

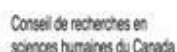
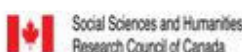
# UNDERSTANDING INSTITUTIONAL CHALLENGES FOR URBAN PLANNING IN VIENTIANE CAPITAL, LAO PDR



The rate of urban population growth in Lao PDR is the highest in the Asia-Pacific region. This is resulting in accelerated social, economic and environmental change in cities of the nation. Yet it remains a starkly under-researched topic. Using the example of Vientiane Capital, this briefing note presents an overview of the stakeholders, legal and policy frameworks, and infrastructural systems involved in urban planning. To assist both researcher and development practitioner, it provides a frame to engage multi-stakeholder policy dialogue and project implementation, specific to the context of Lao PDR.

Compiled by Daniel Hayward for the UCRSEA (Urban Climate Resilience in Southeast Asia) project. For more information on research around the region by UCRSEA, click [here](#).

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*Cover picture: Vientiane Urban Plan 1952 (source: Vientiane, portrait d'une ville en mutation in PTI, MPWT, & JICA, 2011b, p. 1–49)*

## EXECUTIVE SUMMARY

The development narrative of Lao PDR remains one of an agrarian society, where the government seeks rapid economic growth to raise the status beyond that of a Least Developed Country. Nevertheless, the rate of urban population growth is the highest in the Asia Pacific region, led by the primacy of Vientiane Capital. This briefing note analyses the urban planning system in Vientiane as an emergent field of interest. It bridges the language of the Climate Resilience Framework (which aims to identify areas of vulnerability and build resilience), and the terminology used for urban planning in Vientiane. Therefore, an overview is provided in terms of stakeholders (*agents*), legal frameworks and planning policy (*institutions*), and infrastructural development (*systems*).

At the present moment, legal revisions in Lao PDR are aiming to refine the existing system and improve coordination between laws, implementing ministries and departments. The new Land Law is seen as the central glue to renewal, which will facilitate the implementation of other revisions, such as the new Urban Planning Law. Nonetheless, Lao PDR and Vientiane Capital do not suffer from a lack of urban planning. The 2011 Vientiane Urban Master Plan is the most recent for the capital, and is targeted towards the year 2030. However, national development policy, led by the five-year National Socio-Economic Development Plan (NSED), promotes rapid economic growth, through which large-scale development projects and the attraction of FDI challenge coordinated long-term planning. Due to unplanned urban growth, at the end of October 2017 an update to the Vientiane Urban Master Plan was approved, timed to align with legal and regulatory revisions. Still, there is a danger that planning is becoming reactive rather than proactive, constantly having to redress spatial zoning and regulatory frameworks as urban development speeds forward regardless of any managed approach.

An analysis of infrastructural development in Vientiane Capital looks at the system components of roads and transport, water supply, wastewater, drainage, solid waste, food security and energy. Each system is considered in terms of its present state, socio-economic inclusivity, and environmental factors. Particular areas of concern involve roads and transport, and wastewater systems. In the former, increased vehicle ownership and road usage is outstripping attempts to plan ahead or adapt. A wastewater system has yet to be developed, leaving Vientiane open to the risk of pollution as run-off increases. However, it is important that all the systems are given due attention in the face of an increasing urban population, and events related to climate change. Even so, budget constraints in Vientiane limit the maintenance of existing systems, and potential future updates.

The final chapter suggests how development practitioners might engage with Lao government stakeholders in the field of urban climate resilience. This leads to the following recommendations:

- When engaging with government, one must be careful of introducing the innovative language of urban transformation and resilience too soon, instead building up a common understanding through overlaps with a modernisation narrative
- Development approaches must contribute to the directives of individual officials and their departments. Building up relationships is as important as direct results from joint activities.
- Working with field-based cases is a good way to engage with government actors, as these can become a source of policy development (rather than data)
- Different tiers of power should be engaged as there remain spaces for implementation through non-national levels
- A useful starting point is to work within system components of urban development, such as transport or wastewater, and slowly build up the notion of integrated thinking, planning and implementation
- Disaster preparedness is a good entry point for issues relating to climate change, as a concept grounded in concrete climate events that is easier to understand, a strong presence in national policy directives, and opportunities for international funding
- There is space for shared learning, and a common language must be found to slowly encourage government ownership and mainstreaming of urban climate resilience
- A combination of focus and flexibility and sufficient time is needed in order to generate policy outcomes (*retained from Bartlett*)

## INTRODUCTION

Since 2005, a series of networks and projects have been set up to improve understanding on processes of urbanisation in Southeast Asia, particularly under the increasing influence of climate change. The following projects, and where they have worked, can be highlighted:

- C40 City Network – includes Bangkok, Ho Chi Minh City and Hanoi
- CITYNET – includes Bangkok and various cities from Vietnam
- UCLG-ASPAC (United Cities and Local Government Asia-Pacific) – cities from Thailand, Cambodia and Vietnam
- ACCRN (Asian Cities Climate Change Resilience Network) – ten core cities from Indonesia, India, Vietnam and Thailand, and replication cities including the Philippines
- MBRACE project (Mekong-Building Resilience to Climate Change in Asian Cities) – four project cities in Thailand and Vietnam
- ADB (Asian Development Bank) projects in urban climate resilience – cases in India, Vietnam, Indonesia, Pakistan and the Philippines
- UCRSEA (Urban Climate Resilience in South East Asia) project – two secondary city cases from each of Cambodia, Myanmar, Thailand and Vietnam

This list has been provided to demonstrate the relative absence of Lao PDR from discussions and project work concerning urban resilience in Southeast Asia. While not wishing to speculate as to the reasons behind this absence, this briefing note and the research behind it offers an attempt to partially redress the imbalance of attention. Although not conforming to the focus of the UCRSEA project on climate resilience within secondary cities within mainland Southeast Asia, the report represents a complementary glance at urbanisation in Lao PDR, and specifically urban planning in Vientiane Capital City. In this sense, it acts as an introduction to be placed within the UCRSEA project in general, and also to those interested to learn more about urban dynamics in the Lao context. It offers a broad overview of planning processes, a situational analysis of infrastructural systems in Vientiane, and a frame by which practitioners can effectively engage with urban issues in Lao PDR. The UCRSEA project conceptual framework has established three core research questions, and the research in Lao PDR can be placed accordingly:

### ***1. How will climate change impact the poverty and vulnerability of urban residents in Southeast Asia?***

The priority of this briefing note is not to look directly at issues of climate change in Lao PDR. However, by offering an analysis of infrastructural development in Vientiane (in areas such as water, waste and transport), and highlighting strengths and weaknesses in the overall system, an evaluation of potential vulnerabilities for a local population is informed. This may be exacerbated in the face of climate change-related events. In actuality, it is pointed out that climate change, and particularly disaster preparedness, offers a useful entry point for practitioners to engage with Lao government stakeholders in urban issues. Overall, a provisional status report is offered, looking at the dynamics informing urbanisation in Lao PDR, and how a planning process copes with this reality.

### ***2. What does knowledge, from both academic literature and action research, tell us about creating climate resilient urban governance that is both inclusive and equitable?***

In providing information on stakeholders, legal frameworks, planning policy, and infrastructure systems in Vientiane Capital, experiences and challenges to urban planning are discussed in general terms. The analysis offers a provisional measure against which the wider aim of creating climate resilience may be placed. In particular, the equity of national policy, situated within aspirations to achieve both coordinated planning and investment for economic growth, is assessed, and whether this affects the ability of local communities to recover from social, economic and environmental shocks and stresses to their livelihoods.

### **3. How can we strengthen the agency of individuals, groups and institutions to improve economic, physical and social well-being in urban areas, particularly in response to climate change?**

Chapter 5 offers a reflection as to how NGOs and researchers might conduct studies and engage discussion on urban issues in Lao PDR. It is vital to understand that an emerging academic discourse, using terms such as vulnerability, resilience, equity, and transformation, is an extremely problematic one in Lao PDR, both semantically and politically. This briefing note aims to provide some pointers for effective engagement, where building long-standing relationships for work must trump desires for quick developmental wins. Many different stakeholders, from government, academia, and the NGO sector, have been interviewed as part of this research. It is hoped that this initial contact can be backed up by regional exchanges with partners in Southeast Asia, to share experiences and ideas for effective urban planning and development.

The research for this briefing was led in partnership with Thailand Environment Institute (TEI) and the Department of Urban Environment, Faculty of Architecture, National University of Laos (NUoL). This report is indebted in particular to Dr Pakamas Thinphanga (TEI and co-director UCRSEA project) for invaluable brainstorming sessions and reflections on research findings, and Asst. Professor Soukanh Chithpanya (Head of Department of Urban Environment, NUoL) for his generous insights into the Lao urban planning system. Gratitude is also offered to all the interviewees for the research, as listed at the end of this briefing note.

The structure of the brief is as follows. The first chapter sets the scene on urbanisation in Lao PDR and Vientiane Capital. Chapter 2 presents the Climate Resilience Framework (CRF). This acts as a foundation from where, in the subsequent two chapters, Vientiane urban planning system is analysed. Chapter 3 looks at stakeholders, legal frameworks, the provision of master plans and an interaction with national development policy. Chapter 4 offers a situational analysis of infrastructural systems in the capital. After focusing individually on roads and transport, water supply, wastewater, drainage, solid waste, food security and energy, a combined assessment highlights areas of vulnerability in each system in terms of socio-economic inclusivity, and environmental factors. Finally, chapter 5 offers recommendations by which the researcher or urban development practitioner can engage with notions of resilience and vulnerability in Lao PDR.

## **1. SETTING THE SCENE**

### **LAO PDR**

Lao PDR is the only land-locked country in mainland Southeast Asia (figure 1), covering an area of 236,800 km<sup>2</sup>. Around 80% of the country is mountainous, with the plains around the Mekong River (where the capital of Vientiane is situated) providing fertile soils for rice cultivation. Lao PDR remains a predominantly agrarian society, with a reputation for an abundance of natural resources. Nevertheless, it retains a status as one of the least developed countries in the world. This is despite steady economic growth, averaging around 8% since 2007 (Bertelsmann Stiftung, 2016) and extensive poverty reduction from 39% in 1998 to 25% in 2015



Figure 1: Lao PDR and mainland SE Asia (source: <http://geology.com/world/laos-satellite-image.shtml>)

(Lao Statistics Bureau, 2016; USAID, 2011). The projected national population for 2016 stands at 6,918,000, with a density of 30.0 persons per km<sup>2</sup> (UN Statistics Division, 2017). This compares to a density of 133.4 for Thailand, 304.6 for Vietnam (2012) and 89.7 for Cambodia, thereby representing a more sparsely populated land.

