is used in Vietnamese housing. Wood now is for door and window.

## Access to and cost of Basic Services/Infrastructure

In urban area: 65-70% population has fresh water (75-80% in big cities); person has 80-100 lit/day and night (100-120 lit/ day and night in big cities); 80% solid waste is collected; 90-100% main road was lit (Ministry of Construction 2008).

## Access to and cost of Education

Basic Education has 12 years. It is divided in three periods. The first period from the first class to the fifth is compulsory education. Everyone have to study and pay no cost.

## Housing Policy

- In urban new housing area (Housing law 2005):
- In city (class 1): not less than 60% housing floor m2 is apartment housing
- In city (class 2): not less than 40% housing floor m2 is apartment housing
- In city (class 3): not less than 20% housing floor m2 is apartment housing
- Social housing must be apartment housing and lower than 6 stories.

 Money for building social housing comes from selling and renting government-owed houses and from 30 to 50% the amount of money of selling use-land right.

#### Actors in Shelter Delivery and their Roles

In commercial housing there are investors or invest companies.

In social housing, they are People committee (level of province), buyer organisation, and developers or invest companies. Firstly, the buyer needs a certificate from his organisation that he is right person for social housing. Secondly, the People committee will decide the buying process if there is a social house in its area. If the buyer is accepted, the investors or invest company will make buying process (Housing law 2005).

## Shelter Design

There are some principles from Vietnamese law. They have been affected in commercial housing project. In independent housing, people can use principles in building code. But their effect is still week since they are not suitable for most of Vietnamese people; in addition some of them are not clear and difficult for applying.

#### Physical Planning:

Apartment has to independent (not sharing toilet), floor area not lower than 45 m2. Social housing apartment has floor area from 30 to 60 m2. The width of an individual house must be wider than 5m. The occupied land must be larger than 50m2 (Housing law 2005). On the other hand, in Vietnamese building code "TCXDVN 353: 2005" the individual house can be 4m in width and 9m in length and can be used 100% land.

The occupied land of a villa must be lower than 50% of land and the villa itself not has over 3 stories. Land Use of Villa is lower than 50%; of High-rise apartment building is lower than 30% (Housing law 2005).

Population Density: There is no data for limiting population density. As Vietnamese building code "TCXDVN 323: 2004" for apartment housing, floor area per person is very broad from 17.5 to 70m2. The smallest apartment for 1 or two people has floor area from 50 to 70m2.

Shelter Quality: For high-rise apartment is durable housing.

Function: in an apartment, it was required to have spaces at least for: entry space 3m2, guest-living room 14m2, single bedroom 10, toilet with shower 3m2, kitchen with eating place 12m2. There are no data for individual housing and villa.

Safety: There are some principles for fire safety as the distant to emergency exit and width of door.

**Comfort:** There are some principles for comfort climate but normally they are difficult to apply and people do not pay much concern

Social Inclusion: There are no clear data of social principles. They normally are some advices, which people can follow or not.

Gender Issues: There are no clear data of gender principles.

Sustainable Development: There are few articles about sustainable development in Vietnam. It is a new concept in Vietnam.

Norms and Codes: There are some building code relating with housing, but they still need to be improved since they are mostly deal with general principles. Some important data I had written about.

## The role of the National Architectural Research Institute

National Architectural Research Institute is the first institute in Vietnam for architectural and urban planning. Yearly, the Institute implements many projects both at a micro and macro. Lever in the field of housing, the Institute help the Government and Ministry of Construction in policy, model and building code.

#### 2.1 Building code

Some newest version is:

"TCXDVN 353: 2005" (Attached house - building code)

"TCXDVN 323: 2004" (High-rise apartment - building code)

"TCXD VN 306: 2004" (House and public building - Inside environment data)

"TCXD VN 4451: 1987" (Dwellings - Basic principles for design)

## 2.2 Housing policy, model, and project

Followings are some researches from 2007 and early 2008 in the field of housing:

- Collective residential house using energy in economic way Cooperation with National Architectural Research Institute and Public residential house architectural institute from Russian Union (started from 2008)
- Guidelines for structural design covering architectural works in order to use energy in economic and effect way (started from 2008)
- Typical design for dormitory (2007)
- Social residential house in Hanoi (2007).
- Designed standard for social residential house (2007).
- Typical design for sample house for workers in Industrial Zone (2007).
- Residential house, description for safe structure (2007)
- Orientation and solution for traditional village's architectural preservation in northern delta – 2007.
- Survey for traditional housing architecture in the mountainous minorities in the north and Tay Nguyen. Proposal to preserve and exploit architectural value of traditional housing architecture – 2007.

## Shelter Problem

## What is the problem?

Residents in some old apartments are at risk of their life for long time, but there isn't any suitable solution.

