

# Shelter Design and Development in Cambodia

## Guideline for On-site Upgrading of Temporary Settlements



*Meang Sotha*

Chief of Urban Regulation Office,  
Department of Research and Regulation, General Department  
of Land Management and Urban planning, Ministry of Land  
Management, Urban Planning and Construction, Cambodia.

### Introduction

This paper was developed during the Sida Advanced International Training Programme “**Shelter Design and Development**” 2010, which participated 26 people came from 13 different countries, Cambodia, China, Ethiopia, Ghana, India, Indonesia, Kenya, Malawi, Philippines, South Africa, Sri Lanka, Tanzania, and Tunisia.

The preparation of this paper was divided into 4 phases; draft 1 was prepared before 23 August 2010 in Cambodia, the second during actual training 1-24 September, 2010 in Lund, Sweden, third finalized during 3-4 months of field research in Cambodia and fourth finalized during 14-25 February 2011 in Manila, Philippines.

The main purposes of this paper is to fulfill one of the course’s requirements and to express what had been learned from course’s lectures, site visits and study tours, particularly is to initiate the change and improvement of the shelter situation in Cambodia.

The paper consists 4 chapters, chapter 1 is about shelter situation analysis, chapter 2 is about the organization’s responsibilities, chapter 3 is about shelter problems in Cambodia and chapter 4 is a proposal for change and improvement. The first three chapters were written base on available data and information, while chapter 4 is base knowledge, skills learned from the course, tutor’s advisories, consultations with colleagues and own working experiences

The Chapter 4 is introducing a **Guideline for On-site upgrading of Temporary Settlements**, which is not only one of my department’s responsibilities, but also is a technical tool involving in solving temporary settlements in cities, municipalities and urban areas of Cambodia.

# Table of Contents

Introduction	1
1 Shelter Situation Analysis	3
<hr/>	
1.1 Basic General Data.....	3
1.1.1 Geography and Administration .....	3
1.1.2 Demography and Health .....	4
1.1.3. Economy .....	4
1.2 Shelter Related Fact and Figures.....	4
1.2.1 Access to Shelter .....	4
1.2.2 Access to and cost of Basic Services/Infrastructure.....	7
1.2.3 Access to and cost of Education.....	7
1.3 Housing Policy .....	8
1.3.1 The National Housing Policy .....	8
1.3.2 The Circular on Resolution on Temporary Settlements .....	8
1.4 Actors in Shelter Delivery and their Roles.....	8
1.5 Shelter Design .....	9
1.5.1 Physical Planning:.....	9
1.5.2 Land Use/cover .....	9
1.5.3 Population Density .....	9
1.5.4 Shelter Function and Comfort: .....	9
1.5.5 Norms and Codes: .....	10
2 Organization	10
<hr/>	
2.1 General Department of Land Management and Urban Planning .....	10
2.2 The Department of Research and Regulations .....	11
3 Shelter Problem	11
<hr/>	
3.1 Growth of Temporary Settlements .....	11
3.2 Unbalanced urban development .....	11
3.3 Lack of financial support, legal and technical documents .....	12
4 Proposal for Change and Improvement	12
<hr/>	
4.1- Overall Objective .....	13
4.2- Specific Objectives .....	13
4.3 Terms and Definitions .....	13
4.4 Principles of On-site upgrading .....	14
4.5 On-site upgrading process .....	15
4.6 Activity.....	15
6 References	18
<hr/>	

# 1 Shelter Situation Analysis

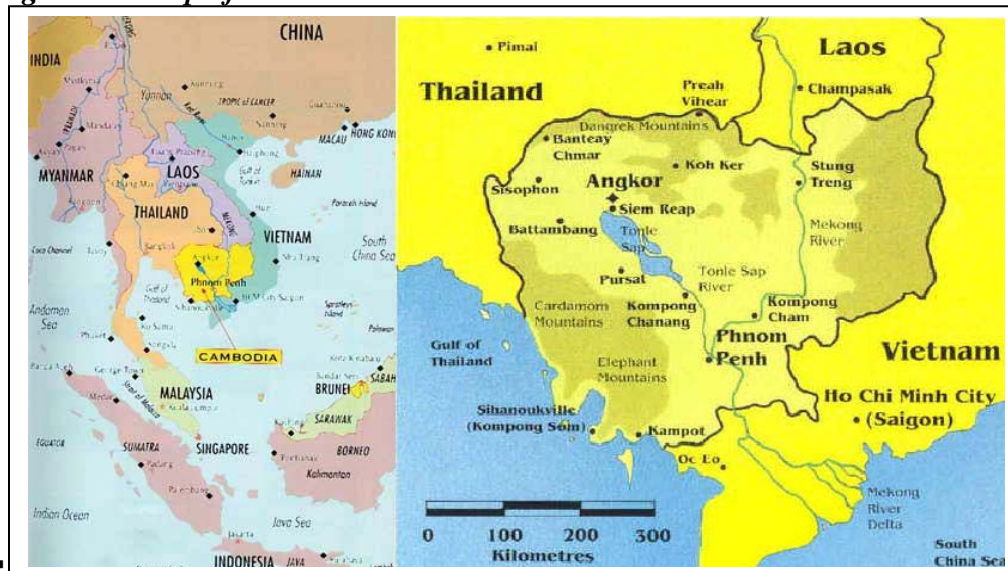
## 1.1 Basic General Data

### 1.1.1 Geography and Administration

#### *Geography*

Figure 01 shows that Cambodia is located on mainland Southeast Asia between Thailand to the west and north between Vietnam to the east and southeast. It also shares a land border with Laos in the northeast. Cambodia has a sea coast on the Gulf of Thailand. The Dangrek mountain range in the north and Cardamom Mountains in the southwest form natural boundaries. The terrain of Cambodia is a central plan areas drained by the Tonle Sap (Great) lake, the Mekong and Bassac Rivers. The influence of tropical monsoon makes Cambodia to have two clear seasons, with rainy season between June to October and dry season between November to May. Cambodia remains one of the most heavily forested countries in the region, although deforestation continues at an alarming rate.