## VIENTIANE CAPITAL

The development of Vientiane is marked through periods of prosperity and decline (Sharifi, Chiba, Okamoto, Yokoyama, & Murayama, 2014). Lao legend states that Prince Thattaradtha founded the settlement under the name of Chantaboury (now the name of a central district), although it may actually have developed out of an earlier Khymer community (Rafiqui & Gentile, 2009). The first Lao kingdom of Lan Xang was founded in 1353, and Vientiane became its capital in 1560. When the kingdom declined, Vientiane fell under Siamese control, being ransacked in 1779. A hundred years later, the city a shadow of its former self, power passed to the French (figure 3). Vientiane was once again named capital in 1904. Following independence in 1954, an American presence oversaw vigorous investment in an attempt to counter regional communist forces, and instigate the transition to a modern capitalist centre. In 1975, when the Lao People's Revolutionary Party took control, an anti-urban rhetoric stunted expansion. It is only in recent times that growth has returned to the capital. This follows the New Economic Mechanism (NEM), instigated from 1986, where set prices were abolished, international trade promoted, and state enterprises allowed to access markets. Private holdings were permitted in agriculture, spreading later to industry and services (Rafiqui & Gentile, 2009). In terms of administration, the prefecture of Vientiane, also known as Vientiane Capital City and distinct from Vientiane Province, comprises nine districts (figure 2). An urban core consists of Chanthabuly, Sikhottabong, Xaysetha, and Sisattanak, and some villages in Naxaithong, Xaythany, and Hadxaifong. Sangthong and Pakngum complete the prefecture.

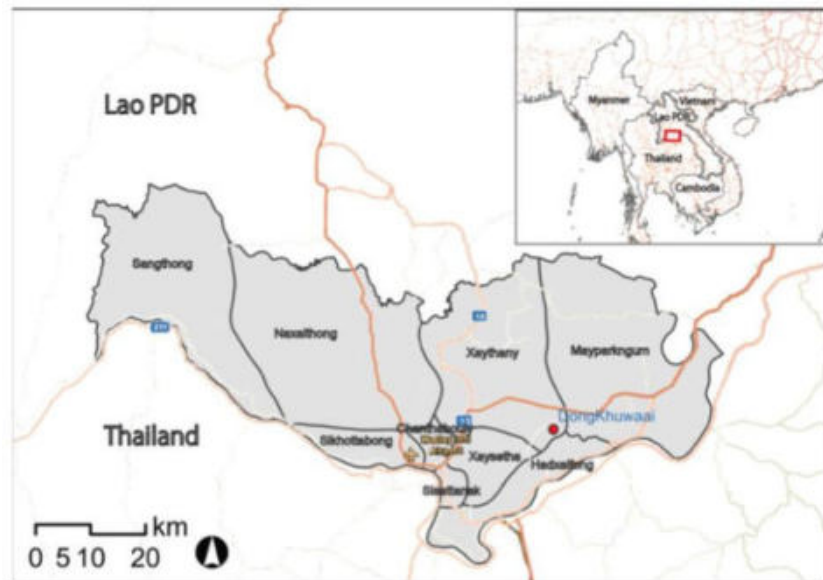


Figure 2: Vientiane and its districts (Sharifi et al., 2014, p. 32)



Figure 3: Street signs and architecture reflect a French colonial past in Vientiane (photo credit: Norm Collins-above; G-left)

## AN URBAN EXPLOSION?

From a certain perspective, Lao PDR is undergoing an urban transformation, led by the primacy of its capital Vientiane. As a country, it shows the highest urbanisation rate (population growth in urban areas) in the Asia Pacific region, in 2015 at 3.1% per annum (UN-Habitat & ESCAP, 2015, p. 23). Table 1 shows how demographic growth in the capital has outstripped the national increase, with the population share increasing over the last thirty years. This reflects not only an internal dynamic in Vientiane, but also strong in-migration, where one in ten residents moved from another province (Lao Statistics Bureau, 2016, p. 56). Indeed, a core narrative to understand urban development involves a survey of migratory practices within and out of Lao PDR. The territorialisation of a Lao State has seen extensive movements of the people, whether under the auspices of collectivised agriculture, to rehouse (semi-) nomadic shifting cultivators as subjects of national development policy, or to free up land for large-scale investment projects (Évrard & Baird, 2017). Therefore, if rural to urban migration seems a more recent phenomenon in demographic terms, it is borne out of thirty years of networks constructed around the country (Bouté, 2017).

As a counter-narrative, the image of high growth demands some contextualisation. An urban population that is 32.9% of the national population still falls well below the global average of 50% and that of neighbouring Thailand (52%), although it is roughly equivalent to Vietnam (32%) and Myanmar (35%), and higher than Cambodia (21%) (Lao Statistics Bureau, 2016; UN in Lao PDR, 2015; World Bank & UN Population Divisions, 2017). Vientiane itself remains a small capital compared to other regional centres. Bangkok has a population of over 8.3 million (2010 census), Hanoi nearly 7.7 million (2016 figures), and Phnom Penh 1.5 million (2012). Indeed, the population density for Vientiane is lower than that of Vietnam as a whole (in 2012 standing at 304.6 persons per km<sup>2</sup>). Therefore, any status as a site of high urbanisation must be tempered with the fact that Vientiane is not the dense megalopolis as seen in other neighbouring capitals (Sharifi et al., 2014, p. 7). Nevertheless, GIS (Geographic Information System) studies shows the spatial impact of growth, highlighting sprawl, roadside development, annexation of surrounding settlements and rapid deforestation (figure 4).

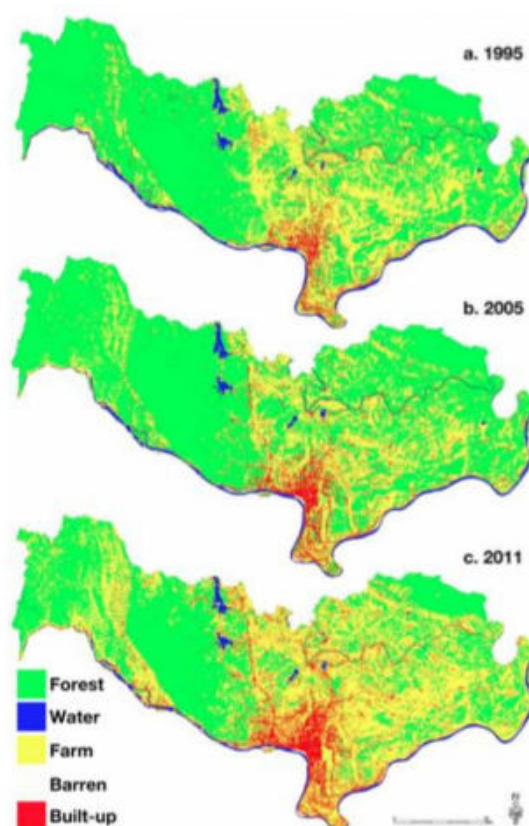


Figure 4: Land use change in Vientiane from 1995 to 2011 (Sharifi et al., 2014, p. 7)

**Table 1: Comparison of Demographic Change in Lao PDR and Vientiane Capital (Lao Statistics Bureau, 2016; PTI, MPWT, & JICA, 2011a)**

	Population (1000 persons)		Population share of Vientiane Capital (%)	Population Density (persons/km <sup>2</sup> )	
	Lao PDR	Vientiane Capital		Lao PDR	Vientiane Capital
1985	3,618	381	10.5	15.3	97.2
1995	4,605	532	11.5	19.4	135.7
2005	5,622	698	12.4	23.7	178.1
2015	6,492	821	12.6	27.4	209.4

The development narrative of Lao PDR remains one of a rural and agrarian society. With the Lao government looking for rapid economic growth to raise the status beyond that of a Least Developed Country (LDC), the clearest means for success has been identified through the exploitation of natural resources, particularly hydropower, mining, forestry and commercial agriculture (Bertelsmann Stiftung, 2016; UN in Lao PDR, 2015). In this, Lao PDR relies upon Overseas Development Assistance (ODA), whether through aid or increasingly Foreign Direct Investment (FDI). Within the context of rapid economic growth, Vientiane is being promoted as:

- i. a regional hub for the Greater Mekong Sub-Region
- ii. centre for the nation
- iii. comfortably liveable and beloved home town for all

(PTI et al., 2011a)

Most large infrastructural projects in the capital have involved FDI, with support welcomed from multiple countries (figure 5), rather than any single donor (Pang, 2017). For example, the 1994 Friendship Bridge used Thai financing and construction for the 2009 Southeast Asian Games stadium involved Chinese support. Using infrastructural development, the Lao government is attempting to shake off an image as a land-locked country to one that is land-linked. Vientiane is seen as key to this strategy, whether through its position within GMS (Greater Mekong Sub-region) Economic Corridors, or as a hub for regional train networks being built by China.

One statistic of further interest concerns the proportion of the population residing in urbanised areas of Vientiane Capital. In the 2015 Population and Housing Census, this stood at 78%, an actual decrease from the 2005 figure of 82% (Lao Statistics Bureau, 2016, p. 24). This suggests that a growing population (including migrants) is moving to peripheral areas faster than authorities can redraw boundaries to reflect urbanisation processes, or supply accompanying services. This is the context through which this briefing note aims to look closer at the urban planning system, the actors and legislative mechanisms involved, and attempts to implement Master Plans.