#### The risk

"We commit ourselves to the goal of improving living and working conditions on an equitable and sustainable basis, so that everyone will have adequate shelter that is healthy, safe, secure, accessible and affordable" (UN Habitat 1996)

Safety is one of the most important and basic factors in shelter issues, but some Vietnamese houses are dangerous for their citizens now.

In Hanoi, there are 450 4-5-storey apartment buildings, concentrated in 24 housing areas and providing a total living area of 1 million m2 for a population of approximately 140 000. They were built during the 1960s to 1980s, when housing production, especially in the cities, was under a state monopoly. The state (and its institutions) was responsible for the planning, design and construction of these areas

(Tran, Dalholm 2005). The housing condition is decreasing for some decades. As the report of Hanoi Natural Resources – Environment and Housing Department, there are 77 apartments at risk. There are some apartments having tested exams as dangerous building level C or D (level D is the most dangerous) in Thanh Cong, Giang Vo wards, Ba Dinh Dst.. Residents in apartment C4, C8, B6 need to move out urgently for their safety (NhadatSaigon.vn 2007/09/20). New apartment houses need to replace the Old



B6 – The dangerous apartment building in Giang Vo (Vietnamnet 2007/2/3)





Apartment building C1 in Giang Vo sank 1.5 m and leaned 15 degrees (Vietbao.net 2008/2/28)

Consolidated frame inside B6 (Vietnamnet 2007/2/3)



Inside a room of apartment building I2, Thanh Cong 2, Hanoi (Dothi.net 2008/1/9)



Apartment building in Lang Ha Street.



Outside of apartment building I2, Thanh Cong 2, Hanoi (Dothi.net 2008/1/9)

#### The Tardy:

"The ramshackle has lengthened for some decades; the risk was evaluated by many Committees, Departments, Institutions; the evacuation is indispensable, but a deadline for residents' transfer out of old ramshackle buildings now isn't still set (VietNamNet 2007/1/16).

The Tardy of resident evacuation and reconstruction is not counted in hour or day, but is counted by decades. The apartment building B6 Giang Vo is a symbol case.

B6-Giang-Vo building is serious damaged since the early of 90s. In 1994/7/1, examined team organizing 12 staffs from some organizations in behalf of Hanoi People's committee had tested and sent B6-Giang-Vo building into dangerous-building list (Tienphongonline 2007/11/2, VietNamNet 2007/1/16).

In 2000, B6 was sent to plan of annual special repair by Housing Trade Company No1, Hanoi Land and House service (Tienphongonline 2007/11/2).

In 2004/7/22, a company named Hanoi-ICT was appointed to set a building project for reconstruction B6-Giang-Vo building (VietNamNet 2007/01/15).

In November 2006, State Bureau for Construction quality Inspection basing on study of Vietnam Institute for Building Science and Technology affirmed that B6-Giang-Vo building was serious dangerous (level D) (VietNamNet 2007/1/16).

In 2007/1/3 Vice President of Hanoi People's committee, Do Hoang An, had signed an official document requiring to move immediately 100 householders out of the dangerous B6-Giang-Vo building (VietNamNet 2007/1/16).

#### The owner of old apartment building

The government has the decision No 61/CP 5th July 1994 trying to sell houses owned by government for renters. As a result, almost all apartments in old apartment building are private property. The government doesn't sell the shared part such as corridor or stairs.

#### Financial for reconstruction of old apartment building

No evidence in public shows that residents in old apartment buildings have to pay for reconstruction of their houses.

As the Government decision "34/2007/NQ-CP: the finance comes from investors. If there is more than one investor in a reconstruction building project, they have to bid for contract. If there isn't any investor and the building is very dangerous, finance will come from government, but it is limited. The investors have profit and capital from the project by using some land of old building for trade or service.

In almost all projects, investors plan to replace the old low-rise apartment building with a high-rise apartment building. The old residents will resettle in that new apartment without any paying, but not in the same floor, since the first floor is for rent or trading. The old apartments will be sold to new householders with the market price. The money will run back to investors. In addition, the investors will have some encouraged policies such as reducing tax, not paying for land use, loan with low interest ebc.

## Who can influence on the problem?

Hoping to solve the dangerous apartment building problem in the whole country, on 3rd July 2007, the Government had decision "34/2007/NQ-CP" pointing authorities and their duties for this. There is a list of authorities:

- Ministry of Construction
- Ministry of Planning and Investment
- Ministry of Natural resources and Environment
- Ministry of Finance
- People's committee of districts and cities having dangerous apartment building

## The immortal problem?

Until now 2008, after 14 years in focus center, after the promulgation of Government decision, B6-Giang-Vo building is still risk for hundreds of people living in it. This is only one case of 77 buildings in risk.