**Figure 01: Map of Cambodia**



Cambodia has the total land area of 181,040 sq.km. Before 22 December 2008, the administrative structure of Cambodia is divided into municipalities and provinces. A municipality consists of khans and a khan consists of sangkats. A province is divided into districts and a district is divided into communes, and finally a commune is divided into villages. Recently Cambodia reclassified the administrative structures, the result which a country dividing into 01

Capital City and 23 provinces, 08 khans, 159 districts, 26 municipalities, 204 sangkats and 14,073<sup>(1)</sup> villages.

## 1.1.2 Demography and Health

### ***Demography***

Cambodia population is 13.4 millions in 2008 with annual growth rate of 1.54% and relatively the percentage of urban population is 19.5%. Cambodia as a whole consists of 90% Cambodians, 5% Vietnamese, 1% Chinese and other 4% small group numbers of Hill tribes, Chams and Laos.

Khmer is an official language, which is spoken in more than 95% of the population, some still speak French in urban areas and English is increasingly becoming popular as secondary language. The majority of Cambodian about 95% of the population is Theravada Buddhism religious.

### ***Health***

With reference to the socio-economic survey of 2004, average spending on medical care for persons with an illness episode in the last month was about US \$6. Moreover, national census of 2008 shows that infant mortality rate is getting worse from 58/1,000 in 1998 to 60/1,000 live birth in 2008 (estimation), On the other hand, life expectancy has improved from 59 years in 1998 to 60.5 years male in 2008 and 63 years in 1998 to 64.3 years female in 2008.

## 1.1.3. Economy

In 2008, Cambodia GDP was \$11.2billions and GDP per capita was \$723 with annual growth rate 6.5% and 19.7% inflation. There are three main growth domestic products (GDP), they are agriculture sector which covered 32.4%, industry is covered 22.4% and service sector is covered 38.8%. Central government budget (2008): Revenues are \$1.3 billion; expenditures are \$1.6 billion; foreign financing is \$606 million;

## 1.2 Shelter Related Fact and Figures

### 1.2.1 Access to Shelter

#### ***Housing stock, Deficit, Occupancy:***

The number of residential buildings in Cambodia has increased from 1,989,828 in 1998 to 2,637,654 in 2008. In Cambodia as a whole 95.7% of residential buildings are wholly residential. The corresponding proportions in the urban and rural are 90.1% and 96.9%.

---

<sup>(1)</sup> Data from Ministry of Interior, number of villages is 13,852

***Yearly percentage increase in number of dwelling units:***

Based on number of residential buildings in 1998 and 2008, we are able to work out as following. The increased number of residential buildings from 1998 to 2008 is 0.7 million or approximately 37% and accordingly the increase number of residential building per year is 0.07 million or 3.7%.

***Floor area per person***

Based on the socio-economic survey in 2004, an average floor area of dwellings is 42 square meters, 8.5 square meters per person, and 3.7 persons per room.

***Housing affordability ration and House price to income ratio***

If the poverty in Cambodia was not improved since 2004, there is about 40.2% of the Cambodian population lives on the equivalent of less than US\$1.25 a day and the remains 59.8% lives with \$100 and higher per month. On the other hand, house prices are various. A house with size 4x12m in inner and in relocation outer khan of Phnom Penh cost about \$15,000 to \$25,000 in 2010. Now, let take the maximum devoted 40% to determine what house prices that groups of people in can be afforded. The first group is representing government officials, which has monthly salary below the average<sup>(2)</sup>, and the second is representing others that have salary higher than the average. Table 01 show that in average people in Cambodia will be able to purchase house prices within the period of 20-30 years, while the first group within 30-40 years and relatively the second group within 15-20 years.

***Table 01: House Prices***

<b>Income/month (\$)</b>	<b>Devoted (20-40)%</b>	<b>N of Years</b>	<b>House Price (\$)</b>
Group 1: \$100	\$ 40	30-40	
Average: \$150	\$ 60	20-30	15,000-25,000
Group 2: \$250	\$ 100	15-20	

Sources: Estimation, 2010

In Cambodia, the houses and land can be bought through a local company, leased, acquiring Cambodian citizenship brings the right to buy land, a route actively encouraged by the government, sometimes bought through a Cambodian nominee, but this has been ruled to be against Constitution, and is unsafe.

***Land (formal and informal), Ownership and Tenure of households***

In Cambodia land is classified into three categories, State, state-private and private land. The State may also provide to natural persons or legal entities of Khmer nationality ownership over the property belonging to the State within the strict limits set forth in this land law, 2001. All

<sup>(2)</sup> Average monthly salary (monthly GDP) is equal to annual DGP/12

transfers or changes of the rights of ownership shall be carried out in accordance with the required general rules for sales, succession, exchange, and gift or by court decision.

