



11

URBAN

Photo by Sina Brod

URBAN

The urban population refers to people living in an urban area, classified as communes that match the following “Reclassification of Urban Area in Cambodia” criteria from 2004 (NIS 2010, p.15):

1. Population density exceeding 200 people/km²
2. Percentage of male employment in agriculture below 50 percent
3. Total population of the commune should exceed 2000

In Cambodia there are 23 provinces and 26 cities containing about 14, 073 villages. 19.5% of the total population lives in urban areas (NIS 2010, p.5). The process of rural areas becoming urban areas is called urbanization. The urbanization rate is calculated based on the growing proportion of the urban population compared to rural population. Cambodia’s urbanization rate of 19.8% is slower than in neighboring Thailand (33.6 %) and Laos PDR (32 %) (NIS 2010, p.26).

While Cambodia’s urban centers are developing very fast, the capital Phnom Penh can be described as the primate city of the country, whereas Siem Reap, Sihanoukville and Battambang are smaller, secondary cities. Urban density refers to the number of people inhabiting a given urban area. The map here clearly shows Phnom Penh as the most populated urban area in Cambodia. Infrastructure such as roads and water supply, as well as access to education and health facilities have been enhanced considerably in order to respond to the needs of ever increasing populations in these urban areas. Very often this development is driven by economic factors and private investors, and thus a pragmatic, though not always sustainable approach, underlies these improvements (STT 2012).

A Brief History of Khmer Cities

According to Khmer architect Vann Molyvann, the early Mon-Khmer lived in settlements of circular earthworks and mound settlements, set in circles nearby natural irrigation sources such as the Mekong River, its tributaries and ponds. Mound settlements were found at the area of Chamcar Andong in the Southwest of contemporary Cambodia, and have been dated back to 180 BC (Bong 2003). These areas show artifacts in a variety of strata and it is believed that they have been occupied for more than 1000 years (Vann 2003, pp.3-4). Circular earthworks were discovered at locations near present day Siem Reap, Angkor Archaeological Park, Phnom Penh and Angkor Borei near Takeo.

The Funan Empire was established through Mon-Khmer people and immigrants, who brought Brahmanic-Buddhist culture to the region in the first century AD. Together they created urban-like settlements with palaces and houses, that were well known to neighboring Chinese and Indian polities. Water management systems of the Funan Empire such as the “prek” that managed the annual cycle of flooding and made productive use of water rises, became characteristic of Khmer settlements and are still found today (Vann 2003, p.10).

Present urban areas in the Kingdom of Cambodia are rooted in the ancient Khmer cities that arose with the establishment of the Angkor Empire in the 9th century. Significant are the so-called hydraulic cities of Angkor that were built by Jayavarman II and located in the Tonle Sap Lake’s basin. These settlements included water reservoirs, known as “baray”, that linked water to economic, social and religious systems (Vann 2003, p.13). Due to the great irrigation system made possible by the close proximity to the Tonle Sap Lake basin and the water reservoirs, inhabitants

could easily produce up to three rice yields a year. The ancient style Khmer capital lasted until the eventual occupation of the Kingdom and then changed its location following several further foreign invasions. In the 19th century, King Ang Duong began to develop the settlement that is still Cambodia’s capital today. Although the structure of settlement shows parallels to ancient Khmer style cities, the style of architecture changed significantly when the French protectorate began (1863-1953). At that time Phnom Penh had about 25,000 inhabitants, Udong about 10,000 and Battambang around 3,000 (Vann 2003, p.16).

URBAN DEVELOPMENT IN PHNOM PENH

The city of Phnom Penh is the largest urban agglomeration in the Kingdom of Cambodia and has increased massively in size over the past ten years. It is located in the south-central region of the country at the confluence of the Tonle Sap, Mekong and Bassac rivers. These rivers provide freshwater and river ecosystems that are important resources for sustainable environmental conditions. Phnom Penh’s area is approximately 678.46km², which accounts for 0.37% of the country’s total area (Phnom Penh Municipality 2013b). In 2013, Phnom Penh’s population was estimated to be 1,501,725 inhabitants (Phnom Penh Municipality 2013b). The city includes eight districts/municipalities with 96 communes in total. The district of Mean Chey has the largest population with 205,761 people.

32.4% of Phnom Penh citizens are aged 0 to 17, with 60.1% aged 18 to 60 and 8% aged over 61 (NCDD 2010). The most common formal occupation of families living in Phnom Penh is within the service sector, which accounts for 57.87%, although 34.24% of the capital’s

inhabitants combine multiple occupations such as services and farming. Only 6.68% work in agricultural occupations such as crop cultivation, or fisheries, and only 1.21% are employed in craft work such as furniture or food production (NCDD 2010). Many other people who work in informal sectors, such as street vendors or those working in the entertainment industry are not listed in the official census of the RGC.

The following images show the enormous increase in size of the capital. The map also demonstrates the considerable decrease and removal of water bodies such as lakes, canals and rivers, as well as significant changes to the green landscape in all areas. The changes have resulted in increased flooding events because