*Figure 5: Phonsinuan Road close to the Thai consulate. Without eyeshot is a Thai pizza chain, a Lao-Singapore business college, two flash new cafés, a Korean food store and an IT shop. Yet only fifteen years ago, this was still rice fields (photo credit: the author)*

## 2. THE CLIMATE RESILIENCE FRAMEWORK

The Climate Resilience Framework (CRF) is a key tool used by the UCRSEA project. It is a useful touching stone when analysing the urban planning system of Vientiane (figure 6). The framework offers a means to evaluate the various factors both contributing to and affected by processes of urbanisation. Three interlinking components can be highlighted here:



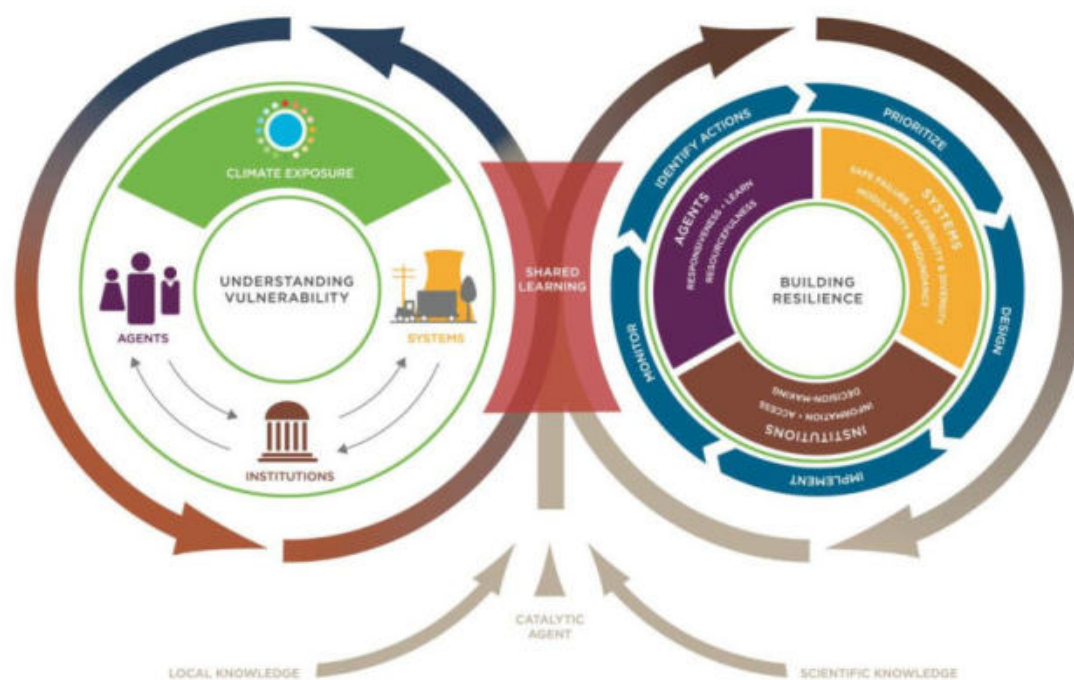


Figure 6: Climate Resilience Framework developed by ISET-International (Source: Tyler & Moench, 2012)

- *Agents*: Individuals, households or other groups that influence the development of, and/or whose livelihoods are dependent upon cities. These include government actors, civil society and the private sector. It is argued that a well-functioning city offers inclusive support to all its users.
- *Institutions*: the social rules or conventions that govern cities, whether formalised laws, regulations and policies, or informal conventions to influence urban well-being. An institutional frame might be inclusive or marginalising to its users.
- *Systems*: the provision of infrastructure and services needed to support the population of a city and its economic activities. Systems include that of transport, water, energy, waste, and food security. A well-functioning city will have strong systems that coordinate between each other.

All three components are capable of displaying vulnerability or influencing it elsewhere. Climate change has been added as a subsequent component, which has growing significance in the shocks felt by both gradual and sudden climate events. By creating durability within and effective coordination between each component, while accounting for increasingly unpredictable weather events, a strong resilient city may emerge. As Tyler and Moench claim, ‘resilience is high where *robust and flexible systems* can be *accessed by high-capacity agents* and where that access is *enabled by supportive institutions*’ (Tyler & Moench, 2012, p. 318–9). This briefing note hopes to assess the situation in Vientiane, look for potential vulnerabilities, and discuss opportunities to find inclusive solutions.

The following two chapters look at *agents*, *institutions* and *systems* related to the urban planning system of Vientiane. The language used actually follows a more conventional frame, as presented in Lao PDR itself. It has been decided to maintain this frame so that the Lao reader is not excluded. As chapter 5 explains, engagement with officialdom carries the risk of a disconnect between a modernist (Lao) and progressive (urban academic) developmental narrative. Bridging this gap is vital if shared learning is to be achieved that might lead towards the building of resilience. Therefore, in the next chapter, a stakeholder analysis is comparable to a view of the different agents involved in Vientiane urban planning. An institutional perspective pays close attention to formal conventions, namely the legal framework, the production of Master Plans, and the influence of national policy mandates. There is a close interaction between agents, who may produce and reinforce these institutions, or

whose livelihoods may be swayed by their enforcement. The relationship between different institutions is also important in Lao PDR, particularly the tension between the desire for growth through ODA for individual investment projects and coordinated planned strategies. Chapter 4 is concerned with systems by analysing infrastructure and services in Vientiane (roads and transport, water supply, wastewater, drainage, solid waste, food security, and energy). The assessment identifies areas of vulnerability in terms of social inclusivity and environmental factors. Admittedly, the issue of climate change is not given priority attention here, reflecting an aim to focus on the governance of urban planning. However, in offering a pathway to engagement on urban issues in Lao PDR, chapter 5 will highlight climate change as a useful entry point for exchange and activity.

### 3. VIENTIANE URBAN PLANNING SYSTEM

#### STAKEHOLDER ANALYSIS

##### a) Stakeholders for the administration of urban planning

Figure 7 provides a simplified overview of the administrative structure for urban planning in Vientiane. Table 2 sums up the role of each stakeholder. It is significant that there are two parallel systems of urban governance present (ministerial and municipal). For the municipal system, in 1995 the Vientiane Urban Development Management Committee (VUDMC) was formed. As the first municipal council of its kind in Lao PDR, its aim was to take on the extra burden of managing urban infrastructure and services, with decentralised power alleviating pressure on ministerial departments in charge of local administration. In 1999, the name was changed to Vientiane Urban Development Administration Authority (VUDAA), reflecting a nationwide formation of municipal authorities (UDAAs) in conjunction with the then new Urban Planning Law. VUDAA was tasked with managing core urban districts (Chantabouly, Sikhottabong, Xaysetha and Sattattanak) and thirty villages from three surrounding districts, under leadership of Vientiane City Government. Meanwhile, outlying urban areas in the prefecture remained under the jurisdiction of the Department of Public Works and Transport (DPWT).

In recent times, problems have been cited through overlapping responsibilities between these two authorities, with Vientiane City Government unable to provide the budget for VUDAA to fulfil its mandate. Therefore, in 2015 VUDAA changed its name to Vientiane City Office for Management and Services (VCOMS). The functions of the organisation now focus on greening and cleaning (including solid waste, waste water and drainage). Meanwhile, road maintenance and construction in the core urban districts, which had been handled by VUDAA, has been handed back to DPWT. It is hoped that this new division of labour will result in more efficient management, and smoother coordination between the different organisations. This is necessary for two

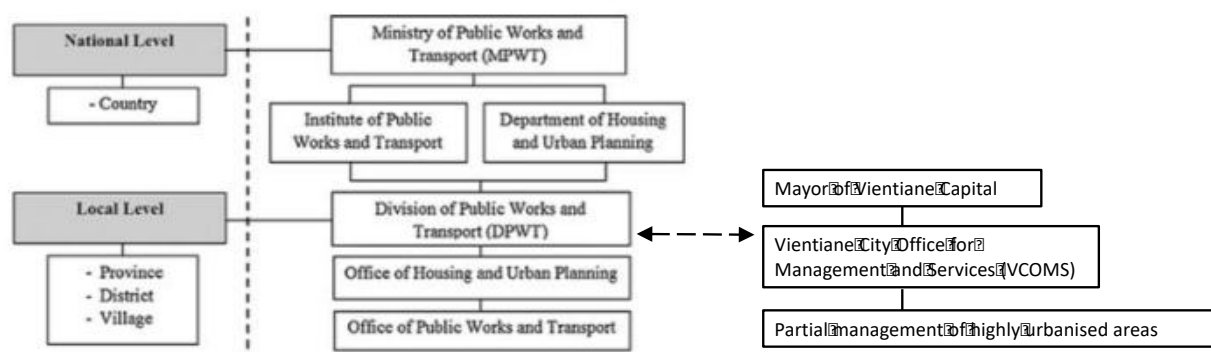


Figure 7: The administrative structure for urban planning in Vientiane (diagram adapted from: Vongpraseuth & Choi, 2015, p. 792)

**Table 2: The role of administrative stakeholders in urban planning in Vientiane**

Acronym	Full title	Primary Function in Urban Planning in Vientiane
MPWT	Ministry of Public Works and Transport	Macro-management of housing, urban planning, transport, roads and waterways in Lao PDR
DHUP	Department of Housing and Urban Planning	Oversee the laws, decrees, regulations, budgets and training governing the planning of urban areas
PTI	Public Works and Transport Institute	Technical production of urban plans
DPWT	Division of Public Works and Transport	Management of non-core urban areas of Vientiane Capital with a focus on housing; planning; and transport, roads and waterways
OPWT	Office of Public Works and Transport	Management of public works and transport at district level in core (partially) and non-core (fully) urban areas of Vientiane
VCOMS	Vientiane City Office for Management and Services (formerly VUDAA)	Municipal organisation, managing the greening and cleaning in core urban areas of Vientiane Capital

reasons. Firstly, improved coordination is necessary in the face of rapid urbanisation. Furthermore, with growth in Vientiane crossing administrative boundaries (see chapter 1), the old divisions of labour no longer carry weight, and so urban planning, including the provision of infrastructure and services, must take a more harmonised spatial perspective.

*b) Other stakeholders*

Other stakeholders involved in urbanisation in Vientiane include other government actors, the private sector and civil society users of urban areas. The case of the former deserves special mention here. If thinking of urbanisation in general terms, developmental interests are far from confined to planners. Two recent academic papers highlight conflict between planned growth management, and spatially fragmented programmes of economic development (Sharifi et al., 2014; Vongpraseuth & Choi, 2015). The Ministry of Planning and Investment (MPI) plays a significant role here, with a mandate to attract FDI and private sector involvement in Lao PDR in an attempt to catalyse rapid economic growth. This contrasts to the obligations of the MPWT for planned spatial growth. Vongpraseuth and Choi question whether the promotion of FDI is resulting in inclusive benefits, instead highlighting the marginalisation of the poor and vulnerable. A lack of public participation does not help here. Indeed, problems of horizontal collaborative governance also play out in vertical tiers of administration. Ironically for a single-party state, many parts of the country display strong decentralised power at provincial or district level, often acting apart of national policy formulations (Hirsch & Scurrah, 2015). Bulkeley (2010) speaks of the need for an institutional ‘fit’ to coordinate urban development across departmental and spatial boundaries. The ‘fit’ in Vientiane is far from snug.