### ***Rental (formal/informal)***

The socio-economic survey in 2004 mentioned that there is an owner-occupied dwelling in Cambodia is worth about US \$3 400 as estimated by the owner. Only 34,000 households out of 2.6 million pay rent for their dwellings. Average monthly rent paid by this group is US \$29 or 2.8 percent of all households invested in new construction or extension of their dwellings.

Renting houses and land can be freely negotiated and there is no specific tenant protection law. There are no limits to the duration of leases, though residential long-term leases usually last for one year. However, the rental agreement may be terminated prior to expiration if either the tenant or the landlord serves a notice one or two months before termination.

### ***Building/Construction materials***

Building materials are classified based into two categories, permanent and temporary. The wood/plywood, concrete/brick/stone, galvanized iron/aluminium/other metal sheets and asbestos cement sheets and tiles are considered as permanent. The bamboo, thatch, reeds or earth or salvaged/ improvised materials is considered as temporary. Production of building materials for housing is limited. Cement imports from Thailand, while steel from Vietnam and China. The cost of building materials appears to be less of a problem than the efficient use of building materials. The application of cost-saving technologies in housing construction may require further dissemination.

***Table 02: Cost of construction materials***

<b>Materials</b>	<b>Prices</b>	<b>Remarks</b>
Cement, Elephant	80-100\$/Ton	Import from Thailand
Steel	700-750\$/Ton	Import from Vietnam
Brick	370-450\$/10,000	Cambodia
Wood/Tiber	300-550\$/m <sup>3</sup>	Cambodia

Sources: Sok Samon, Archi-Vision Company, 2010

### ***Housing construction***

According to the quality and scale of the buildings, housing construction in Cambodia can be built by homeowners or small scale builders and private developers. By users or home-owners happen in rural areas for wooden/temporary houses, where the communities organize self-help housing construction whenever it is necessary. By small scale builders happen in both rural and urban areas for semi-permanent and permanent houses. In this case, the agreement will be made into ways, for only construction services or services and materials and include/exclude the construction permit. By private developers or companies or enterprises happen in urban areas for

larger scale housing construction such massive housing construction, business centre/skyscraper construction with high quality, In this case, the agreement will be made with either local or foreign companies for services and materials with or without include the construction permit.

### ***Housing standard***

The following combination of building materials is used to determine the quality of a building. Based on the wall and roof material used for residential purposes (wholly and partly), building can be classified as permanent, semi-permanent or temporary. A building or structure with a combination of permanent wall and permanent roof materials is considered as permanent. A building with a combination of permanent wall and temporary roof materials or temporary wall and permanent roof materials is considered as semi-permanent. A building with a combination of temporary wall and temporary roof materials is considered as a temporary building.

#### **1.2.2 Access to and cost of Basic Services/Infrastructure**

The water considered as safe drinking water are piped water, water from tube/pipe well and water bought. The number of household's access to safe drinking water is increasing from 29% in 1998 to 47% in 2008 and relatively 60.3% in urban areas in 1998 to 76% in urban areas in 2008.

#### **1.2.3 Access to and cost of Education**

With reference to the general Population Census 2008, the literacy increased from 65% in 1998 to 75.1% in 2008, which is 85% male and 64% female. The literacy 21% female is lower than male is explaining that the literacy was calculated as from pre-primary to the university, because numbers of female students decrease at higher classes.

The general education from pre-primary to secondary schools is the responsibility of the government. However, the socio-economic survey in 2004 found that educational expenses per student for one school year include school fees, tuition, textbooks, other school supplies, gifts to teachers, and contribution to building funds. The expenses are various depend on the school grades as shown in table 03.

***Table 03: Cost of Education***

<b>School Grade</b>	<b>Expenses/student/month</b>	
	<b>In Riel (R)</b>	<b>In USD (\$)</b>
Pre-primary school	50,000	12.000
Secondary school	400,000	100.000
Technical/vocational training	1,100,000	250.000
University	2,100,000	500.000

Sources: Socio-economic survey, 2004

## 1.3 Housing Policy

### 1.3.1 The National Housing Policy

The Royal Government of Cambodia (RGC) is committed to implement the principle of human rights, especially the right to “adequate housing” for all citizens by setting out some important strategies. With reference to this commitment, Cambodia started to prepare a draft Urban Housing Strategy Paper in August, 2001 and draft of National Housing Policy (NHP) in May 2010. Now the draft of NHP is under the finalization for approval. The draft aims at setting aside land for housing the poor, low-income households and vulnerable groups in suitable locations and at developing forms of land tenure security. It also notifies that people or communities, who legally occupy the settlements that are relocated shall have the right to land and housing in compliance with the criteria of adequate living; shall have tenure security; the relocation site shall be appropriately situated, with access to employment and basic services such as health, education, and other social infrastructures, and technical infrastructures like fresh water supply, sewage systems, sanitation, and electricity..Etc.

### 1.3.2 The Circular on Resolution on Temporary Settlements

Recently, the RGC issues the Circular No3 dated 31st May, 2010 on Resolution of Temporary Settlement. The main purpose of the Circular is to instruct to all authorities at all levels and all relevant institutions on the procedures for solving temporary settlements on state land which have been illegally occupied in the capital city, municipal and other urban areas. According to the Circular, there are the possible solutions responding to temporary settlements are relocation where the temporary settlement’s location is not suitable for on-site upgrading; on-site upgrading where the temporary settlement’s location is suitable for such solution; other types of solution policies on actual situation.