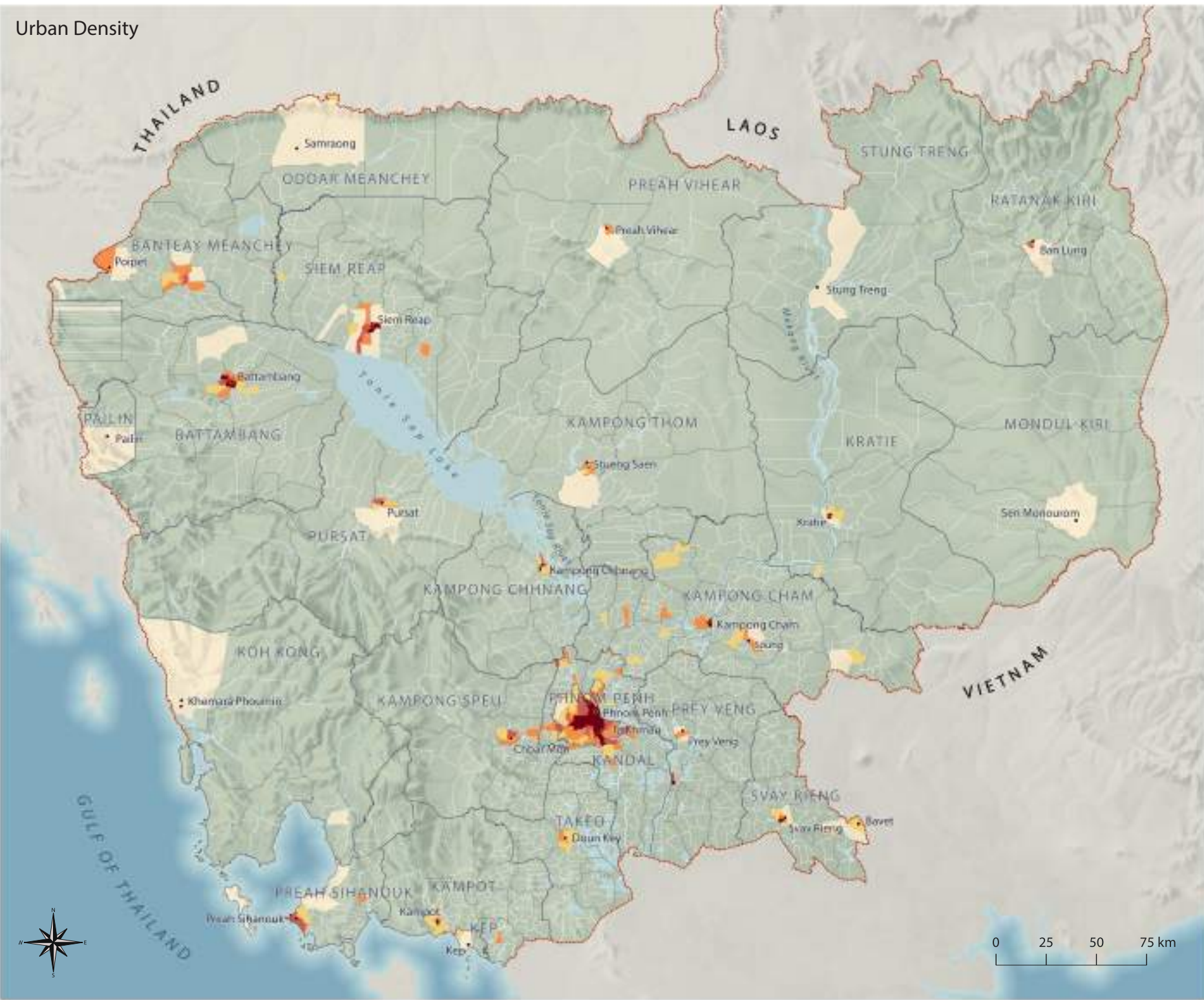
many of the reservoirs and green spaces that were removed had important drainage functions for the city. This growth is connected to the socio-economic development in the city, such as housing projects and attempts to build satellite cities, as well as other private investments that have contributed to massive changes in the urban landscape of Phnom Penh in the past decade.

	Male	Female
Total Population	6,516,054	6,879,628
Urban Population	1,255,570	1,358,457
Mean Age at Marriage (years old)	28	26
Literacy Rate in Phnom Penh (per 100 persons, aged 15 and over)	97	89
Literacy Rate in other urban areas (per 100 persons, aged 15 and over)	93	80
Fertility rate of women aged 15-49 years urban areas		2.1
Fertility rate of women aged 15-49 years rural areas		3.3

Cambodian Urban Population at a Glance (NIS 2011)



Urban Density



LEGEND

- Krong (City)
- International boundary
- Province boundary
- District boundary
- Commune boundary
- Water body

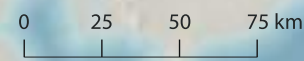
Reclassification of urban 2011

Rural

Urban density 2008 (people per km²)

- 2000 - 15700
- 1000 - 2000
- 500 - 1000
- 250 - 500
- 9 - 250

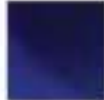





Data Source:
 United Nations Population Fund (UNFPA):
 Reclassification of Urban Areas in Cambodia
 2011
<http://arunatechnology.com>
 (Aruna Technology Ltd.)
 Department of Geography (DoG), 2005





Phnom Penh (May 2003)

LEGEND

-  Water
-  Shallow water, high sediment content
-  High density settlement areas
-  Predominantly industry area (factories, big buildings, construction sites)
-  Dense vegetation
-  Agriculture, mixed use, sparse vegetation

This image was acquired by the Landsat 7 satellite in May 2003. The image data is shown as a so-called false colour composite of the channels 7 (shortwave infrared) in red, 5 (near infrared) in green and 3 (green) in blue. This combination of image bands and colours is often used because it makes it easy to differentiate water, vegetation and human settlements with naked eye.





Phnom Penh (May 2013)

LEGEND

-  Water
-  Shallow water, high sediment content
-  Sandy, barren soils, often indicating barking of earth
-  High density settlement areas
-  Predominantly industry area (factories or other buildings)
-  Dense vegetation
-  Agriculture, mixed use, sparse vegetation



This image was acquired by the landsat 8 satellite in May 2013. The image data is shown as a so-called false colour composite of the channels 7 (shortwave infrared) in red, 5 (near infrared) in green and 3 (green) in blue. This combination of image bands and colours is often used because it makes it easy to differentiate water, vegetation and human settlements with naked eye.



Beginning in the early 2000s, the pace of construction sped up tremendously, leading to new aesthetic standards being adopted, such as those found in neighboring countries like Vietnam, Thailand and China. It has also meant the loss of some important heritage sites, such as the former Phnom Penh tourist office on Sisowath Quay (Vann 2003 p.121). Phnom Penh's recent urban development has also seen Cambodia follow the worldwide trend towards the development of satellite cities – metropolitan areas that are located in the vicinity of a large urban area and remains independent with its own infrastructure services. However, most of the so called "satellite cities" of Phnom Penh are connected to the existing infrastructure of Phnom Penh in most cases simple city extensions. The RGC has approved the construction of six satellite cities in the past ten years including Diamond Island "satellite city" in Tonle Bassac commune, Grand Phnom Penh International in Sensok, Camko City near Sensok, Boeung Kak Lake in Daun Penh, a future "satellite city" in Russey Keo district's Chroy Chongva commune, and Ly Yong Phat's "satellite city" along National Road 6. According to a real estate market study in 2012, the will of Cambodians to move into these city extensions was still low due to the lack of amenities and the distance to "downtown" Phnom Penh (CBRE Cambodia 2012). Many of the "satellite city" projects also floundered in the face of the global recession of the late 2000s.