The environmental impacts of urban development involve further government actors. In particular, recent years have seen an increasing concern and focus of attention upon natural disasters and climate change in Lao PDR, most clearly enshrined within the 8<sup>th</sup> National Socio-Economic Development Plan for 2016-2020. The Ministry of Natural Resources and the Environment (MoNRE) is the key actor in the development and implementation of national policy in this area, with the Ministry of Labour and Social Welfare (MLSW) coordinating emergency preparedness.

## LEGAL FRAMEWORK

Urban planning is framed around the following legal formulations, many of which are presently undergoing revision:

i. *Land Law (No. 04/NA, 2003)*: currently under revision

Land management in Lao PDR has been placed under the Department of Land (which brought together the two departments of land administration and land allocation), placed with the Ministry of Natural Resources and Environment (MoNRE). Offices will be found at different tiers of government from national to provincial, district and village levels. The Land Law is currently under revision, and a final draft should be presented to the National Assembly in April 2018. This will likely represent more detailed and refined legislation. The first draft of the revision contains 181 articles, compared to 87 articles in the 2003 law, although this is likely to be reduced.

- *Party Resolution of the Party's Central Committee on the Enhancement of Land Management and Development in New Period (2017)*

To compliment legal revisions, plans were made for new land policy in Lao PDR. However, a Party Resolution was produced placing decision-making powers with a party central committee. How these powers will interact with processes laid out in the new land law remains to be seen.

ii. *Law on Urban Planning (No. 03-99/NA, 1999)*: currently under revision

Rules and regulations for the classification and management of urban planning, land use, and construction, are systematised under this law, operating at national and local levels. The new revised version is in its final form, and ready to be submitted to the National Assembly for approval. There are 96 articles in this final draft, compared to 63 in the 1999 law. In general, the new legislation aims for clearer policy on the promotion of urban development, promoting investment roles for government, the private sector, public-private partnerships and FDI. More details are provided for operationalisation of the law and management rules, with an emphasis given to harmonisation with the recently revised *Investment Promotion Law (No. 032/NA, 2016)*.

iii. *Road Laws (No. 021/NA, 2016)* - revised

Defines classes of roads and their management. Related laws on land transport and land traffic also contain important legislation on topics such as parking.

iv. *Law on National Heritage (No. 022/NA, 2013)* - revised

Important provisions on natural conservation areas, cultural heritage sites, and public parks.

v. *Law on Environmental Protection (No. 29/NA, 2012)* - revised

Offers regulation on natural conservation areas, the maintenance of biodiversity, and pollution.

vi. *Law on Tourism (No. 05/NA, 2013)* – revised

vii. *Law on Local Administration (No. 47/NA, 2003)*

In conducting legal revisions, the Lao government is attempting to refine the existing system and improve coordination between laws, which they hope will translate into improved linkages between implementing ministries and departments. Admittedly, analysis here remains speculative while new laws are yet to be passed and operationalised. Nevertheless, the new Land Law is seen as the central glue to renewal, which will facilitate the implementation or submission of other revisions. Indeed, new laws on water and forestry have been frozen until the new Land Law is ready. A further linkage involves harmonisation with investment policy, emphasising mechanisms to attract FDI. For example, the new Land Law potentially provides new articles stipulating on land leases for foreign investors, SEZs, and high-rise buildings (figure 8). However, land ceilings may be introduced for different land use types, which could influence large-scale infrastructural investments. This all aligns policy development with the government strategy of 'Turning Land into Capital' (TLIC), which reflects the shift since the 1980s towards a market economy, and more recently to engagement in neoliberal global markets. The



Figure 8: Two scenes photographed over three periods show the development of Talat Sao in central Vientiane, which has shifted from a traditional market into a modern shopping mall. Can we expect more of this inspired by new legal revisions in Lao PDR? (source: photos to the left and centre– <https://worklivalaos.com/end-of-an-era-for-old-talat-sao/>; photos on the right – the author)

strategy has become the basis for large-scale land acquisitions, both in rural areas (such as for agribusiness or mining) or urban infrastructure (such as the national stadium for the 2009 Southeast Asian Games in Vientiane). However, controversial or economically unsuccessful projects, such as the 450 Year Road development in Vientiane, have brought the strategy under question (Pathammavong, Kenney-Lazar, & Sayaraj, 2017), even if the attraction of FDI remains a priority aim.

## URBAN MASTER PLANS

Despite a perception that the growth of urban areas is a relatively recent phenomenon, Lao PDR and Vientiane Capital do not suffer from a lack of urban planning. In the official Lao Urban Planning Manual (MPWT, NLMA, & GTZ, 2007), an annex notes that between 1991 and 2007, 116 urban master plans were prepared, spread between level 1 (4), level 2 (15) and level 3 (97) towns. This classification refers to the status given to districts around the country, of which there are 148 in total. Clearly, the production of plans is not an issue. Indeed, the manual referred to above, which was put together by a consortium of Lao urban planners and international consultants, represents an impressive work. It offers a clear step-by-step approach for the creation of a master plan, including data collection, environmental assessment, drafting, participatory consultation, submission, implementation, monitoring and evaluation. Interviews conducted for this research highlighted the continuing use of the manual ten years after its preparation, even if the process promoted may not be strictly adhered to.

The notion of urban planning was first introduced to Vientiane by French colonial authorities. An expansion plan was generated in 1920 (figure 8). There followed master plans for 1934, 1952, 1994-2002, and 2000-2010. In 2011, the Japan International Cooperation Agency (JICA) assisted in the production of the present Vientiane Urban Master Plan, which is targeted towards the year 2030. It promotes an increase in the planned urban area from 20,950 (in the 2000-2010 plan) to 61,600 hectares within the prefecture (figure 9). The plan promotes a multi-core structure, with urban centre, sub-centres and outer urban clusters aiming to counter over-concentration within and disordered expansion out of the existing centre (PTI & JICA, 2011). It identifies a historic conservation centre, inner urban zone, outer zone, sub-centre zone, outskirts zone, and urban cluster



Source: Vientiane, portrait d'une ville en mutation

Source: Vientiane, portrait d'une ville en mutation

Figure 8: Urban plans for Vientiane – on the left, expansion plan of 1920; on the right, urban plan for 1994-2002 (PTI et al., 2011b, p. 1–48 to 50)

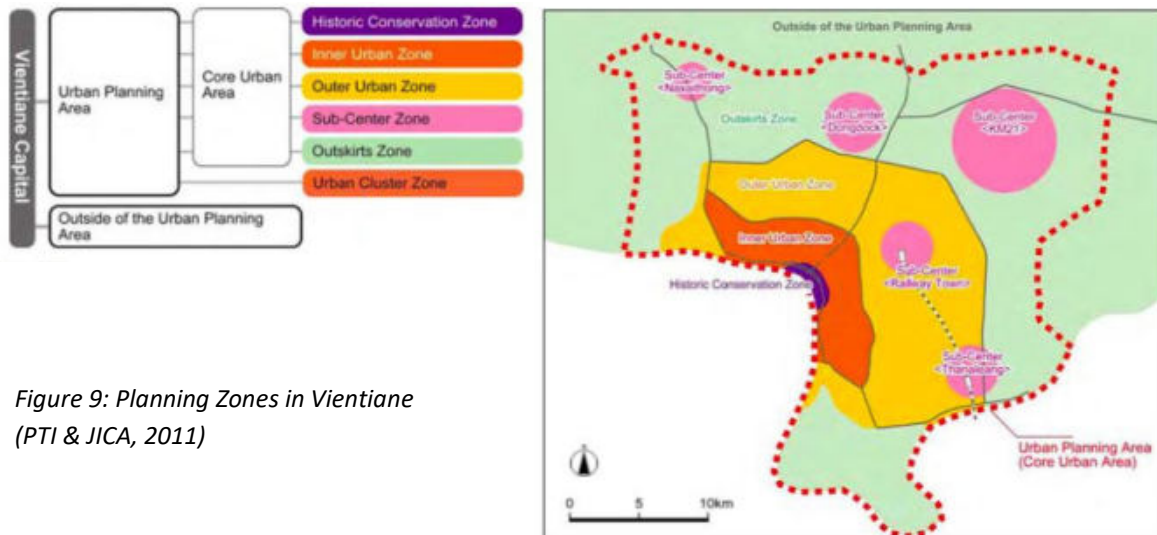


Figure 9: Planning Zones in Vientiane (PTI & JICA, 2011)

zone (figure 9). In a detailed plan looking to Vientiane in 2030, there are seventeen categorised zones, of which fourteen can be applied within urbanised areas (figure 10). This is based upon a projected increase in population to 1.4 million inhabitants, and a level of economic growth maintained at an average of 8% per annum (PTI et al., 2011b). The 2011 Master Plan also reports on the present infrastructural status in Vientiane, the future needs to support the 2030 prediction of growth, and a management programme that provides an organisational, legal and human resource development strategy. The infrastructural overview will be related in the following chapter.

The implementation of the 2011 Vientiane Urban Master Plan has been questioned in various quarters. Sharifi et al (2014) claim that it has largely been ignored. They question whether it is suitable to the context of developing countries with staff capacity still weak, public participation minimal, and the desire for rapid economic development trumping attempts at coordinated growth. Vongpraseuth and Choi (2014) reiterate this last point, emphasising that large-scale development projects and the attraction of FDI have been given precedence over urban growth management. Figure 11 supports this view, highlighting differences between planned and actual land uses. The contradictions are sizable even two years after the production of the master plan. It seems that the general speed of development is undermining the means to create long-term planning.