## 1.4 Actors in Shelter Delivery and their Roles

There is no any government institution responsible for housing yet. Therefore, housing delivery in Cambodia is involving with various actors such as government both national and sub-national levels, local authority, NGOs/IOs and private in both formal and informal. Furthermore, the 3rd draft of NHP has proposed mechanisms to be responsible housing issues as following:

- National housing committee at the MLMUPC, which shall be an inter-ministerial body;
- Sub-national housing committee at capital, province, municipal, khan and district;
- Institutional Coordination and Stakeholder Participation.



## 1.5 Shelter Design

### 1.5.1 Physical Planning:

Cambodia has no an official either legal or technical for physical planning system yet. The process of preparation of the documents mentioned above and the plans go parallel. At the moment, the GDLMUP has drafted a physical planning system, which few of them are under the implementation, but the majority is still under the preparation stage. Within the support from Danida, DFID and NZAid, the technical and legal documents for commune land use planning were developed.

### 1.5.2 Land Use/covers

Cambodia was covered by forest about thirds fourth of the total area. Due to the limitation of land use datasets, the changes were not able to estimate. However, the trend is that agriculture land areas are occupying more and more from forest land and at the same time, settlement as well as urban areas is also significantly occupying the agriculture land. The decreasing of forest land was considerably mentioned since the integration of all Khmer parties in 1993 and 1996 and on the other hand, the increasing of urban area was notified when the urban development was starting in 2003.

### 1.5.3 Population Density

According to general population census 2008, Cambodia has population density 75 person per square kilometres, which is higher than Lao People's Democratic Republic that has 25 persons per square kilometres, Brunei that has 66 persons per square kilometres, Myanmar and Timor-Leste that have 73 persons per square kilometres.

### 1.5.4 Shelter Function and Comfort:

In Cambodia, shelters are classified by use-functions as wholly and mixed residential. Among 100 shelters, 95.74% are wholly and 4.26% mixed residential. In addition to this, the comfort of shelters is depending on the physical functions of the shelters such as size, internal facilities and physiological both outdoor and indoor designs. The medium income families in the urban areas are able to afford 2-story flat houses with the size approximately 4mx14m include kitchen and toilet, which are physically less comfort.

There are two example of shelters design in inner and outer Phnom Penh, which the size of 4x12m lives one family with average number of family size of 5. This is meaning that for an unit of about 40 sq. m multi-story flat house or 1-story flat house comprising typically a kitchen area, bathroom, living room and one bedroom living by 5 people.

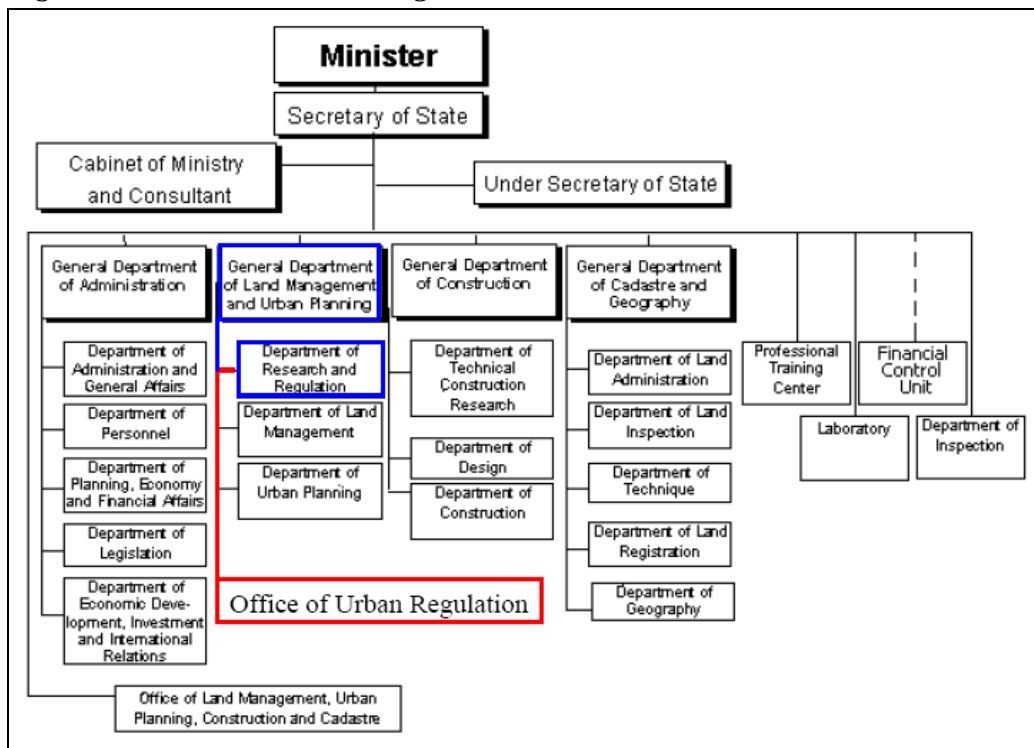
### 1.5.5 Norms and Codes:

The main legal document for development plans and construction permit is Sub-degree No 86 ANK/BK on Construction Permit that was put into the implementation since it was signed 19 December, 1997. According to the provision of this sub-degree, all private or public person, physical or legal shall have the rights to construct a building on their own titled land and such rights shall be protected by this sub-degree. Any Construction Permit issued prior the construction start- up shall be considered as legal document of the Construction. However for the poor people, the construction permit shall not be required for small wooden habitations pursuant to the provisions determined in Article 3 of this sub-degree.

## 2 Organization

The Ministry of Land Management, Urban Planning and Construction (MLMUPC) was established in 1999 and was given the mandate to direct and manage the affairs of land management, urban planning, construction, cadastre and geography.