Phnom Penh's Foundation

The Royal chronicles state that after the Siamese invasion of Angkor (1431), King Ponhea Yat (1405-1467) moved eastward to establish a new capital in the area of Srey Santhor. When the capital flooded, the new King's palace was constructed around the rivers in Phnom Penh in around 1434 and named Krong Chaktomuk. According to Khmer Historian and Linguist Dr. Jean-Michel Filipi, Krong Chaktomuk is the short version of "Krong Chaktomuk Mongkol Sakalkampucheahipadei Sereysanthor Pavara Intapattaborei Rothreachsema Mohanokor", which may be translated as "Capital of the four arms, happy master of all Cambodia, wealthy, noble town of Indraprastha, frontier of the Kingdom". Although in the following centuries the kingship moved to the locations of Longvek and Udong, Phnom Penh remained an important economic location for foreign traders due to its location at the confluence of three rivers: Bassac, Tonle Sap and Mekong. In the early 17th Century, Phnom Penh's inhabitants grew to number 20,000, including 3,000 Chinese. At this time "a new Chinese system of weights and measurements entered the Khmer language, as well as a new numerical system borrowed from the Cantonese language" (Filipi 2012, p.10). With the new Royal Palace in Phnom Penh, the city again became the capital of the Kingdom of Cambodia under King Norodom in 1863 and has remained the biggest and busiest urban centre until today.

The Founding Myth of Phnom Penh

According to myth, Phnom Penh was founded in the 15th century. "A rich lady named Penh had her house built not far from the bank of the river, on a hillock with a cone-shaped mound at its side. One day when the river was swollen by rainwater, Daun Penh went down to the riverside and saw a big koki tree swirling in an eddy not far from the bank. She straightaway asked her neighbors to board their canoes and grab the tree. They tied ropes around the trunk and hauled the tree to shore. As Daun Penh was cleaning away the mud which coated the tree, she discovered in a hollow of the trunk four bronze statues of the Buddha and one statue, the latter depicting a standing deity holding a stick in one hand and a conch in the other, with his hair tied up in a chignon in the Vietnamese style. Daun Penh and the people from the neighborhood were much delighted by this find, and they ceremoniously brought the statues to Daun Penh's house, where she built a temporary shelter to keep them. She then asked the inhabitants to come and help her raise the mound beside her house to the size of a small hill, a phnom" (Filipi 2012, p.8).

(Filipi 2012, p.8)



Photo by Rithy Lomor Pich



Architecture in the Capital

After independence from the French in 1953, Phnom Penh's number of inhabitants increased rapidly from 364,000 people in 1950 to 760,000 in 1970. The growth in agricultural production and the following economic boom in the 1960s, led to investments in the urban sector (Vann 2003). Colonial architecture that led Phnom Penh to be known as the "Pearl of Asia" in the early 20th century is still found in the city today, such as the National Library near Wat Phnom or the building of the Foreign Correspondent Club (FCC) on the Riverside. The concepts of colonial architecture were expanded upon by inspiring new Khmer architecture after Cambodia's independence. Cambodia illustrated its new confidence and progress through this "New Khmer" architecture, especially in Phnom Penh (Khmer Architecture Tours 2013). This modern architecture was both innovative and dynamic in adapting international characteristics. This innovation can be compared to elements used in the Bauhaus style, such as simplification to avoid heavily loaded decoration, functionality to use the available space to its maximum and creative minimalism to show the merger of modernity and tradition. The individuality of the design was accomplished through a combination of international styles with distinct Cambodian styles.

Famous Khmer architect and Head of Public Works and State Architecture during its Golden Age between 1955 and 1970, Vann Molyvann, had a significant impact on New Khmer architecture. Main features of his architectural design covered functionality and aesthetics. For example, his buildings were climate friendly, and used natural air ventilation that flowed through air passages that were built into the walls. Another common characteristic of the emerging New Khmer architecture that is still

visible, for example at the Sports Complex in Phnom Penh, was their resemblance to water bodies of the Angkor architecture. Another example is the Institute of Foreign Languages (originally meant to be used as a teacher training college), which is characterized by cross-ventilation, indirect lighting and good water management.

The period of Cambodia's prosperity, creativity and modernity was disrupted in the period of war between 1970 and 1975 and under the Khmer Rouge policy of forced de-urbanisation, which led to the emptying of Phnom Penh. In the decade of isolation and poverty that followed (1980-1990), the number of city inhabitants again grew slowly but steadily and by 1987 the city housed 584,000 people (Vann 2003).

As the population of Phnom Penh is set to increase further in the coming years, improved infrastructure is necessary. Due to the fact that socio-economic development is mainly driven by private investors and that the conservation of heritage sites are not always valued by new developments, heritage buildings face the threat of being demolished. In addition, various public open spaces in the city's centre that once were reserved for air circulation and green spaces for leisure for the capital's citizen and to beautify the city, have now been changed to serve private interests. Major heritage buildings built in the colonial era and the Golden Age include the Institute of Foreign Languages (IFL, 1965-72), Central Market (1935), Chaktomuk Conference Hall (1962), the Council of Development of Cambodia (CDC, 1925) and the Ministry of Post and Telecommunication and Cambodia Post Office – Administration (1890), located in the former French Quarter (Phnom Penh Capital Hall 2010). Other important buildings and public areas that are still widely used for leisure activities by Phnom Penh citizens, such

as the National Sports Complex, were constructed between 1962 and 1964 by Vann Molyvann, and are currently under threat from being demolished to make way for housing and economic development projects. The National Sports Complex features space for 80,000 spectators with 4,000 seats for guests of honor, a sports hall with 6,000 seats, an Olympic size pool with 4,000 seats plus administrative buildings and tennis courts, which were used during the 3rd Southeast Asian Games in Phnom Penh in 1965 (Vann 2003, p.65).