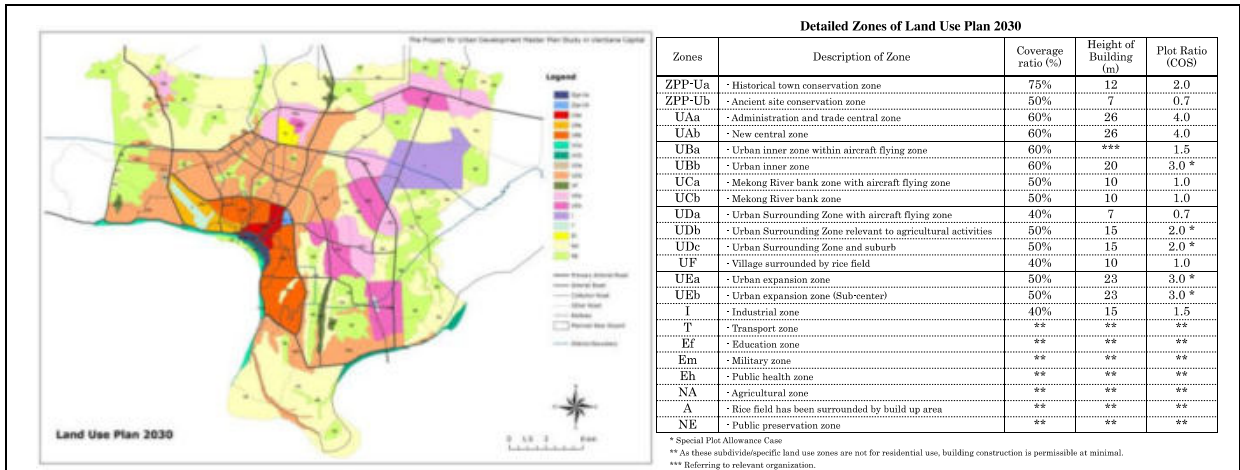


Figure 10: Detailed land zoning plan for Vientiane (PTI & JICA, 2011, p. 7)

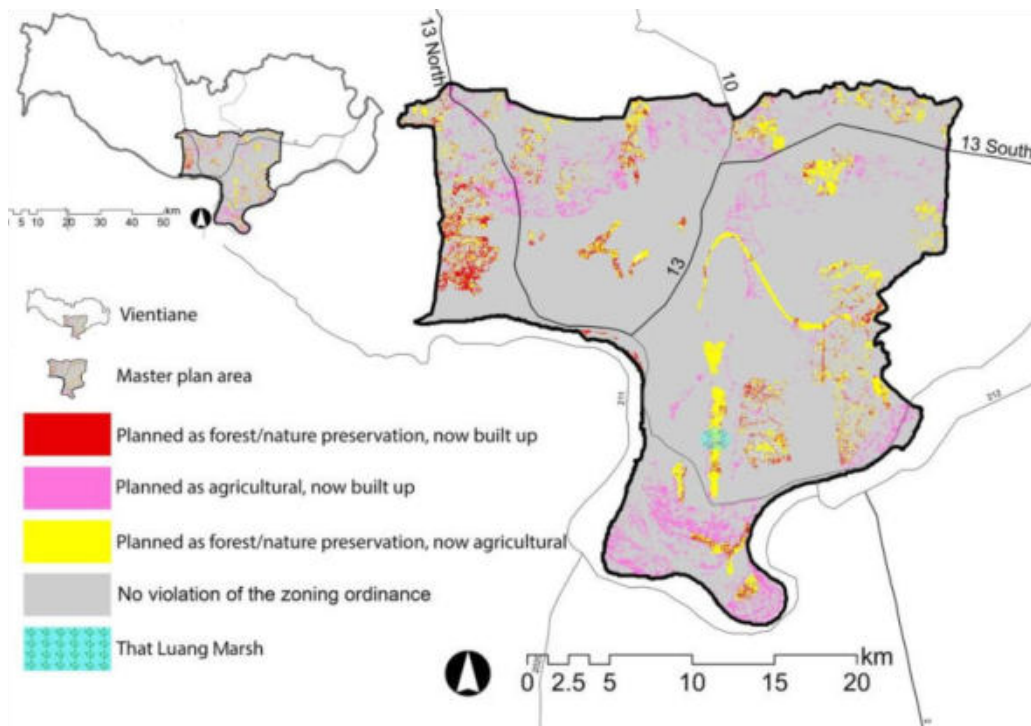


Figure 11: Contradictions between the actual land uses and the zoning provisions of the master plan (Sharifi et al., 2014, p. 9)

Government officials interviewed for this study admitted that the 2011 Master Plan was hard to implement due to an incompatibility with existing laws and regulations. As a result, at the end of October 2017, an update created under the leadership of Vientiane City Government, was approved. Although maintaining many of the features of the 2011 plan, it has adapted some of the zoning around the urban area (VCG, 2017). The update is also timed to align with legal and regulatory revisions, aiding coordinated implementation from central to local administrations. JICA remains involved in the process. In the Urban Development Management Project for 2014-17, they have created a new General Land Use Plan (G-LUP), General Zoning Codes (G-ZC) and a Detailed Land Use Plan (D-LUP). Nevertheless, operationalisation and the influence of uncoordinated development remaining problematic. There is a danger that planning is becoming reactive rather than proactive, constantly having to

redress spatial designs and regulatory frameworks as urban development speeds forward regardless of any managed approach.

## NATIONAL DEVELOPMENT POLICY

The centrepiece of national development policy is the five-year National Socio-Economic Development Plan (NSEDP), to which urban planning in theory should comply (Rabé, Thongbonh, & Vongsiharath, 2007, p. 12). Consequently, it is interesting to note the extent to which urban planning is represented within the policy. The 7<sup>th</sup> NSEDP, covering the period 2011-15, acknowledges the need for zoning and its role in a shift to industry and services (MPI, 2011). Spatially concentrated developments in these sectors can stimulate labour migration to urban areas, the promotion of both domestic and foreign investment, while planning can make sure that growth takes place in an 'orderly, beautiful and clean manner' (MPI, 2016, p. 25). However, less attention is given to urban development and planning in the 8<sup>th</sup> NSEDP for the period 2016-20. Here, the overall objective seeks to:

...ensure political stability, peace and order in the society; the poverty of the people is reduced significantly in all areas; the country is developed out of LDC status by 2020 through continuous, inclusive and sustainable growth; there is effective management and efficient utilization of natural resources; development is enhanced through the national potential and advantages; Lao PDR participates in regional and international integration with ownership.

(MPI, 2016, p. 87)

There are three outcomes aimed for to achieve this objective, namely:

1. Sustained, inclusive economic growth with economic vulnerability (EVI) reduced to levels required for growth support.
2. Human resources are developed and the capacities of the public and private sectors is upgraded; poverty in all ethnic groups is reduced, all ethnic groups and both genders have access to quality education and health services; the unique culture of the nation is protected and consolidated; political stability, social peace and order, justice and transparency are maintained.
3. Natural resources and the environment are effectively protected and utilized according to green-growth and sustainable principles; there is readiness to cope with natural disasters and the effects of climate change and for reconstruction following natural disasters.

A focus lies on rapid economic growth to promote the status of Lao PDR, yet there is very little explicit reference to the urban context, instead showing more concern for regional integration. However, if we think in terms of urban climate resilience, outcome 3 places an interest in natural shocks and disasters. This point is returned to in chapter 5 as a pathway for engagement with Lao officials, offering the potential for inclusive planning.

National development policy is a contributing factor in competing narratives for urban development, where a core aim for economic growth may challenge coordinated planning (figure 12). As a result, the limited implementation of the 2011 Vientiane Urban Master Plan can be seen as a pick-and-mix approach, where elements supporting certain large-scale economic projects are promoted, but the full planning package is ignored. For example, three communities have been relocated to make way for large infrastructure projects. These involve Don Chan island (with developments including a five-star hotel and luxury villas), That Luang marshlands (for residential and commercial facilities under status as a Special Economic Zone) and the site of the new national stadium (built for the 2009 Southeast Asian Games). Communities from all sites have been relocated to the area of Industrial Zone Km 21 where it is hoped that they can contribute to a demand for labour catering to the needs of local industrial development. The examples represent a reductionist application of planning policy that treats those affected as state subjects rather than pursuing an inclusive strategy for urban development. A similar story could be projected upon the environmental management of Vientiane. Fears remain over deforestation and the destruction of natural wetlands (and farmland) that could have a strong impact upon the natural hydrological cycle of the city, particularly during monsoon flooding (Sharifi et al., 2014).



That Luang Marsh is a well-known example here where the FDI has been used despite concerns of the environmental impact of the project.

A further national policy development that warrants attention involves the Sam Sang (“Three Builds”) directive (Politburo Resolution No.03/CPP/2012). This concerns the vertical structure of governance and the implementation of regulatory frameworks from national to local levels, which has proved troublesome in Lao PDR (see stakeholder analysis, this chapter). Launched in 2012, Sam Sang attempts to improve coordination between different tiers of public administration with: i) provinces as strategic units; ii) districts as sectorial strengthened units; iii) villages as development units. The reporting of pilot studies has suggested limited devolution of decision-making processes (LADLF, 2015), and it is possible that Sam Sang could actually help centralise power. As with the ‘Turning Land Into Capital’ policy (Pathammavong et al., 2017, p. 6), Sam Sang has not been ‘specialised and formalised’ in any written document. It should be seen as the latest in a series of attempts to improve centralised control and use it to motivate the local level. Indeed, one interviewee referred to the impact of Sam Sang in terms of de-concentration more than decentralization, with a focus on building strategy, regulation, research, monitoring, and capacity building, rather than a full transfer of power to the local level. In terms of urban planning, Sam Sang acts as a motor, defining the partition of tasks, duties and responsibilities from the centre to the local.



*Figure 12: The World Trade Center under construction. Using Chinese FDI, this is part of the Nong Chen Lake Project built on wetlands along Khouvieng Road in central Vientiane. Providing commercial and residential facilities, the project promotes an urban idyllic lifestyle (in both Chinese and Lao language), with images of Westerners as well as prosperous Asians (below). This is the kind of project that carries favour in Vientiane, often at the expense of planning.*



## 4. INFRASTRUCTURE OVERVIEW: A SYSTEMS ANALYSIS OF VIENTIANE

To complement an overview of stakeholder interests (agents), legal frameworks, and planning policy (institutions), this chapter offers a brief situational analysis of infrastructural development (systems) in Vientiane Capital. The analysis is broken down into a view of system components. In the cases of transport, water supply, wastewater, drainage and solid waste, the assessment predominantly uses information provided in the Urban Master Plan report prepared by the MPWT, PTI and JICA (2011a & b) and the recent update to the 2011 plan (VCG, 2017). Interviews with JICA, the National University of Laos and government officials have controlled for any further changes. Subsequently, the two systems of food security and energy are considered, moving briefly from the Lao to the Vientiane context. The level of analysis here is not intended to be fully authoritative, instead acting as a first pass assessment to inform further investigation. As a structure to this chapter, details on each system are provided. A collective overview assessment then follows to highlight critical areas of need in Vientiane, reflected in terms of socio-economic inclusivity, and environmental factors.