**Figure 02: The MLMUPC’s organizational structure**



Sources: Sub-degree on establishment of MLMUPC

### 2.1 General Department of Land Management and Urban Planning

General Department of Land Management and Urban Planning (GDLMUP) is one of four general departments within the MLMUPC, which is responsible formulating policies, regulations, procedures, making proposals and implementing strategic policies of Land Management and

Urban Planning. The GDLMUP consists of Department of Land Management (DLM), Department of Urban Planning (DUP) and Department of Research and Regulation (DRR).

## 2.2 The Department of Research and Regulations

The Department of Research and Regulation (DRR) is responsible for

- Communicating and collaborating with ministries, institutions, and provinces, municipalities to conduct research and collect information, statistics, and data to compile as a basis for formulating legislation on land use management, expropriation, land provisions, and establishing guidelines, circulars, provisions, regulations, and norms related to land management and urban planning;
- Monitoring the impact on land management and urban planning policies resulting from inside and outside the country's investment projects;
- Defining criteria of location and type of business of development projects which use national, international, state, and private funds.

## 3 Shelter Problem

### 3.1 Growth of Temporary Settlements

The General Population Census 2008 shown that Cambodia's urban population was increased about 0.8 millions from 1998 to 2008. In addition, urban population will increase about 2.2 millions from 2010 to 2020 and 2.7 million from 2020 to 2030 (estimation in 2008). Such growth, mostly in the main urban areas, contributes to increased land and housing needs. Parallel, along with population and economic growth in urban areas, temporary settlements spread over many areas on state land, privately-owned land, and also in corridors areas, which has brought about the loss of municipal beauty and order. This creates complicated issues in society, and the resolution processes require a lot of discussion with the participation of all relevant stakeholders such as communities, municipalities, NGOs, donors, etc.

### 3.2 Unbalanced urban development

The social stability and a booming economy over the past decade having attracted significant foreign direct investment. Moreover, the RGC has adopted a number of policy measures to improve the overall business environment, especially in the areas of laws and regulations, trade facilitation and reinforcement of export competitiveness. Generally, the government is pro-investment and has made reasonable efforts to further boost the economy, which is resulted a growing number of high rise buildings and mega construction projects. On the other hand, municipalities set a goal to solve temporary settlements in urban and cities with expected

technical and financial supports from NGOs, IOs and other donors. But almost all of ongoing activities related to temporary settlements seem to be as an emergency interventions to support to daily livelihood, create communities, provide loans and self-help housing.

### 3.3 Lack of financial support, legal and technical documents

A Circular No3 is only one existing legal document that can be used for instructing to all authorities at all levels and all relevant institutions on the procedures for solving temporary. In addition, the 3rd draft of NHP is still not approve yet, therefore the implementation mechanism and other supported documents were also not been established.

The MLMUPC is a new organization; therefore many technical documents such as spatial planning system, urban development planning and many other urban development tools are still under the development. Due to lack of financial support, the current implementation of temporary settlements are going on with inadequate official technical documents and particularly tools for improving and on-site upgrading of temporary settlements. This lead to insufficient solving problems of the temporary settlements.

## 4 Proposal for Change and Improvement

Due to limitation of knowledge, skills, working experiences, especially time and financial resources, I representing the DRR/GDLMUP/MLMUPC would like to write a proposal for change and improvement of temporary settlement in cities, municipalities and urban areas of Cambodia by introducing “*Guideline for On-site upgrading of Temporary Settlements*”. The successful proposal will use as one of the technical documents supports to Circular No3 for instructing to all authorities at all levels and all relevant institutions to solve the temporary settlements.

### ***What is on-site upgrading?***

On-site upgrading is a process of legalizing land status, tenure right, improving basic services, improving or redesign some parts of the areas such as infrastructures, sewage system, sanitation including houses. The temporary settlements usually settle on state public, state private or private individuals. There are various cases of state public land:

- Land was already used as public parks, public space, state private land, individually or company owned land, land in the pagoda premises;
- Land already planned or being use as public parks, road networks, sewage or canal systems, industrial sites, commercial areas, housing areas, tourist areas;

- Harmful sites such as example proximity of landfills, proximity of sewage, on the pavement, in road corridors or railways, on the dams protecting from floods, river banks, streams, creeks, and roof terraces;

#### 4.1 Overall Objective

To contribute to the commitment of RGC that is willing to implement the principle of human rights, especially the right to have “adequate housing” for all citizens.

#### 4.2 Specific Objectives

- To initiate in implementation of the Circular N0 3 issued dated 31st May, 2010 on Resolution on temporary settlements in municipalities, cities and other urban areas, through capacity development sub-national levels.
- To contribute to the announcement of Cambodia Prime Minister Sam Desh Hun Sen on May 24, 2003 about a policy to provide secure land tenure and to assist in the on-site upgrading of 100 inner-city poor communities each year;
- To take one of the responsibilities of Department of Research and Regulation by preparing more efficient urban planning and urban development tools, which is considering the issues of Temporary Settlements.