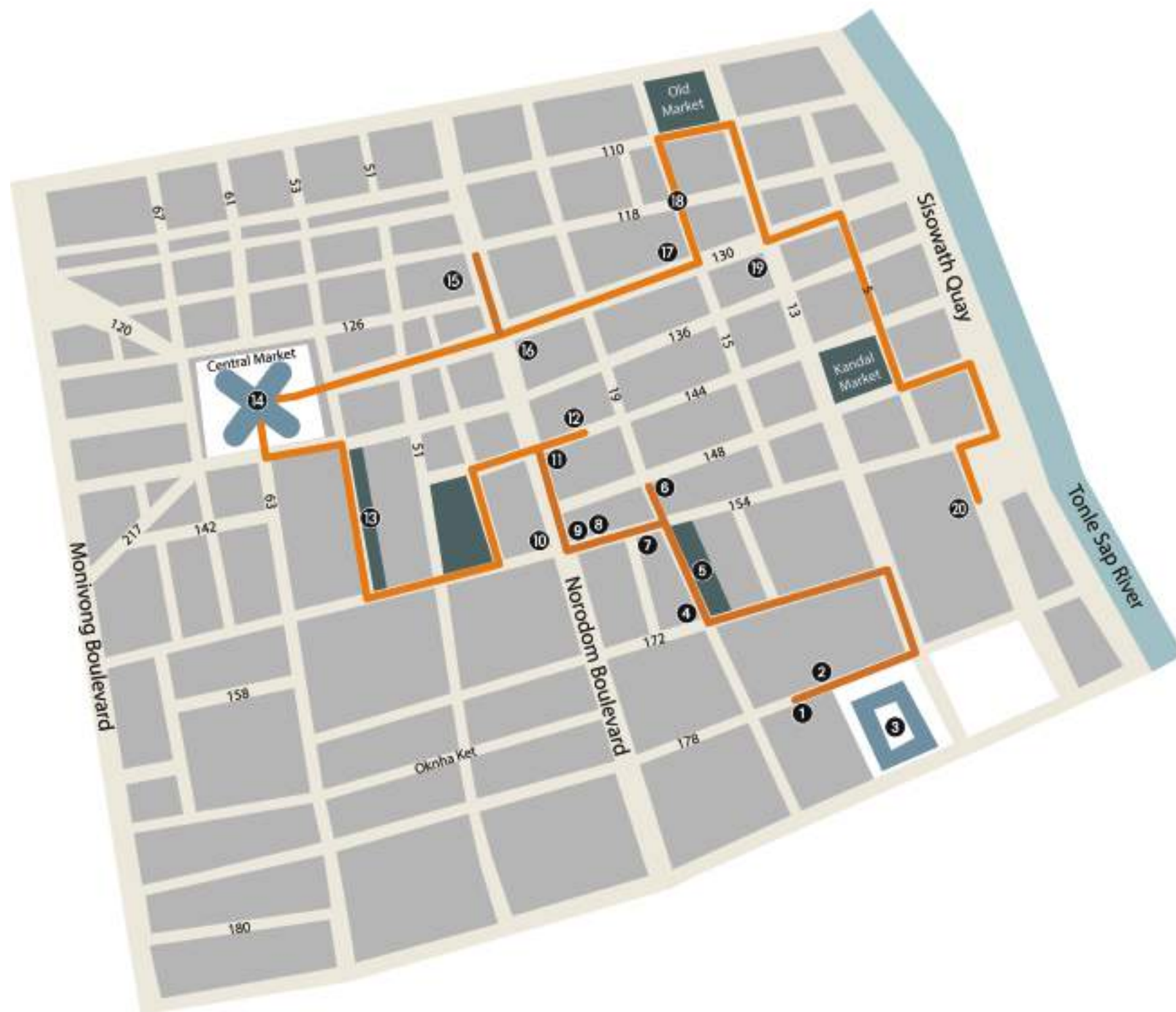
The traditional Cambodian house

The traditional Cambodian house features a wooden frame with gabled thatch roof, walls of woven bamboo and is raised on stilts up to three meters high, wooden staircase, blinds and about three rooms including a bed room for the parents, living room to receive visitors and one more bedroom. Food is prepared in a separate kitchen located near the house and usually behind it. Livestock is kept below the house. (SCW 2006). Toilet facilities are usually outside, and either improved or unimproved. Unimproved refers to a shared pit in the whole in an open space or just a simple bucket and improved refers to a pour-flush latrine, ventilated latrine, connected to a public sewer and septic system.



Photo by Hun Mady





Phnom Penh Walking Map

- ① Royal University of Fine Arts (1920s)
- ② Old Royal Villa (1900-1910)
- ③ National Museum (1917-1920s)
- ④ Round Corner Block (1940s-1960s)
- ⑤ Street 19 (colonial, 1960s)
- ⑥ Capitol Cinema (architect: Vann Molyvann)
- ⑦ Prom Bayon Cinema (1960s)
- ⑧ Deco Apartments (1935-1945)
- ⑨ Cinema Lux (1938)
- ⑩ Ministry of Water Resources (1915-1925)
- ⑪ Villa (1915-1925)
- ⑫ Forestry Administration (1960s)
- ⑬ Apartment Buildings (colonial, 1960s)
- ⑭ Central Market (1937)
- ⑮ Customs Office (1920s)
- ⑯ Villa
- ⑰ Hemakheat Cinema (1950s)
- ⑱ Intersection (colonial, 1960s)
- ⑲ Hotel International (1900-1910)
- ⑳ Wat Ounalom (1442)

Data Source:
Khmer Architecture Tours



Drainage System and Waste Water Management

Phnom Penh is located on the alluvial lowland formed by the Mekong River and the Tonle Sap. The old parts of the city are on a natural levee and many of the new residential areas are located in swampy lowlands. When the city was planned, a water management system was introduced and primarily based on natural sources such as the prekk and beng that were located in the city. For instance the area that is nowadays known for its various coffee shops and beautiful residential housing, Boeung Keng Kang I, was once a lake that contributed to the capital's irrigation system. To support the development of urban areas in low-lying areas further away from the riverbanks, protective dikes were developed and spaces between dikes were filled. "At present, the primary flood risk to the city is inadequate drainage capacity of these artificially raised areas." (Vann 2003, p.174).