### ROADS AND TRANSPORT

In an interview with the Japan International Cooperation Agency (JICA), it was stated that a Transport Master Plan from 2008 has been 70% implemented. Nevertheless, the growth rate of car ownership and usage has expanded beyond predictions in the plan, making transport a priority concern. It seems that transport use is accelerating faster than an ability to respond and provide the necessary infrastructure to cater to demand. From 2000 to 2009, the number of registered motor vehicles more than tripled (figure 13) and passenger car ownership has been projected to quadruple from 2010 to 2030 (table 3). Even here, updated figures from the Department of Transport suggest that these predictions have been underestimated. To compound the rise in vehicle ownership, and the increase in trips, there are insufficient facilities for parking. Meanwhile, an ailing bus system run by Vientiane Capital State Bus Company (VCSBC) is in need of renewal. It seems that the green light has been given to a US\$100 million Sustainable Urban Transport (SUT) system, which would include a new Bus Rapid Transit system (BRT). The primary funding will be provided by an Asian Development Bank (ADB) loan, and the bidding process for an implementing partner is now complete.

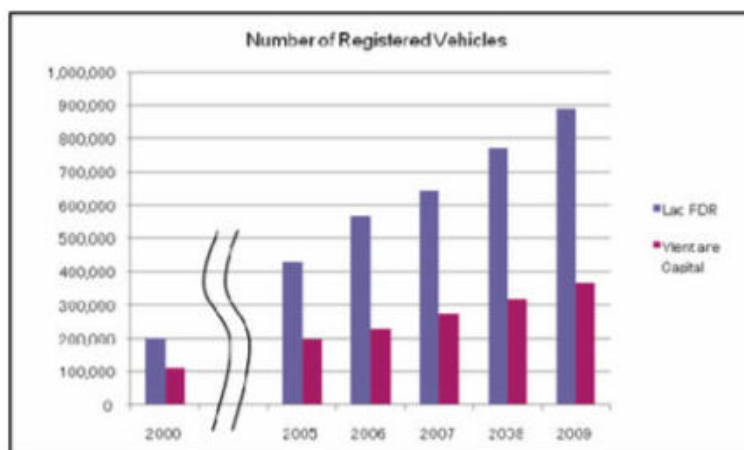


Figure 13: Number of registered vehicles in Lao PDR and Vientiane Capital (PTI et al., 2011b, p. 1–77)

	2010	2020	2030
Passenger car	54,500	166,800	223,500
Motorcycle	274,900	463,300	620,700
Total	329,400	630,100	844,200
Ratio		1.91	2.56

Source: JST

Table 3: Estimated Future Vehicle Ownership in Vientiane Capital (PTI et al., 2011a, p. 4–59)

Management and policy on roads is coordinated between the Road Department (under which the Road Division focuses on Vientiane Capital) and the Department of Housing and Urban Planning (DHUP) within the Ministry of Public Works and Transport (MPWT). In Vientiane, an extensive road-building plan has been put in place to the year 2030 (figure 14). This includes the construction of inner and middle ring roads, with proposals put forward for a further outer ring. While the need to manage increased vehicle usage is necessary, there will be consequences in the resulting acquisition of land to build new roads, where the provision of adequate compensation and relocation sites for affected households may be lacking. Furthermore, many existing roads are of deteriorating quality and are far from capable of supporting increases in traffic. A recent posting on a Vientiane Facebook group humorously satirises this quality (figure 15). Transport needs are highly visible to the public, resulting in frequently comments. Yet this does not undermine the fact that it remains one of the greatest demands for infrastructural development and management in Vientiane.

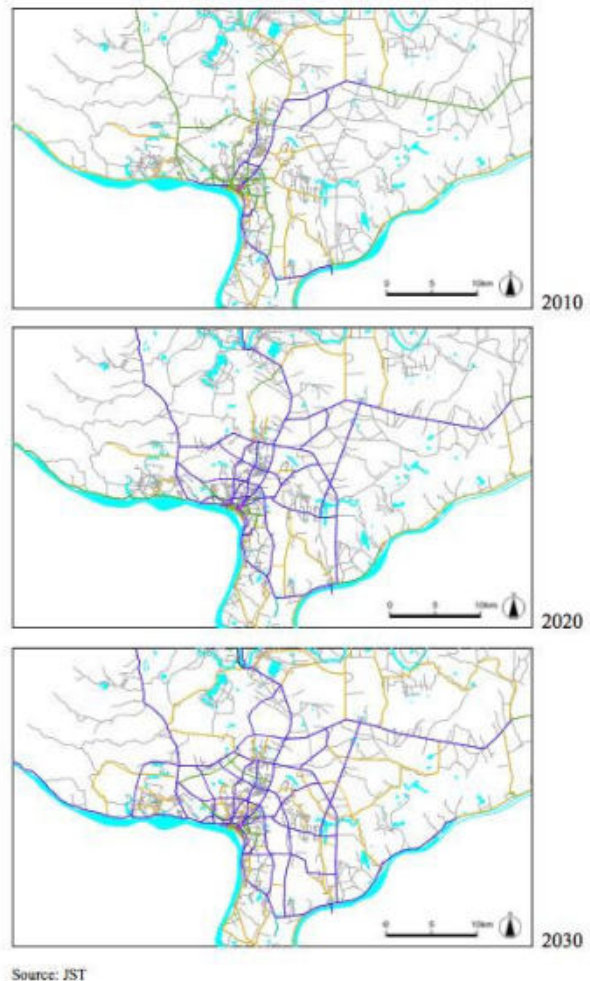


Figure 14 (above): Road Development Program until 2030 (PTI et al., 2011a, p. 4–69)

Figure 15 (left): The state of roads in Lao PDR seen in a recent Facebook post



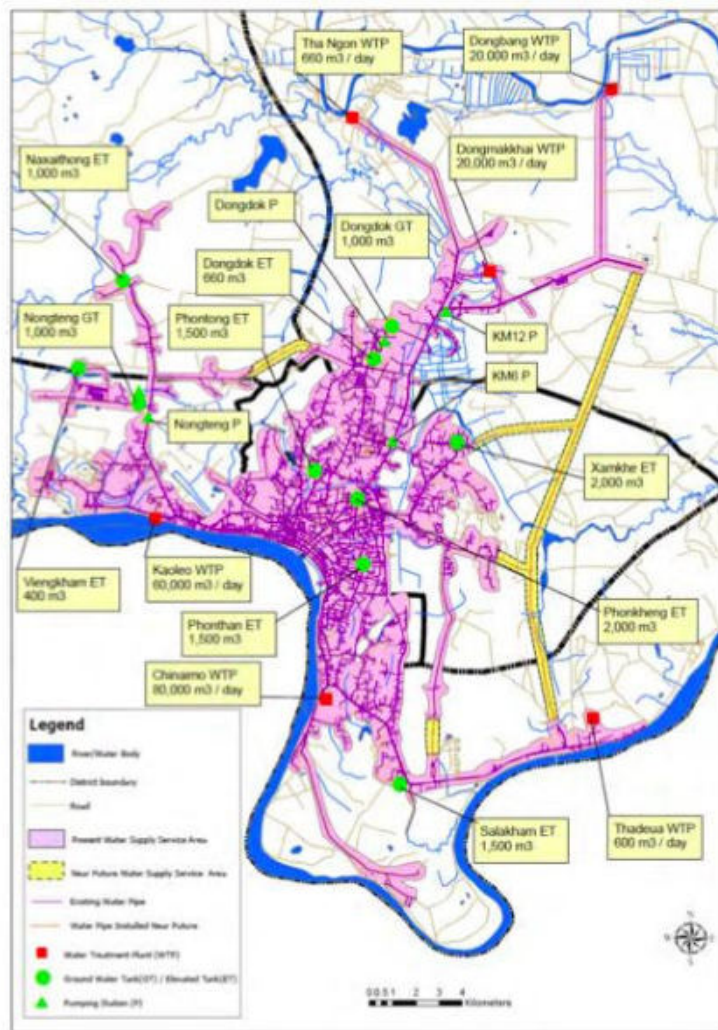
## WATER SUPPLY

In 2013, an estimated 73% of Vientiane Capital was covered by a water supply system (JICA, DHUP, DPWT, & NPNL, 2015). Figure 16 shows this existing system. The supply is provided through four water treatment plants and one borehole station, with an addition of seventeen reservoirs and three pumping stations. A rural population without access to this system use local wells and boreholes. There are three principal water sources, namely the Mekong River, Nam Ngum River and groundwater. Within the MPWT, responsibilities for the urban water supply system lie with the DHUP, delegated to their Water Supply Division (WSD). Public and private service providers are regulated by the Water Supply Regulatory Council (WSRC), also under MPWT. Responsibility for the system in Vientiane is with the Vientiane Capital Water Supply State Enterprise (known as

Nampapa Nakhone Luang or NPNL), overseen by DPWT. The updated master plan aims for 80% coverage by 2020 (VCG, 2017), using support from ODA and private sector investment, and recommends a rather ambitious 95% coverage by 2025. However, beyond coverage there is a need to match increased demand from a growing urban population, with the present system suffering from overload, areas of low pressure, leakages and maintenance issues. Only two of the four water treatment plants are capable of expansion.

Pricing is determined by Vientiane City Government and NPNL, with four rates available depending on the amount of usage or the status of the user (commercial, state or foreign). The quality of supplied water is good, but not of drinkable standard.

Figure 16: Existing Water Supply System in Vientiane Capital (PTI et al., 2011b, p. 1–91)



Source: NPVC, JST

## WASTEWATER

Responsibility for a sewerage system lies with various organisations within MPWT (including DHUP, DPWT and PTI), and VCOMS (Vientiane City Office for Management and Services, formerly VUDAA). At present, there is neither separate sewerage piping or a public wastewater treatment facility, with much water running into natural waterways through drainage systems. Some individual buildings and factories may have installed their own on-site systems using a septic tank or cesspool. Tests in the capital have suggested that the level of pollution in any run-off is not high. Nevertheless, an interview with JICA identified wastewater as one of the most pressing infrastructural needs for the capital, particularly in the context of population growth. Due to budget restraints, communities are to be encouraged to manage their own waste water, and although a centralised system is desired in the long-term, there is no concrete plan for implementation.