#### 4.3 Terms and Definitions

- **Increasing Urbanization:** As the pace of urbanization accelerates and more people and more investment are flowing into cities, informal settlements which used to be tolerated are no longer acceptable, as the formal city increasingly appropriates the space they occupy for development (HS/960/08E Housing the Poor in Asian Cities, Quick guide 2, 2008).
- **Urban Poor Settlement:** Urban poor settlements come in a variety of sizes and shapes, and are called by a variety of names, not only ‘slums’ (HS/960/08E Housing the Poor in Asian Cities, Quick guide 2, 2008).
- **Informal Settlement:** A shanty town (also called a squatter settlement) is a slum settlement (sometimes illegal or unauthorized) of impoverished people who live in improvised dwellings made from scrap materials: often plywood, corrugated metal, and sheets of plastic... (en.wikipedia.org/wiki/Informal\_settlement).
- **Spontaneous Settlement:** a squatter settlement or shanty town containing self-built houses made of scrap materials such as corrugated iron and plastic; the settlement usually

lacks piped water, an electricity supply and sewage disposal facilities...  
([geographyfieldwork.com/urban\\_geography\\_glossary.htm](http://geographyfieldwork.com/urban_geography_glossary.htm)).

- **Slums:** The word slum traditionally describes a neighbourhood of housing that was once in good condition but has since deteriorated or been subdivided into a state of high crowding and rented out to low-income groups (HS/960/08E Housing the Poor in Asian Cities, Quick guide 2, 2008).
- **Squatter Settlement:** A squatter settlement, on the other hand, is an area of poor quality housing built on illegally occupied land. A third kind of settlement is an irregular subdivision, in which the legal owner subdivides the land into sub-standard plots and sells or rents them out without following all relevant building bylaws (HS/960/08E Housing the Poor in Asian Cities, Quick guide 2, 2008).
- In Cambodia's Context, the term **Temporary Settlements** here referred to the term Squatter Settlements in Khmer is equal to the term Anarchic Settlements built on land which is not belonged to the settlements' builders. However, the term is considered as downgrade to the squatter settlers and in 2003, Sam Dech Prime Minister HUN SEN requested that the name Anarchic shall be changed to Temporary Settlement (TS).

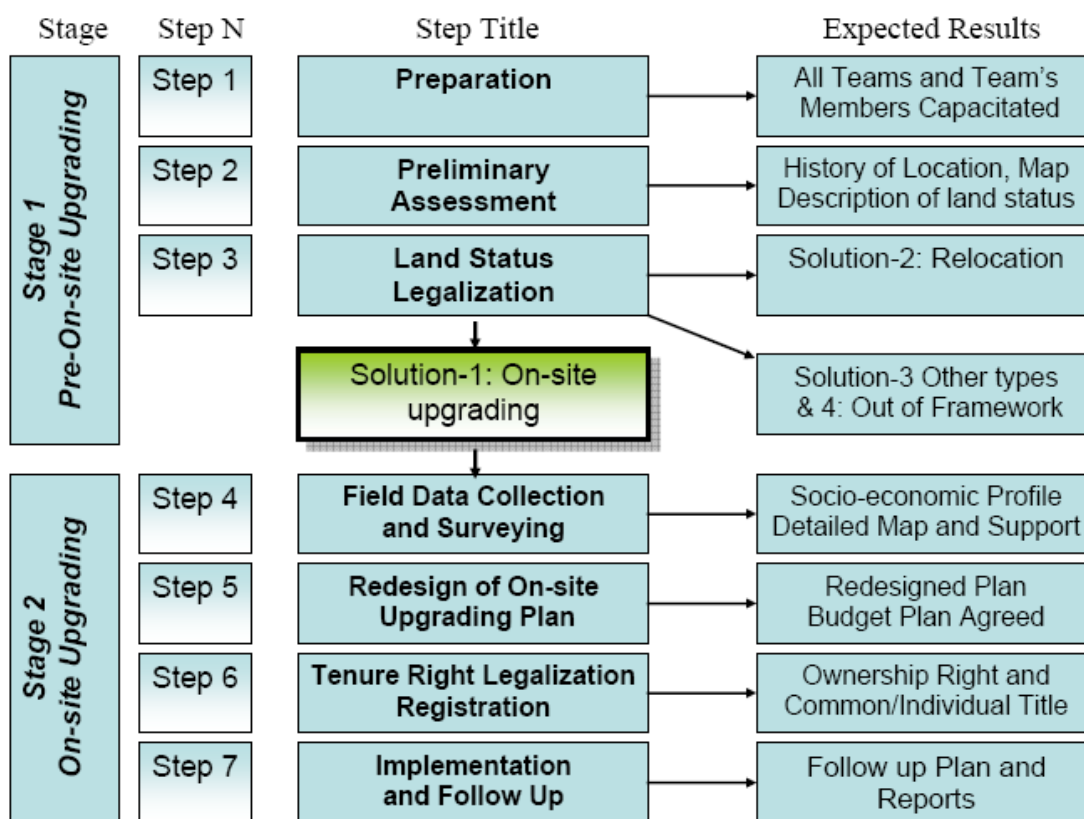
#### 4.4 Principles of On-site upgrading

- On-site upgrading of TSs will be implemented within the strategic framework land policy (September 2002) or other new version/White Paper, which is under the formulation by General Secretariat of Council for Land Policy;
- On-site upgrading of TSs will be implemented within framework of Sub-Decree No. 118 ANK; dated October 07, 2005; on State Land Management, which has clear implementation mechanism, national state land management committee (NSLMC), capital/provincial state land management committee (C/PSLMC), district/khan/municipal state land working group (D/K/MSLWG) and commune/sangkat field team;
- On-site upgrading of TSs will be implemented within the framework of the third draft of NHP (March, 2010) or other new version, which will finalize by General Secretariat of Council for Land Policy;
- On-site upgrading of TSs will be implemented within the framework of the Circular No3 on Resolution of Temporary Settlements in city and urban areas, dated 31st May, 2010;
- On-site upgrading of TSs will be implemented after the acceptance that the location is suitable for on-site upgrading by district/khan/ municipal state land working group