The construction of outer ring dikes began in the 1960's, to protect Phnom Penh City from flooding of neighboring rivers, lakes and swamps. Urban drainage facilities with functions of draining storm water and domestic wastewater were improved gradually in line with the development of the city. However, all of the drainage facilities constructed since the beginning of the 1900's became dysfunctional due to old age, as well as poor maintenance after the 1970's. As a result, the city suffers from occasional inundation and poor environmental conditions caused by stagnant wastewater in the lowland areas, which cause deterioration of the residents' living environment and posing serious constraints to social and economic development.

In response to this regular flooding, the RGC requested foreign donors to begin working on Phnom Penh's drainage system in order to minimize the inundation and damage caused by local rainfall. This work began in the early 2000s and the storm water drainage system is expected to be completed by the end of 2015. However, the absence of a centralized sewerage treatment system in Phnom Penh, still poses great risks for the health of urban dwellers. This has led the RGC to examine the possibility of constructing the first waste water treatment plant in Phnom Penh as part of its broader sewerage development plan.

The Urban Poor

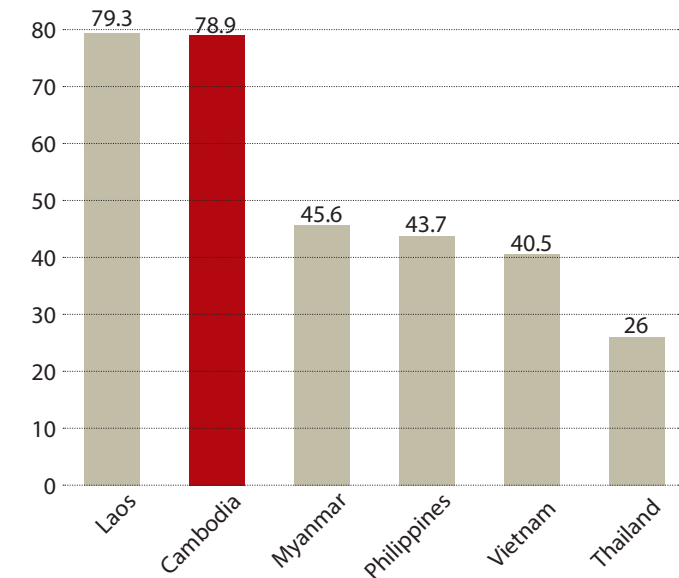
While living conditions have generally improved with development of Phnom Penh, they have not done so equally. A significant population of urban poor lack opportunities and remain highly vulnerable due to a variety of reasons. Many of them live in so-called urban poor settlements, which although not officially defined, generally denote communities or areas that are distinctly poorer than their surroundings, with inferior housing and services. Given the lack of a formal definition, the number of urban poor settlements in Phnom Penh is contested. The Municipality of Phnom Penh has identified 516 poor settlements (Phnom Penh Capital 2012). Many of these are slum

households. A slum household is one or a group of individuals living under the same roof in an urban area, lacking one or more of the following five amenities: durable housing; sufficient living area; access to improved water; access to improved sanitation facilities; secure tenure. Since information on secure tenure is not available for most countries, only the first four indicators are used to define slum households (UN Habitat 2008, p.90). The following table shows that Laos PDR and Cambodia hold the highest prevalence or frequency of slum dwellers in urban areas in the Southeast Asian region, which does not mean that every urban poor household is automatically a slum household.



Photo by STT

Slum Households
(% of total)



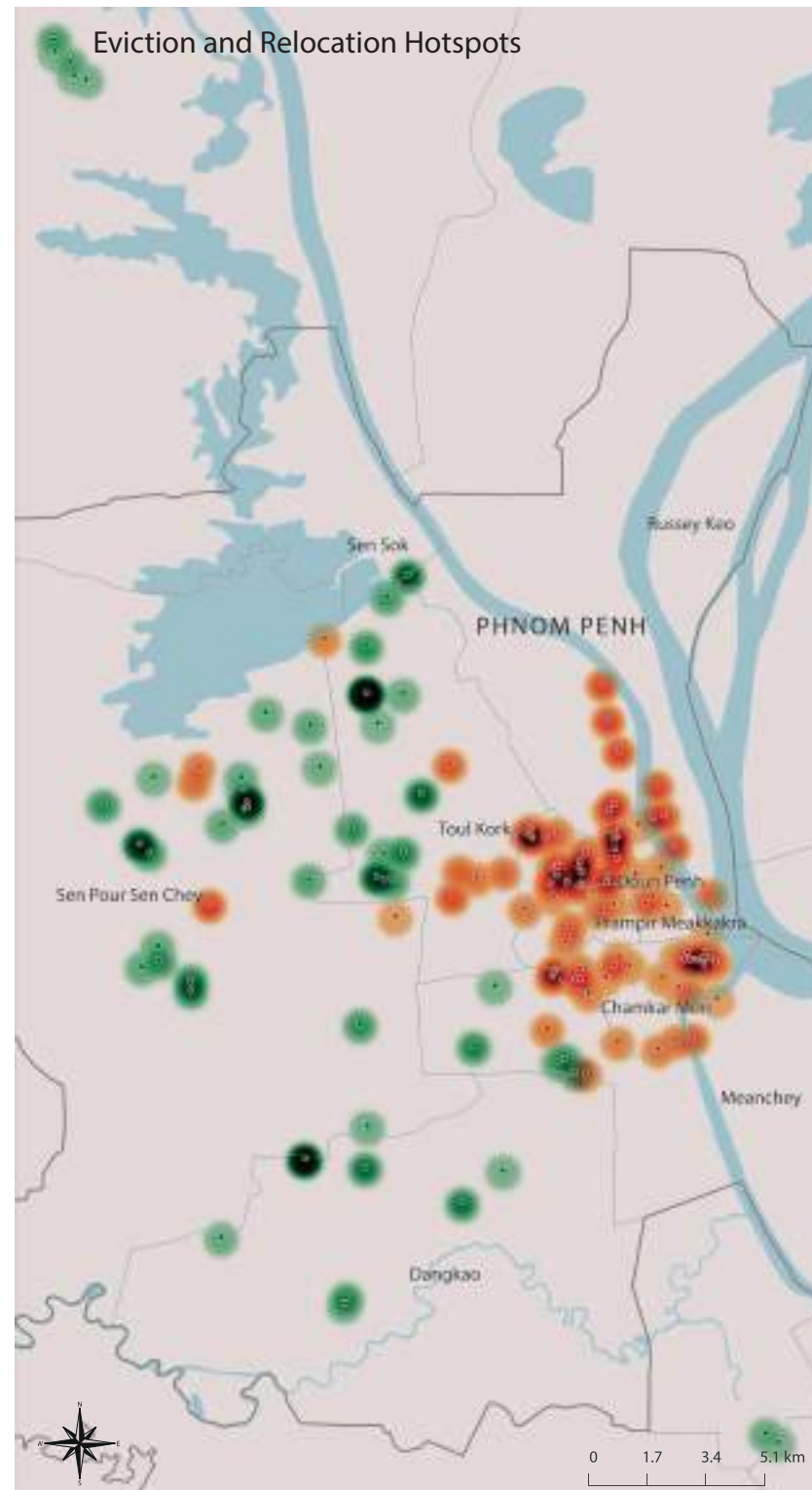
Prevalence of Slum Dwellers in South-East Asian Urban Areas (Source: CDRI 2012, p.3)





