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Royal University of Phnom Penh

Urban Climate Resilience in Southeast Asia Partnership (UCRSEA) Project

(Draft Working Paper)

Situation Analysis Report – Khemarak Phoumin City, Koh Kong Province, Cambodia

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Introduction

As part of the UCRSEA project, eight secondary cities were chosen across the partner countries (two in each). For Cambodia, the two cities chosen were Koh Kong town (formally known as Khemarak Phoumin town¹) in Koh Kong province and the city of Battambang in the province of the same name. These two cities were selected based on a number of criteria including: climate related impacts, urbanization processes (i.e. rapidly growing/urbanizing), importance in regionalization as part of ASEAN, background of engagement and supporting data, political buy-in from local governments and leaders, and logistical and practical accessibility.

This report serves to provide a backdrop of contextual information to support a future vulnerability analysis study for Khemarak Phoumin town. In order to do this, a situational analysis was conducted to collect information from city government and provincial officials on the nature, challenges and opportunities in light of the [UCRSEA research questions](#). Namely, the objectives were:

- a) To understand the challenges and opportunities that Koh Kong and its government faces as a result of climate change to city infrastructure (water, waste, electricity, land)
- b) To collect data and information on land use management and planning, waste, water and energy management systems and state of infrastructure and development
- c) Visiting city support systems (waste site, urban slums), identifying areas of vulnerability

On April 6 – 7, 2016, a meeting was arranged with key government officials from Khemarak Phoumin town and the province of Koh Kong (see Annex for schedule and list of participants) from the following divisions: Administration; Public Works and Transport; Provincial Planning and Investment; Bureau of Biological Safety; and the Office of Urban Planning and Compensation.

Background

There are three districts and 11 communes, with a total population of approximately 27,000 and a population density of 227 people/km. Owing to its location along the coast, the town is divided into two quasi-administrative areas: land and water. There is a community of fishers that are living along the water's edge in the town and have been there since 1979, consisting of four villages (Figure 1). While they do not have official land titles², they cannot be easily classified as 'informal settlements' or 'slums' because the community does have electricity access and piped water, two important services provided by the city. This brings to light the discussions, prevalent in urban studies discourse, around informal vs. formal settlements. For Khemarak Phoumin town, and indeed much of Cambodia, the notion of formality is vague and many communities such as the fishing households living in Koh Kong town occupy this space within the formal-informal spectrum. This observation echoes more recent scholarship on reflections of the formal and informal, eschewing the traditional division and rethinking the classical dichotomy, seeing it instead as a 'formality-informality continuum' (Waibel, 2016).

Heat stress, drought and water scarcity poses risks to growing urban areas, such as Koh Kong town, amplified for those lacking essential infrastructure and services or those living in exposed areas (e.g. at the coast). These problems have been linked to several areas such as sand dredging, letting communities live on the coast, and letting factories be built in vulnerable areas. While alone they are not significant, when compounded, they pose significant challenges for city planners and officials.

¹ The two names will be used interchangeably throughout this report.

² The team was informed that they are unlikely to receive formal land titles

Government officials noted that all areas, people have noticed an increase in the frequency and length of droughts and that this is already affecting their livelihood. For instance, droughts and heat negatively impact animal health. Animals die because of the heat stress, which increases during drought months. Second, impacts as a result of climate change is negatively impacting rice yields but also extends to other crops (i.e. vegetables). Related to this, water scarcity limits water resources which in turn limit the ability to irrigate for farmers and affects overall yields. Other environmental changes cited included the silting up of lakes and dams as a result of deforestation and subsequent soil erosion. There are also health-related impacts, conditions such as diarrhea and stomach ailments were said to increase in the dry season as the water quality is deteriorated.



Figure 1. The view from the fishing community located in Khemarak Phoumin town. Photo credit: Furqan Asif

Urban Systems

Due to time constraints and the schedule and availability of government officials for site visits, the focus for the situation analysis centered around two urban systems: water and waste.