- (DSLWG), commune/sangkat field team together with community representatives and civil society as ad hoc members;
- On-site upgrading of TSs will be implemented in close cooperation with communities/community representatives and civil society/community base organizations (CBOs), non-governmental organizations (NGOs) and international organizations (IOs) work in the areas;

#### 4.5 On-site upgrading process

**Figure 03: Flowchart of On-site upgrading process**



#### 4.6 Activity

**Table 04: Steps and Activities**

Step/Activity	Main Actors	Participants	Expected Results
<b>Pre-On-site Upgrading Stage</b>			
<b>Step 1: Preparation</b>			
1.1- Forming and training D/K/MSLWGs	C/PSLMC's Chairman and members	All D/K/MSLWGs	D/K/MSLWGs have capacity
1.2- Forming and training C/SFTs (on job training)	D/K/MSLWG's Chairman and members	All C/SFTs	C/SFTs have capacity

Step/Activity	Main Actors	Participants	Expected Results
1.3- Forming CBOs (meeting, communication)	D/K/MSLWG's members	All community members	Some specific CBOs (They may already exist)
<b>Step 2: Preliminary Assessment</b>			
2.1- Legal status--semi-structured interviewing	D/K/MSLWGs C/SFTs	-Community -NGOs/IOs/ CBOs -other stakeholders	- History of location - Description of land status, Overview map of TSs
2.2- Geographic location--Physical observation	D/K/MSLWGs C/SFTs	-Community -NGOs/IOs/ CBOs	
<b>Step 3: Land Status Legalization</b>			
3.1- Organize a meeting to discuss possible solutions	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Possible Results-1 <sup>(3)</sup> (S1,S2,S3,S4)
3.2- Organize public display the result (30 days)	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Possible Results-2 <sup>(4)</sup> (including comments)
3.3- Finalizing and Report comments of possible results to C/PSLMC	D/K/MSLWGs	C/PSLMC's Chairman and members	Possible Results-3 <sup>(5)</sup> (Agreed on Tenure Right)
<i>If the agreed result is S1--Continue to on-site upgrading stage</i>			
<b>On-site Upgrading Stage</b>			
<b>Step 4: Field Data Collection and Surveying</b>			
4.1- Organizing a Coordination workshop	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Participation, coordination and financial supports
4.2- Socio-economic data of residents—Interviewing	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Socio-economic profile of the residents
4.3- Physical characteristics--Physical surveying and observation	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	-Detailed map and description of TSs, infrastructure and facilities;

<sup>(3)</sup> Possible Results-1 (S1: Location is suitable for On-site upgrading, S2: Relocation, S3: Other types of solution policies, S4: Out of SLMC framework);

<sup>(4)</sup> Possible Results-2: Possible Results-1 + Comments of 30-day public display;

<sup>(5)</sup> Possible Results-3: Decision of C/PSLMC



Step/Activity	Main Actors	Participants	Expected Results
<b>Step 5: Designing Upgrading Plan</b>			
5.1- Organizing a meeting to discuss upgrading options	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Agreed conceptual plan and regulation
5.2- Designing upgrading plan and regulations	D/K/MSLWGs C/SFTs	-Community representatives -NGOs/IOs/ CBOs	Agreed upgrading plan, clear definitions and regulations
5.3- Budgeting infrastructure, basic service, common place projects	D/K/MSLWGs	C/SFTs	Budget plan for infrastructure, basic service, common place projects
<b>Step 6: Tenure Right Legalization and Registration</b>			
6.1- Submitting upgrading plan to C/PSLMC	D/K/MSLWGs	C/PSLMC	-Agreement on Ownership Right,
6.2- Submitting upgrading plan for registration	D/K/MSLWGs	C/PLMUPCC <sup>(6)</sup>	-Registered/cadastral plan--common or individual.
6.3- Integrating infrastructure, basic service, common place projects into CIP/CDP <sup>(7)</sup>	D/K/MSLWGs C/SPBC <sup>(8)</sup>	CC <sup>(9)</sup> , CBOs	-Prioritized infrastructure, basic service, common place projects for financing supports.
<b>Step 7: Implementation and Follow Up</b>			
7.1- Defining boundary of infrastructures, common areas	D/K/MSLWGs CBOs,	C/SPBC, CC, Community	Clear boundary of infrastructures, common areas
7.2- Supporting in formulation project documents	D/K/MSLWGs CBOs,	NGOs/IOs, C/SPBC, CC,	Contracted projects
7.3- Training on following up projects	D/K/MSLWGs CBOs,	C/SPBC, CC,	Annual, semester quarter, Action plans

<sup>(6)</sup> C/PLMUPCC: Capital/Provincial Land Management, Urban Planning, Construction and Cadastre