Over the past two decades some 150,000 people, equivalent to over 10% of the city's current population, has been displaced (STT 2011). In the same time period, at least 54 relocation sites have been established in peri-urban areas in the outer Khans (STT 2012b). Residents in relocation sites typically face more difficult living conditions, including limited access to employment opportunities, increased costs (e.g. water and electricity) and decreased access to services such as health and education. A key challenge facing the urban poor in Phnom Penh is tenure insecurity. The RGC's efforts in the land sector focused mainly on rural areas, leaving much of Phnom Penh untitled. As such, the status of the land in many urban poor settlements remains unknown. The RGC commonly claims that the urban poor reside on state public land and are therefore illegitimate residents. A number of high profile cases in the 2000s show how poor communities have been denied adjudication under the law and have subsequently faced eviction (STT 2012c).

With urban development driven by private interests, civil society actors have worked to empower urban poor communities and advocated for more equitable development. In the prominent case of some 20,000 people facing eviction from the centrally located Boeung Kak lake, the community successfully mobilised to prevent the eviction of over 600 families. This however, is not a common case and most urban poor communities have lost their land. Many areas where these poor communities live suffer flooding, since they are located near lakesides, riversides, or along canals. Many residents also suffer from food insecurity due to limited livelihoods, and are in significant debt to informal moneylenders. A significant number of the city's poor are also no longer owners of their homes but rent space in the city. Preliminary research on the living standards of renters suggests they are even poorer than those of (untitled) owners, with renters often paying significantly more for basic services such as water and electricity (STT 2013a).



LEGEND

- Province boundary
- District boundary
- Water body
- Eviction site
- Relocation site

Eviction hotspot

- High number of families
- Medium number of families
- Low number of families
- Very low number of families

Relocation hotspot

- High number of families
- Medium number of families
- Low number of families
- Very low number of families

Data Source:
 Sahmakum Teang Tnaut (STT) 2013,
<http://teangtnaut.org/>
<http://arunatechnology.com>
 (Aruna Technology Ltd.)
 Department of Geography (DoG), 2005



URBAN DEVELOPMENT IN BATTAMBANG

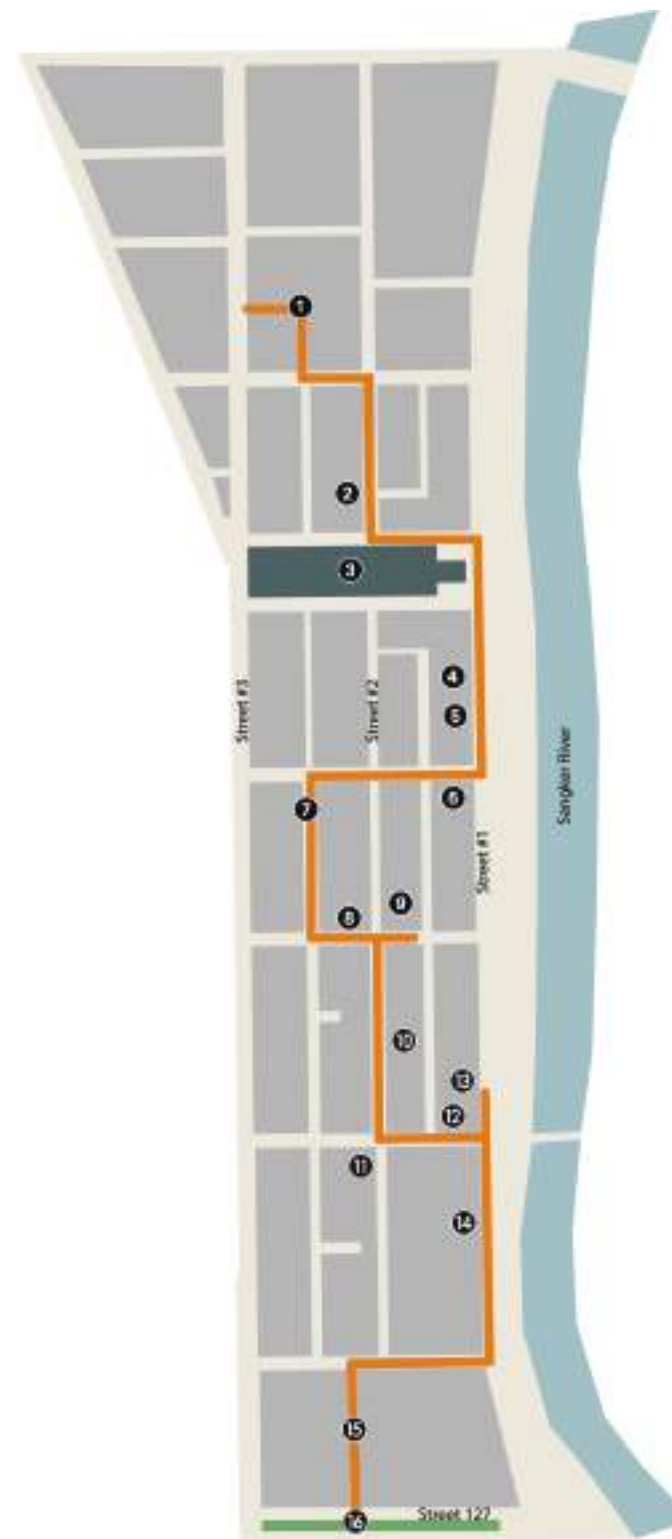
Battambang is located about 300 kilometers northwest of Phnom Penh. Widely known as the “rice bowl” of Cambodia for its fertile soil, the province preserves a rural character to this day. Battambang City, the provincial capital, covers a territory of 115 square kilometers. As of 2010, approximately 146,224 (NCDD 2010) inhabitants populated this urban agglomeration, making it one of the largest secondary cities in the country. The Municipality is comprised