## DRAINAGE

Much of Vientiane Capital is a flood risk area (figure 17). As a result, a network of pipes, channels, and canals has been operationalised, which utilises run off points into natural water sources such as rivers and marshlands. This has improved drainage over the past ten years, and flooding occurs less frequently and for shorter periods of time (see figure 18 for the existing system, figure 19 for a reflection on the progress made). However, increased demand will challenge a system that is aging and lacks maintenance, with budget constraints only

allowing for cleaning during the rainy season. A further risk involves the development of marsh areas (such as That Luang) that impact upon the natural hydraulic system. Policy on drainage and its implementation is carried out by DHUP, DPWT and VCOMS, with financial and technical assistance from overseas donors.

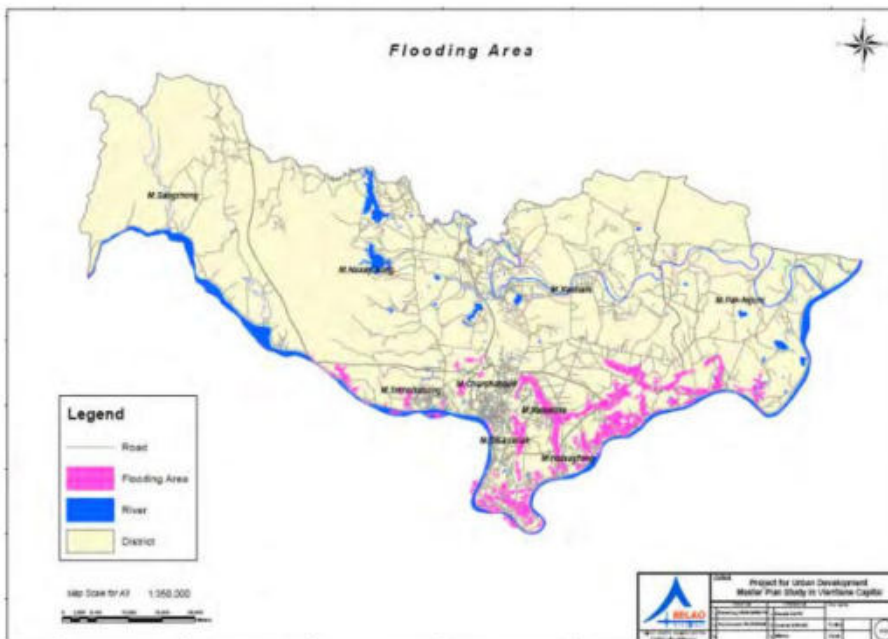


Figure 17: Areas at risk of frequent flooding in Vientiane Capital (PTI et al., 2011a, p. 4–102)

Source: JST

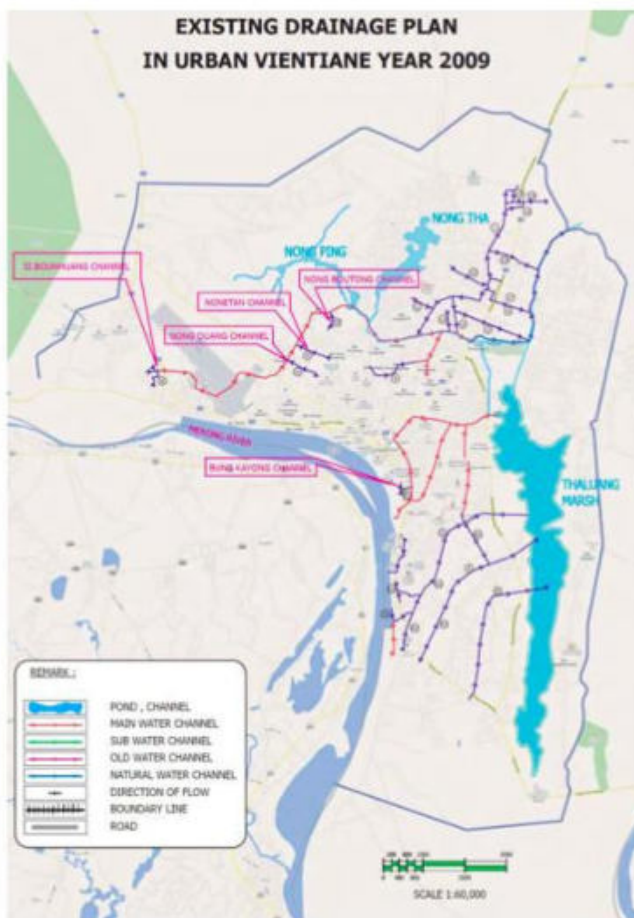


Figure 18: Existing drainage system in urban Vientiane Capital (PTI et al., 2011b, p. 1–115)

Source: VUDAA



*Figure 19: Mixed progress - mapping an old photo of Patuxai War Monument over the present day shows the big flood of 1966 replaced by the flooding of modern transportation (credit: Thanavorakit Kounthawatphinyo)*

## SOLID WASTE

There are eight private companies involved in solid waste collection, and one public collector (Vientiane Solid Waste Collection Service – VSWCS) operated by VCOMS (CCAC, 2015). There is partial coverage in eight districts of Vientiane Capital, as collectors take up contracts with individual households or local villages. Contracts also exist with institutional subscribers such as offices, factories and hospitals. The 2011 Urban Master Plan points towards three target areas for improvement: i) disseminate sanitary waste treatment; ii) expand the collection service area; iii) establish the sanitary landfill site. It recommends the increase of waste collection to 100% by 2030, alongside a community awareness programme on how to deal with solid waste. However, there is no official plan to extend public collection, with a preference placed on area expansion for private collectors. Interviews uncovered examples of stark rises in prices when individual contracts with collectors were replaced with community-level contracts organised through village authorities. Meanwhile, outside the core urban area, there seems to be insufficient coverage, with some residents still burning their solid waste.

At present, there exists no intermediate treatment plant, with one principal landfill site (KM32 Landfill Site) deemed sufficient to cater to present demand.

## FOOD SECURITY

The nuances of land and food markets are too numerous and subtle to make a fully comprehensive assessment of food security here. However, a few observations can be put forward as a starting point. If we compare the maps looking at land use over the last twenty years in Vientiane Capital (figure 4 on page 6), despite the expansion of built up areas around the city, there has been extensive conversion of forest into farmland. It is important to consider the environmental impact of conversion and intensified agriculture (although it must be noted that at both governmental and community levels there is a growing interest in organic farming). In terms of food security, increased land use implies a higher production base within the locality, which would be necessary for increased demand. Yet more information would be needed on crop types and marketplaces. Furthermore, the influence of production around the country, the intensification of demand in the capital, and the opening of markets for imports, need consideration. In national terms, despite a low population density, food security remains widespread in many rural areas, where poverty remains and subsistence agriculture is frequently practiced (Vilavong, 2016, p. 173). Large-scale land acquisitions or contract farming using foreign

investment will be having an impact here. Overall, while food demand in the capital is being met at present, it is appropriate to give attention towards future demand and the possibilities of any shortfall.

## ENERGY

As an initial frame on the Lao energy system operating through Vientiane, two important components must be highlighted. Firstly, Laos is a low producer of fossil fuels, although it should be noted that mining operations have recently been set up to exploit newly discovered coal deposits. This results in a dependence upon fossil fuel imports, particularly necessary for the transport sector, placing the country under the volatility of global pricing markets. Second, Lao PDR has abundant access to renewable energy sources for electricity generation, predominantly hydropower but with potential in biofuels, solar, and wind power. Renewables have become a significant contributor to the economy, particularly through foreign investment into and exports of electricity through hydropower. In 2013, 73.2% of hydropower energy produced was exported out of the country, although national profits are tempered by the fact that most plants are run by private companies (Kouphokham, 2016).

The electricity supply for Vientiane Capital is predominantly supplied through two hydropower plants, namely Nam Ngum 1 and Nam Mang 3. A localised supply is significant as there is a lack of effective transmission of electricity around the country, which otherwise could improve supplies for demand hotspots. There is high access to electricity, claimed at 98.1% households in the 2015 Population and Housing Census (Lao Statistics Bureau, 2016). Clearly, a growing demand must be accounted for, particularly during peak periods, which will be influenced by changing user profiles as GDP rises and household capital assets shift. At present, to cover high moments of demand in the dry season, electricity is sometimes imported from Thailand.

## A COMBINED INFRASTRUCTURAL ASSESSMENT

Table 4 collects together an assessment of infrastructure systems in Vientiane. Each system is considered in terms of its present state, socio-economic inclusivity, and environmental factors. There are areas in which all systems could be improved, particularly when placed in the context of an increasing urban population, or the potential impact of events related to climate change. Yet the 2011 Urban Master Plan does not focus on how development can avoid marginalising sections of the population, or support the already vulnerable. With the assessment here representing an overview, there is certainly space for further research to pinpoint more clearly where these vulnerabilities lie. What have been the short- and long-term effects of past natural disasters, both environmentally and on residents? How can systems work for the population so that they can bounce back from such shocks? This refers back to the claim of Tyler and Moench, mentioned earlier but worth repeating here, that ‘resilience is high where *robust and flexible systems* can be *accessed by high-capacity agents* and where that access is *enabled by supportive institutions*’ (Tyler & Moench, 2012, p. 318–9). It can be seen that there are various enabling and inhibiting factors within Vientiane urban system and the manner by which it is governed. Hopefully, this brief can contribute to a new wave of research and dialogue to address and support the rapid processes of growth presently taking place in the capital.

Looking in more detail at the assessment in table 4, particular areas of concern involve **roads and transport** and **wastewater** systems. In the former, increased vehicle ownership and infrastructure usage is outstripping attempts to plan ahead or adapt, and the developments that are taking place are questionable in terms of inclusivity and environmental impact. A wastewater system has yet to be developed, leaving Vientiane open to the risk of pollution through its natural hydrology as run-off increases. However, it is important that all the systems addressed here are given due attention. They are not mutually exclusive and their future enhancement demands a coordinated multi-stakeholder approach. Such a perspective does not sit well with present modes of governance in Vientiane, where budget constraints severely hold back maintenance of existing systems, let alone coordinating development for increased demand. The following chapter lays out some pointers for engagement in Lao PDR to start upon a pathway to progress.