Water

City officials commented that the past year was particularly unusual due to lack of sufficient rainfall which has led to the town, and indeed many parts of the province, facing drought conditions. Compounding this, in 2012/2013, water demand surged principally as a result of rapid growth in the industrial sector, along with an increase in population and development (e.g. hotels, guesthouses and restaurants). The effect of climate change is also exacerbating drought conditions with a longer hot, dry season (extending until May versus typically March or April). In 2014, hundreds of households in Koh Kong province were affected by a severe drought with two reservoirs running dry and residents being compelled to buy clean water (Chakrya, 2014).

These incidents have put an adequate water supply for the province and Koh Kong town in jeopardy, particularly during the dry season where there has not been enough water to meet demand³. Currently, the water supply system consists of three reservoirs (this infrastructure was put in place in 2005). The main reservoir, located in Cham Yeam village (Mondul Semah district) (Figure 2) has a capacity of 1,100,000 m³ with two other secondary reservoirs: one 80,000 m³ which is used only in the dry season in case of shortage and another 20,000 m³.



Figure 2. The main water storage reservoir for Khemarak Phoumin town.

Photo credit: Furqan Asif

As a result of recent water shortages, to increase water supply capacity, a new water storage facility is currently being constructed (at a cost of approximately \$8.5 million) by LYP Group Co. Ltd, a company affiliated with the business tycoon (and Cambodia People's Party Senator) Mr. Ly Yong Phat, and slated to be completed by early 2018 (activities started November 11, 2015).

Referred to in project documents as the 'Ta Phnom Water Valley and Irrigation' project (see Annex), this dam reservoir would increase the water supply for Khemarak Phoumin town by five times the current capacity⁴.

Waste

Although city officials remarked that the waste management for Koh Kong town was not perfect, waste collection and disposal is undergoing improvements (Figure 3) including the city's first-ever Solid Waste Management Strategy, which is being developed and supported by the provincial government.



³ When asked if a well could be dug to supplement supply, the research team members were informed that they cannot dig a well because of the proximity to the sea i.e. salt water intrusion

⁴ Incidentally, the research team was informed that the current system was also constructed by LYP Group Co. Ltd. Before 2005, water service delivery was not privatized.

Figure 3. Sign in Koh Kong town encouraging the use of reusable bags. Photo credit: Furqan Asif

The city's current waste dump site is located on the outskirts of the city (there are four to five houses in its vicinity), in a fairly isolated area and not close to any water bodies. This site was established in 2013 and previously, the old (and smaller) dump site was located across the road from the current location (it has been filled over with earth). The move to a larger site was dictated by increasing industrial activity and general development. Waste at the new dump site is 'treated' by burning (there is no other treatment nor is the waste buried) (Figure 4). The environmental impact of this is yet to be assessed and remains uncertain.



Figure 4. Current waste site for Khemarak Phoumin town. Smoke in picture as a result of burning of waste. Photo credit: Furqan Asif

Waste collection, while administered by the city, is privatized and managed by 'Tim Rin Company' which has a contract with the city until 2020 (the selection/bidding process remains unclear)⁵.

⁵ While the company mentioned by the city officials was called 'Tim Rin', the researchers observed that the truck that was arriving to the waste site had the name and logo of a different company – Daejeon City Corporation (DCCO) – along with the Ministry of Environment logo. A brief search online indicates that this is the name of a South Korean company from the city of Deajeon. It is unclear whether the trucks were simply bought second hand from the company or if there is a formal involvement on some level with the city of Koh Kong.

Private sector involvement

The close involvement of a private company (LYP Group Co. Ltd) in providing key public services, while itself not novel as evidenced by the presence of public-private partnerships, does bring to light issues related to political economy and raises notions of power and vested interests. This was reflected with an overall impression by the researchers of reticence from meeting participants during the meeting when asking questions related to areas of city planning and urban policy (e.g. Master Plan, Economic Land Concessions). As a result, it proved very difficult to obtain information in general (hence the gap between the stated objectives and the material gathered).