of 10 communes and 62 villages. 25% of the overall area is covered by settlements. High and medium building density is concentrated along both sides of the river, where the old town center can be found. More recent settlement extension since the late 1990s has been less controlled, leading to urban sprawl.

The following walking map, a collaboration of the Battambang Municipality’s masterplan team and Khmer Architecture Tours, draws attention to interesting architecture sites in Battambang.



Psa Nath 1948, National Archive of Cambodia



Battambang Walking Map

- 1 Wat Pipetharam
- 2 Building of the Cantonese Association
- 3 Psar Nath
- 4 Shophouses next to the Chinese Temple
- 5 Chinese Temple / Chinese Spirit House
- 6 Corner Building and Villa
- 7 Street 2 ½: Series of Shop Houses
- 8 Chinese School
(opposite of White Rose Restaurant)
- 9 Buffalo Alley
- 10 Battambang Cinema (on Street 2)
- 11 School Pi Thnou
- 12 Apartment Building
- 13 Sangker Cinema and Battambang Warehouse
- 14 Department of Land Management
- 15 Wat Damrey Sor
- 16 Former canal south of Wat Damrey Sor

Data Source:
Battambang Municipality – Master Plan Team
in cooperation with Khmer Architecture Tours





The city as we perceive it today marks the end of a development process that started more than 150 years ago, in which Battambang underwent rapid urbanization and transformed from a small fishing village, stretching along the banks of the Sangké River, into a modern city and regional hub of major importance in the northwest.



Source: *Kambuja Monthly Illustrated Review*, 15 August 1965, p. 60

1. In the beginning, Battambang was a very small town with only one road and not more than 2500 residents. People built their wooden houses along the Sangké stream, clustered around docent Buddhist monasteries. The most prominent building of that time was the residence of the then governor, which was located inside a fort, and is known today as the Old Sala Kaet.

2. After 1907, the French authorities devised a first urban plan for Battambang. A regular grid system of well-defined streets was established. They built a water canal system, connected the river banks with bridges and constructed basic urban infrastructure. The city began to flourish as commercial and urban life was brought by new dwellers.

3. A second urban development was created around 1926, envisioning a business and administrative centre. To link Battambang to the capital, a railway was constructed; the city was extended to the west until the new railway line. A market was built, right in the heart of the city on the location of a previous open air market. The structure, called Phsar Nath, still exists today and is a well-known landmark building of Battambang City.

4. During the Independence Period the urban layout of Battambang was quintupled in size. The city extended towards the north, east and south. A modernization program saw the construction of an airport, public facilities, administrative buildings, factory complexes, schools and a state university among other cultural and public facilities.

5. During the civil war and until the mid-90s, the city changed very little. Although many refugees from neighboring regions, seeking for employment and shelter, settled in Battambang, expansion was limited to the southeast areas.

6. The past two decades brought a massive development leap, caused by the booming trade and small-scale business sector as well as the growing importance of Battambang as an educational and tourism center. Recent urban growth caused the city to fray out along its edges, thus giving it a somewhat organic shape.