<sup>(7)</sup> CIP/CDP: Commune Investment Programme/Commune Development Plan

<sup>(8)</sup> Commune/Sangkat Planning and Budgeting Committee

<sup>(9)</sup> Commune Council

## 6 References

- 1- 2010 Third Draft of National Housing Policy, Secretariat for Council Land Policy, MLMUPC, Cambodia;
- 2- 2010 Circular N03 on Resolution on Temporary Settlements (In Khmer) Council Ministry, Royal Government of Cambodia;
- 3- 2009 The 8 Khn Survey, Urban Poor Settlements in Phnom Penh, Samakum Teang Tnaut (Local Association), Cambodia;
- 4- 1998 and 2008 General Population Census, Institution of Statistic, Ministry of Planning, Cambodia;
- 5- 2008 Yearbook, Ministry of Planning, Cambodia;
- 6- 2008 newsletter on Activities of Urban Poor Development Fund of Cambodia (In Khmer) Urban Poor Development Fund of Cambodia;
- 7- UN-HABITAT, 2008 Low-income Housing, United Nations Economic and Social Commission for Asia and the Pacific, ISBN: 978-92-113-1947-7, HS/960/08E Housing the Poor in Asian Cities, Quick guide 2;
- 8- UN-HABITAT, 2008 Housing Finance, United Nations Economic and Social Commission for Asia and the Pacific, 2008, ISBN: 978-92-113-1944-6, HS/957/08E Housing the Poor in Asian Cities, Quick guide 5;
- 9- Goran Tannerfeldt & Per Ljung, 2006 More Urban Less Poor, Introduction to Development and Management, Swedish International Development (Sida), ISBN-13: 978-1-84407-381-8;
- 10- Rodolfo Mercado and Ricardo Uzin, 1996 Regularization of Spontaneous Settlements, Swedish International Development (Sida), Lund University, Centre for Habitat Studies, ISSN 1100-9446, ISRN LCHS-A3-B1--21—SE;
- 11- Johnny Åstrand, 2010- PowerPoint Presentation: Organized Self-help Housing; Shelter Design; Shelter Design & Development; Shelter Development; Shelter Finance; Shelter in Tanzania and Up-grading of Spontaneous Settlements;
- 12- Rachele Navarro Åstrand, 2010- PowerPoint Presentation: Academic Writing for Advanced Course; Building Technologies for Housing; Settlement Planning and Design of dwelling units and Urban Agriculture in Settlement Planning 2;
- 13- Erik Johansson, 2010- PowerPoint Presentation: Climate, Energy and Shelter and Climate Sensitive Design;
- 14- Maria Rasmussen, 2010- PowerPoint Presentation: Shelter Upgrading in Copenhagen;

- 15- Prof.Dr. He.Jianqing, 2010- PowerPoint Presentation: Shelter Development in China;
- 16- Laura Like, 2010- PowerPoint Presentation: From Habitat II to WUF5; Gender and Shelter; Shelter Solutions in Central America; House, Function and Culture; Shelter Design and Disasters;
- 17- Beryl Baybay, 2010- PowerPoint Presentation: Urban Harvesting and Shelter; Urban Harvesting and Shelter;
- 18- Sofie Adolfsson Jörby, 2010- PowerPoint Presentation: Swedish Planning, 2010; Sustainability initiatives in Sweden;
- 19- Sara Stenhammar, 2010- PowerPoint Presentation: Sida Urban Development, Sweden;
- 20- Study Visit, 2010: Malmö City, Sweden;
- 21- Study visit, 2010: Southern Sweden;
- 22- Study Visit, 2010: Shelter Upgrading in Copenhagen, Denmark;
- 23- Asec Wendel Avisado, 2011- PowerPoint Presentation: Housing and Urban Development (HUDCC), Philippines;
- 24- Mr. Percival Chanvez, 2011- PowerPoint Presentation: Legal Perspective in Social Housing and the Urban Development, Philippines;
- 25- Mr. Florencio R. Carandag, Jr., 2011- PowerPoint Presentation: Social Housing Finance: The Social Housing Finance Corporation (SHFC) and Community Mortgage Programme (CMP), Philippines;
- 26- Arch. Benita Regala, 2011- PowerPoint Presentation: State of Social Housing in (NHA), Philippines;
- 27- Arch. Ma. Alma Valenciano, 2011- PowerPoint Presentation: Social Housing in Mandanao, Philippines;
- 28- Mr. Hernani Panganiban, 2011- Powerpoint Presentation: Presidential Commission for the Urban Poor (PCUP), Philippines;
- 29- Site Visit, 2011: Smokey Mountain Permanent Medium Rise Buildings, Philippines;
- 30- Site Visit, 2011: Gawad Kalinga Baseco Site, Philippines;
- 31- Site Visit, 2011: Habitat for Humanity Baseco Site, Philippines;
- 32- Site Visit, 2011: Portofino Real Estate, Brittany Corperation, Muntlupa, Philippines;
- 33- Site Visit, 2011: National Bilibid Prison House (NBP), Philippines;
- 34- Site Visit, 2011: NHA Kalayaan Medium-Rise Housing (PRTC), Philippines;
- 35- Site Visit, 2011: St. Hannibal Christian Community in-City Resettlement Site, Philippines;
- 36- Site Visit, 2011: Quezon City Development, Quezon City Planning, Philippines;
- 37- Site Visit, 2011: Phinma Middle Income Housing Project- Sofia Bellevue, Philippines;

- 38- Site Visit, 2011: National Government Center East and West, Philippines;
- 39- Site Visit, 2011: Kasiglahan Village VI, San Isidro- PRRC Resettlement Site, Philippines;
- 40- Site Visit, 2011: Barangay Holy Spirit Ecology Center (Materials Recovery Facility and Urban Organic Garden), Philippines.
- 41- Site Visit, 2011: Ayala Nuvali Mixed Use Sustainable Development, Philippines;
- 42- Site Visit, 2011: Habitat for Humanity Taguaig, Philippines;
- 43- Site Visit, 2011: DMCI's Cedar Crest-Middle to High Income, Philippines;