One official, in a more candid moment with the research assistant, did provide some context and revealed a potential reason for this reluctance to share information:

“You know in Koh Kong’s territory, tycoon Ly Yong Phat is the biggest [most powerful] person. No one dare to reject his project even the provincial governor [...] Ly Yong Phat kicked out even his cousin [previous Provincial Governor] [...] If he wanted to do any project in Koh Kong, he will do it. Many government officials dare not reject Ly Yong Phat’s goal, even if they found the [negative] impact from their study of Yong Phat project.”

– Senior Government official, speaking on the condition of anonymity

Indeed, LYP Group has made a spate of headlines in the last three years, with many centering on Koh Kong town. In 2013, the company was implicated, and subsequently under investigation, by the Ministry of Water Resources and Meteorology, in the illegal export of \$1.5 million worth of sand from Koh Kong Province River to India (Reaksmey, 2013; Willemys & Naren, 2013). More recently, Koh Kong town’s drinking water became tainted, with some families being cut off altogether, during repairs being done by LYP Group to a filter pipe, thereby forcing households to buy drinking water. Information about the repair was not disclosed beforehand to town residents because, “there was no time to warn the town’s resident” according to a statement released by LYP Group and the Koh Kong Department of Industry and Handicraft (David, 2016).

Conclusions & Next Steps

The assessment revealed that Koh Kong town faces many challenges, particularly for water provision and waste management. If this past year’s drought is any indication, the city (as well as the province) will continue to face water security issues, especially as the current expansion project for its water supply will not be completed for another two years. During that time, it is unclear how the city government will mitigate for decreasing water supply, more so as the demand (primarily driven by industry) continues to increase.

While it should be lauded that there is a waste management strategy in development, this is an area that requires following up. For example, an initial step should be obtaining a copy of the strategy and understanding how it will be implemented. Another area is to inquire on the environmental impacts of the waste site and to determine what, if any, kind of assessment has been conducted or is planned.

The difficulty in obtaining important information related to urban planning and management sheds light on the politicized aspects of doing research for the UCRSEA project. In this case, it is possible that fear of retribution by business tycoon Ly Yong Phat or his associates, prevented the sharing of information by the government officials. It is also possible that the officials were unclear or did not fully understand the objectives and nature of the UCRSEA project (this is surmised from the initial Field Report for Koh Kong conducted May 2015 where it was noted that it was perceived by the Cambodia UCRSEA team that participants did not have a full grasp on the

UCRSEA project). Therefore, it is suggested that more inroads be made with the city government and its officials by facilitating not only the understanding of the project but also its importance to them and their work. This can be done via workshops or 'one-pagers' distributed to key officials and their offices as well as follow up via telephone. The experience in Koh Kong contrasts sharply with that in Battambang, where information was readily made available. In addition, perhaps conducting individual interviews with government officials would prove to be more useful in the information that is obtained, while also being less costly compared to organizing a large meeting.

Going forward into another project year, these areas will need follow up and action in order to deliver on the expected outcomes and outputs (e.g. working paper).

References

- Chakrya, K. S. (2014, May 28). Villagers await water [Text]. Retrieved April 21, 2016, from <http://www.phnompenhpost.com/national/villagers-await-water>
- David, S. (2016, March 1). Koh Kong town's drinking water tainted during repairs [Text]. Retrieved April 21, 2016, from <http://www.phnompenhpost.com/national/koh-kong-towns-drinking-water-tainted-during-repairs>
- Reaksmey, H. (2013, November 12). Water Resources Minister Seeks Investigation Into Exported Sand. Retrieved April 21, 2016, from <https://www.cambodiadaily.com/archives/water-resources-minister-seeks-investigation-into-exported-sand-46848/>
- Waibel, M. (2016). *Urban Informalities: Reflections on the Formal and Informal*. Routledge.
- Willemyns, A., & Naren, K. (2013, November 8). Despite Ban, \$1.5M of Cambodian Sand Turns Up in India. Retrieved April 21, 2016, from <https://www.cambodiadaily.com/archives/despite-ban-1-5m-of-cambodian-sand-turns-up-in-india-46753/>