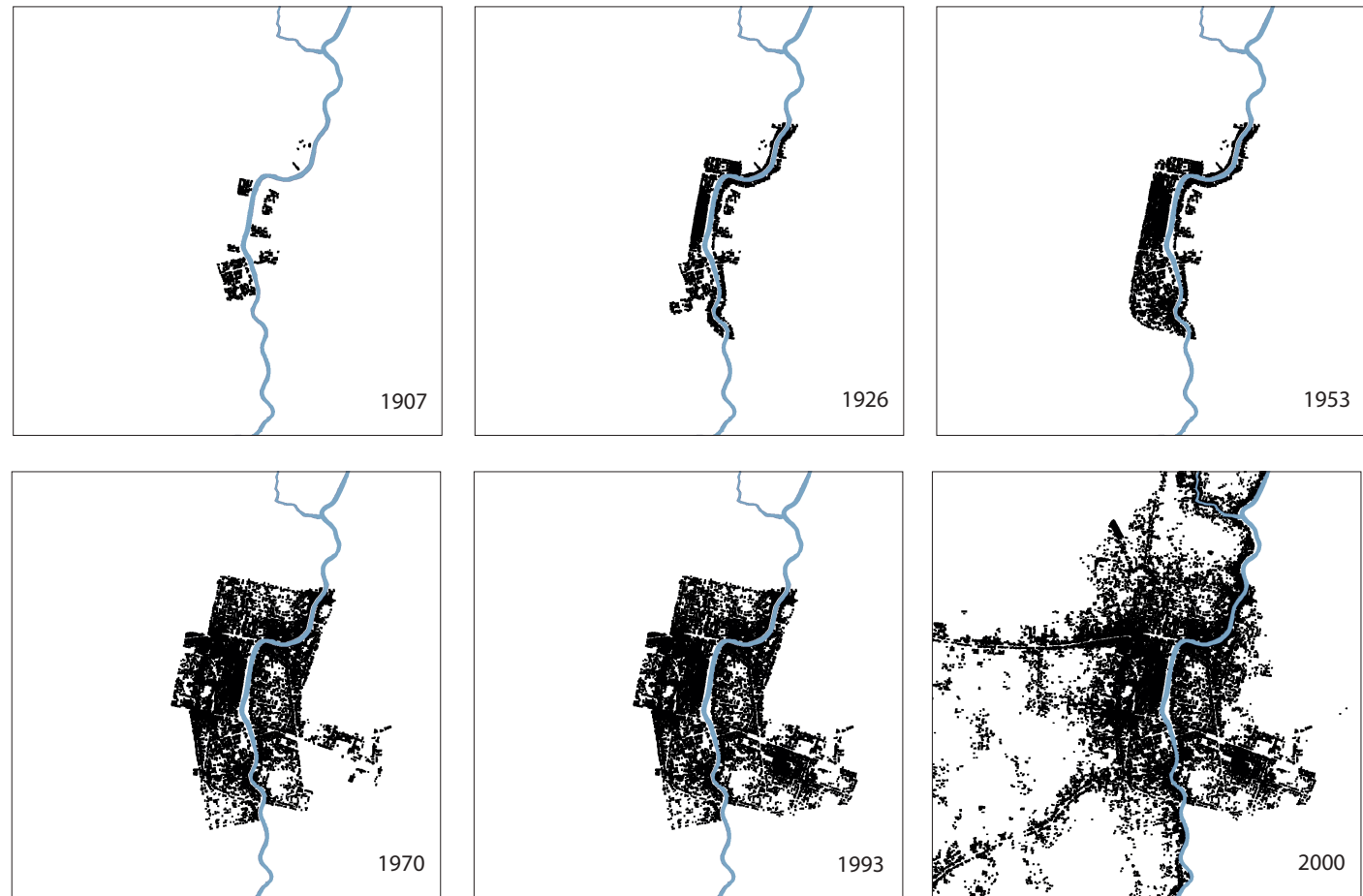
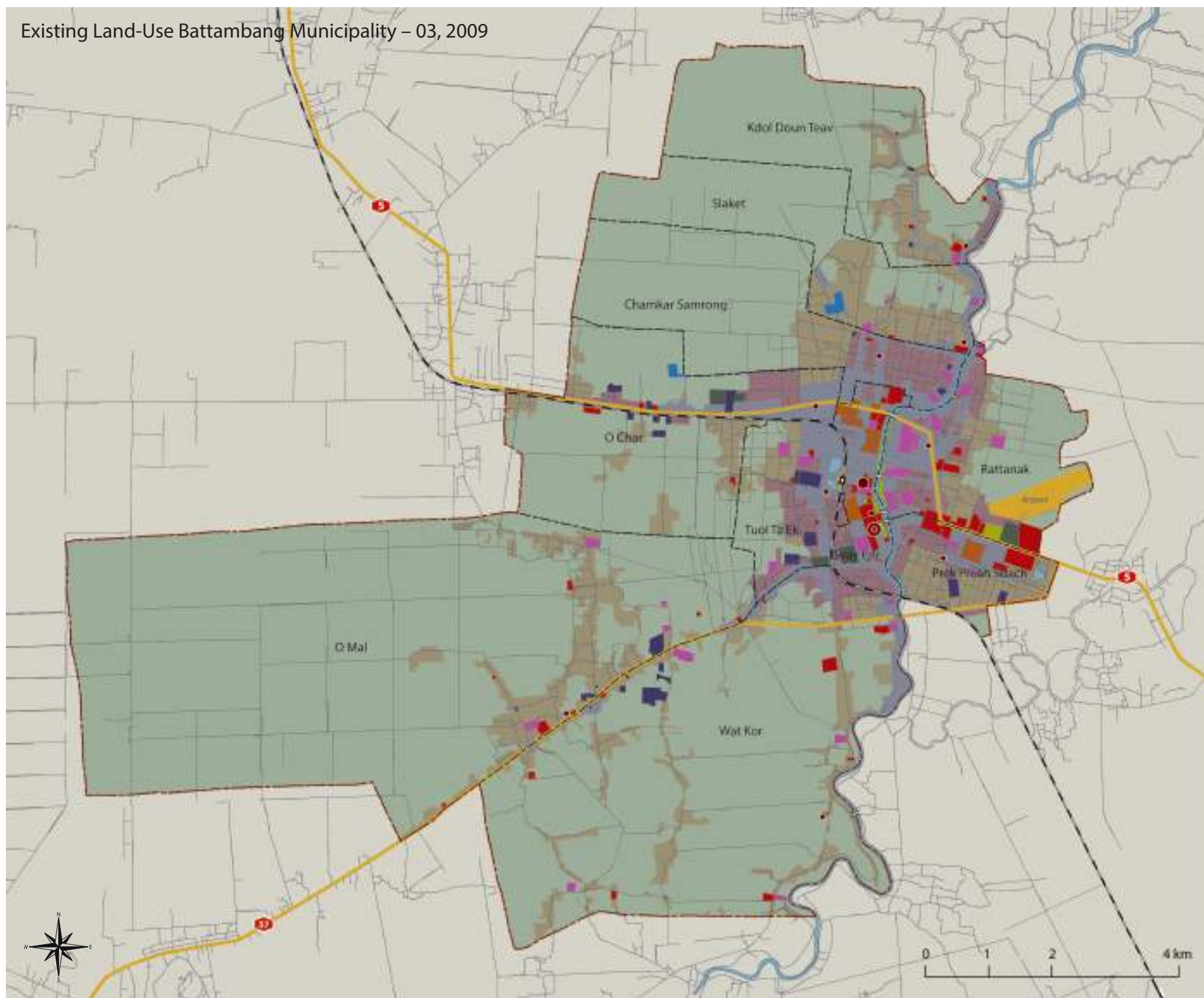


Figure ground diagram of Battambang urban development over time
Illustration by Battambang Municipality Master Plan team





Existing Land-Use Battambang Municipality – 03, 2009



LEGEND

- Province center
- Municipal center
- Commune center
- Railway station
- Commune boundary
- Municipal boundary
- National road
- Other roads
- Railway
- Bridge

Land use categories

- Residential zone
- Residential with agriculture zone
- Mixed use zone
- Commercial zone
- Administrative zone
- Culture zone
- Small and medium industry
- Public green space, sports and recreation
- Agricultural zone
- Technical infrastructure zone
- Transportation zone
- Military zone
- Water body

Data Source:
Battambang Municipality – Master Plan Team



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