"Reconstruction task of old apartment buildings in Capital, which is like a "big Bear" since the number of projects is the highest in the country, ought to be moving noisily, changing basically urban face, but now the Bear still hibernates" (Vietbao.net 2008/2/2008).

## Why does this problem exits?

There are some reasons in public as:

• Nguyen The Thao, President of Hanoi People's Committee told in a the conference "Reconstruction of old apartment building" in 2007/11/17:

"Hanoi People's Committee prepared enough housing stock for migration, plan to save people in case of danger, gave the mission to two People's committees in two districts: one to move out people, one to receive people; the work was careful ...but some people did not want to move!" (VietNamNet 2007/11/19)

- Pham Van Chanh, President of People's Committee in Ba Dinh district, Head of Guidance boat of B6-Giang Vo-building migrant and reconstruction said: "Since living together, but their expectation are different, some want to stay, other want to move...and in general, it is very difficult to do" (VietNamNet 2007/9/25)
- Tran Chung, Head of State Bureau for Construction quality Inspection: "Delay a single month, a single shop in the first floor will bring benefit in some million dongs, every year nearly hundred million dong per trade householder ... And, as many shops in the first floor if they must leave the big lost amount of money will make them painfully regret!" (VietNamNet 2007/1/16)
- Director of Service of Natural resources, Environment & housing VuVan Hau: "Although there are many business companies registering for reconstruction old apartment buildings in the Capital, some of them prepared from 2, 3 years ago but now still "stand in the same place" ... because they could not count in and out; fund and profit". "While the government is impossible and couldn't pay budget for rebuild old apartment buildings" (VietNamNet 2007/8/7)

# Proposal for Change and Improvement

The issue of old dangerous apartment buildings is complicated. It also involves many organizations, urban planers, policy makers, investors, social communities ... The issue has been taken for some years and still not solved. My individual work could not solve the issue too, but I hope the proposal will make some clear for improvement and could prevent other similar issues in the future.

## Main questions:

The proposal will find the answer of some questions followed:

- What is main cause of the issue?
- How could the issue be solved by housing policy?

The issue of old dangerous apartment buildings appears since early 1990s, about twenty years. The government, Hanoi People's committee, other authorities have exerted their strength to solve the issues. Many proposals were given and failed. The failure is not in a single old apartment building, but in all others. It argues that the main cause of the issue is still not defined. If the cause is clear, the issue will be solved soon.

#### Theory

The cause of unsolved dangerous apartment housing is not easily found and proved. It will take much time for deep and broad study. However:

"Culture and ownership are two important factors, which affect apartment

*buildings*". The study will focus in these factors.

*Culture:* Many researchers argue that Vietnamese culture is a special factor that could influence lives urban people such as:

"Vietnamese cities demonstrated a strong vital force and a serious structure of traditional strokes imbued of identity which exist ever with time" (Christian Pedelahore de Loddis 2006)

There are phenomena and events, which seem to be incomprehensible; however they could be interpreted through a culture prism. Such as, extension of an apartment causes danger to all lives in the community and themselves and at the same time shorten building lifetime, however they even do, as these effects do not occur now or occur but unknown while the good they gain is visual. Just, the following conclusion: "Vietnamese are not provident after little gain" (Huu Ngoc 2005)

*Ownership:* In Hanoi's housing history, the reconstruction of "collective houses" has been difficult issue. In Hanoi "Collective houses" are variety styles. They are Villa, attached house, apartment housing. Residents have their private rooms, and share some common parts. In old Hanoi' quarters, many attached houses, which is shared of some householders, have the bad condition since their householders could not have a same voice.

Methodology:

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The issue of old dangerous apartment buildings is a multi-faceted phenomenon. The issue will be examined in social, economic, environmental aspects. It will be a qualitative and case study research.

## Case study

An old apartment building, which is located in Giang Vo and named C7, is the case study. C7 occupy convenient place. It is located in a lush, over looking Giang Vo Lake near three schools near hospital and big marke



125 flats. There are 375 people

live there. C7 was built in late 1970s. In September 2002, Research Institute on Architecture of the Ministry of Construction evaluated the condition of C7 and, together with Ha Noi Construction Department, concluded that C7 building needs rebuilding

C7. It was dangerous to live because:

In 1970s, the construction quality was not high, now C7 was too old

The residents enlarged their apartments. They broken basic structure of C7.



Cracks on roof



Cracks on beams

Present condition of ownership.

+ Almost all people have bought dwellings liquidate by Decree No 61 and have ownership certificates.

- + Number of standard apartments: 40
- + Number of real owners: 43

Building C7 reconstruction project.

The project is proposed by ASEAN Ltd. Co.

+Building C7 to be pulled down.

+ A 19-storied building to be built

+ The basement to be for car park and the fist floor to be for shopping and services.

+The second to the sixth floor to be for resettlement. The seventh to the nineteenth floors to be for sale.

+Those who live on the first floor of old building C7 to be allowed to rent some area on the same floor of the new building for trading

+ For households removal. When moving furniture and living equipment, every household gets 2-way payment, getting out and coming in.

+ Temporary settlement. Households can get money to rent house in the time of the apartment building construction.

+ Shared investment. Resettlement apartments are arranged from the second floor to the sixth floor with the area increased by 1.5 times. Their households do not have to pay for the resettlement area equivalent to the area specified in their ownership certificates but they only have to pay for the additional area.



New C7 apartment building



New C7 apartment planning

## Failure of the project

The project cannot be implemented since:

Households living from the second to the forth floors of building C7 agree with the project but those on the first floor do not because they are now doing good business. They accept the project on the condition that they can continue their trade on the

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same floor without paying any rents. This request is not accepted because it is against the city's policy, which says that rents collected from traders on the first floor are to be used for the repair and maintenance of the building. Although a minority of households says no and the old building C7 is now too dangerous to live in, the city government cannot help ASEAN Company, makes the hostile elements accept the project.

In 2004, other project studied about old building the same C7 but do not find any solution to rebuild old building. The Hanoi government organized some discussing in 2005. In the discussing, there are some questions for the residents of old building. Three of them are:

- 1. The old building was dangerous .Do the residents pay money to re build?
- 2. Do residents want to move to other place?
- 3. When they have lager flat, do they want to enlarger their flat?

The answers from the residents are:

1. The residents wanted to rebuild their building, but they had not enough money to pay to rebuild.

- 2.80% the residents do not want to move other place.
- 3. 78% want to enlarger their flat when their families become bigger.

Studying C7 building we may find the cause of issues since others dangerous apartment buildings have nearly the same story.

#### Main question:

# *How do culture and ownership factors affect the reconstruction C7 apartment building?*

#### Study Plan

- Finding the background of C7- an old dangerous apartment building in Giang Vo, Hanoi such as: the location, structure, the changing apartment building by its residents...
- 2. Report the content of reconstruction project.
- Report the failure of the project, directly causes of failure which every one could know in public.
- 4. Finding some hypothesis for explaining the root cause of issue.

- 5. Prove the hypothesis. Finding the main cause of issue
- 6. Proposal a way to solve issue by new housing policy

## Strengths

The strengths that are there include:

- The advantages of proposal: the issue of old dangerous apartment building is concerned issue. The government are looking forward to see an effective solution. If government could not solve the issue soon, it continuous loosing its roll. Residents in some dangerous apartments say they feel left to themselves to the fate and life of hundreds human beings here are treated as "leaving a work unfinished" or something likely in a campaign which rises a while and falls quiet! (Vietbao.net 2008)
- Many organisations and researchers study about issue. Most of them try to solve only the symptoms of the issue; they don't find the root cause. I will find a new way to approach the issue. I deal with the culture and the ownership, which have no touch by other researcher. My study will answer why until now the issue still remains. In addition, the purpose of study is still higher. It will help to create a policy to prevent the similar issue in the future.
- Since the issue of old dangerous apartments is relating to people life, many residents in these apartment buildings may cooperate with us in the study process.
- I have many study years of housing so I have more advantage in solving housing issue.
- People in my sector think I have ability to study and my institute has some works relating with the proposal.

## Weaknesses

- The improvement of the study is that it will supply a fundament for building strong policies to solve the issue. This requires a lot effort to do.
- This study is multi-faceted. I should avoid studying too broad. I should focus in the important sector.

- Many residents are disappointed of too much survey and no effective action. Consequently, they may do not like to answer more questions in another survey.
- People in my sectors think that my study is too big; one could not do any thing to improve.
- I lack of time and funding for deep research

## **Opportunities**

- The good opportunities for me when there are some social survey in old dangerous buildings. I could analyze this result to add more data for my study.
- I aware that the behaviour of residents in old dangerous apartment buildings may be a reason of a cultural conflict
- With new approaching, my study may make a clear scientific view of the dangerous housing apartment issue. It will help other researchers and authorities find solution in detail for the issue.
- If my proposal is accepted by my government, the result will be strong since I will have budget and cooperative researchers for continuing study.
- If I have a grant for PhD. Study, I will deal with this housing issue. With the helps from many professors, my study will be helpful for Hanoi's housing

## Threats

- My obstacle is that I may not gain enough strong proof for my study if I could not find funding and time.
- This issues is urgent, I have no much time for a long study. The study result needs to be sent to real life quikly.

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