**Table 4: An assessment of urban infrastructure systems in Vientiane Capital**

	<b>Situation Analysis in Vientiane Capital</b>	<b>Socio-Economic Inclusivity</b>	<b>Environmental Factors</b>
<b>Roads and Transport</b>	Increasing vehicle ownership and use; insufficient parking facilities; speed of change exceeding ability to respond	Insufficient public transport; land acquisition with inadequate compensation for new roads	Increased air and noise pollution
<b>Water Supply</b>	Present coverage at 73% with strategy for 80% by 2020; issues of overload and maintenance	Nearly whole population should have access by 2020, although prices have increased	Reasonable water quality although not drinkable; plentiful water sources
<b>Wastewater</b>	No existing public system with much waste entering into natural waterways	At present, left to individual to organise own system	High risk of polluted hydraulic system
<b>Drainage</b>	Network of pipes, channels and canals alongside natural system; significant flood reduction in Vientiane; aging infrastructure	System to benefit all, although some live in higher flood risk areas	Development of marshlands threatens natural drainage system
<b>Solid Waste</b>	Private and public collection with extensive but not full coverage	Emphasis on private collection could marginalise poorer households	Much solid waste still burnt
<b>Food Security</b>	Increased farmland and production around the capital (level for local consumption unconfirmed)	Risk of insecurity increasing prices	Intensified land use and conversion from forestland, but also growing interest in organic production
<b>Energy</b>	Near universal access to electricity; foreign imports sometimes needed	Access near universal	Promotion of renewables by government, although impact of hydropower plants debatable

As a subsequent level of analysis, the assessment can be compared to a Key Informant Survey conducted by JICA towards the production of the 2011 Vientiane Urban Master Plan. This survey compiles perceptions of satisfaction and dissatisfaction relating to infrastructural provisions. A sample of 3,000 interviews were conducted, proportionally reflecting the population size in each of the nine districts within Vientiane Capital. The general results can be viewed in tables 5 and 6. The highest level of dissatisfaction is placed around transport infrastructure (particularly small access roads) and drainage/sewerage, with significant attention also placed on the drinking water supply, solid waste disposal and parks/open spaces. The interest in drainage shows how flooding remains a high-risk concern, even if infrastructural provisions have overseen improvements. The mentioning of parks and open spaces highlights a fear that urban development will fail to provide public spaces, which can support a dwindling natural ecosystem and the liveability of a city. Indeed, at present there are only nine public parks in Vientiane Capital. Concerning areas of satisfaction, electricity and telecommunications received strong support from all districts. Primary school education also received support, alongside main roads and drinking water supply. It is intriguing that the latter two services garnered support as both sufficient and insufficient, if nothing else warranting further research.

To add to the Key Informant Survey, all interviewees towards this briefing note were asked which infrastructural system they perceived as demanding most attention in Vientiane Capital. Nearly all respondents mentioned transport, particularly concerning the high volume of traffic and lack of parking in central areas. This confirms the high visibility of the issue. Water management (especially wastewater) and solid waste received significant attention. Finally, a number of respondents spoke of the problems faced by different government departments in coordinating their work on urban development. To see such a range of responses chimes with the urban resilience framework presented in chapter 2, where institutions, agents and systems must all be addressed in the formation and development of urban areas.



**Table 5: Household survey of lacking of insufficient infrastructure by district (PTI et al., 2011b, p. 2–50)**

No.	District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Other
1	Chanthabouly	83%	25%	0%	33%	0%	83%	33%	17%	0%	25%	0%	0%	0%	0%	0%	0%
2	Sikhottabong	86%	14%	0%	29%	14%	57%	71%	0%	0%	14%	0%	0%	0%	0%	14%	0%
3	Xaysetha	54%	31%	0%	31%	8%	85%	54%	0%	0%	31%	0%	0%	8%	0%	0%	0%
4	Sisattanak	89%	6%	0%	17%	0%	94%	61%	0%	0%	33%	0%	0%	0%	0%	0%	0%
5	Naxaithong	67%	11%	0%	44%	33%	33%	44%	0%	11%	22%	0%	0%	11%	22%	0%	0%
6	Xaythany	80%	0%	7%	53%	20%	27%	47%	7%	7%	20%	7%	0%	7%	0%	20%	0%
7	Hadxaifong	55%	45%	0%	36%	0%	64%	36%	0%	0%	45%	9%	0%	0%	9%	0%	0%
8	Sangthong	50%	60%	10%	80%	40%	20%	0%	0%	0%	0%	0%	10%	0%	10%	20%	0%
9	Mayparkngum	75%	25%	17%	33%	33%	17%	33%	8%	0%	8%	0%	0%	8%	25%	17%	0%
Grand Total		72%	22%	4%	38%	15%	56%	43%	4%	2%	23%	2%	1%	4%	7%	7%	0%

Legend	<span style="background-color: #FFC0CB; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Most serious problem	1 Small Access Roads	7 Waste Dumping Site	13 High Schools
	<span style="background-color: #FFDAB9; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Secondly serious problem	2 Main Roads	8 Electricity	14 Medical Centers (Clinics)
	<span style="background-color: #FFFF00; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Thirdly serious problem	3 Bridges	9 Telecommunication	15 Hospitals
		4 Drinking Water Supply	10 Parks/ Open Spaces	
		5 Irrigation Water	11 Primary Schools	
		6 Drainage/ Sewerage	12 Secondary Schools	

Source: JST (Key Informant Survey)

**Table 6: Household survey of comparatively satisfactory infrastructure by district (PTI et al., 2011b, p. 2–50)**

No.	District	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	Other
1	Chanthabouly	0%	33%	8%	33%	0%	0%	8%	67%	83%	8%	17%	17%	17%	8%	0%	0%
2	Sikhottabong	14%	43%	0%	43%	0%	14%	0%	86%	71%	0%	14%	14%	0%	0%	0%	0%
3	Xaysetha	0%	69%	8%	23%	15%	8%	8%	54%	62%	0%	0%	8%	8%	8%	31%	0%
4	Sisattanak	6%	44%	0%	28%	17%	6%	0%	61%	61%	11%	28%	11%	11%	11%	6%	0%
5	Naxaithong	33%	11%	11%	11%	11%	11%	0%	89%	78%	0%	0%	11%	0%	0%	33%	0%
6	Xaythany	7%	33%	7%	20%	7%	0%	13%	73%	47%	7%	33%	20%	20%	7%	7%	0%
7	Hadxaifong	9%	36%	0%	36%	36%	0%	9%	64%	64%	9%	27%	0%	0%	0%	9%	0%
8	Sangthong	20%	0%	0%	10%	0%	0%	0%	100%	80%	0%	40%	20%	20%	0%	10%	0%
9	Mayparkngum	0%	8%	8%	0%	0%	8%	0%	67%	75%	0%	58%	58%	8%	0%	8%	0%
Grand Total		8%	33%	5%	22%	10%	5%	5%	71%	67%	5%	25%	18%	10%	5%	11%	0%

Legend	<span style="background-color: #FFC0CB; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Most satisfactory	1 Small Access Roads	7 Waste Dumping Site	13 High Schools
	<span style="background-color: #FFDAB9; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Secondly satisfactory	2 Main Roads	8 Electricity	14 Medical Centers (Clinics)
	<span style="background-color: #FFFF00; border: 1px solid black; display: inline-block; width: 15px; height: 10px;"></span> Thirdly satisfactory	3 Bridges	9 Telecommunication	15 Hospitals
		4 Drinking Water Supply	10 Parks/ Open Spaces	
		5 Irrigation Water	11 Primary Schools	
		6 Drainage/ Sewerage	12 Secondary Schools	

Source: JST (Key Informant Survey)

## 5. URBAN CLIMATE RESILIENCE IN LAO PDR: RECOMMENDATIONS FOR ENGAGEMENT

One of the challenges of achieving urban climate resilience in Southeast Asia is the injection of innovative joined-up thinking into institutional frameworks that themselves are only just emerging. Lao PDR has been identified as possessing ‘weak legal frameworks, judicial systems, and law enforcement capabilities’ (Schoenweger & Ullenberg, 2009, p. 30), with poor coordination between government departments and different vertical tiers of administration. This is hardly conducive for shared learning in order to foster exchange and collaboration (Orleans Reed et al., 2013). Instead, the exploitation of marginalizing development investments often prevails over coordinated inclusive planning. A high staff turnover disrupts continuity in capacity building, and acts as a barrier to policy being effectively passed around government and implemented. For donors and NGOs working in Lao PDR, the process of receiving an approved Memorandum of Understanding (MoU) with a government ministry, which is needed for any budget over US\$50,000, can take anything up to a year, severely curtailing a project timeline. As a response to these issues, this chapter offers pointers as to how a researcher or development practitioner might engage with Lao government stakeholders when working in the field of urban climate resilience.

In 2014, the consultant Andrew Bartlett conducted a study as part of an evaluation for the Laos-Australia NGO Cooperation Agreement (LANGOCA) program. He took a wider perspective as to how NGOs might best impact upon policy changes and their implementation in Lao PDR. This is particularly important in an environment that has become more restrictive for NGOs to operate in recent years. The following conclusions were made:

- 'For NGOs to have greater influence on best practices and policy in Laos, they need to find common ground between the modernisation narrative of the Government and their own empowerment narrative.
- Policy does emerge from field experience in Laos, but if development programs want to influence policy they have to work with those in power, and there is considerable power in the mid-level of government in Laos.
- Policy-making in Laos is not data-driven. Field visits can play an important role in a policy-making process, and NGOs may have a comparative advantage in organising this kind of activity.
- A combination of focus and flexibility and sufficient time is needed in order to generate policy outcomes.
- NGOs in Laos are operating in a complex environment but are still able to effectively support development processes. Donors can help by playing a strong role in negotiations with government at the start of a program and subsequently provide a channel for highlighting field experience in dialogue at the national level.'

(Bartlett, 2014, p. 1)

There is much in this assessment that can be applied to working with urban climate resilience in Lao PDR. To start with, development policy follows a modernisation narrative, looking for top-down rapid economic growth. This is witnessed in the focus on attracting investment in the 8<sup>th</sup> NSEDP. As a result, approaching officials with the progressive language of urban climate resilience, using words like *resilience*, *transformation*, *complexity* and *uncertainty* is like speaking a foreign tongue. Two interviewees noted that the word *resilience* does not have any effective direct translation in the Lao language. This made it hard to understand for Lao NGO workers, let alone potential project beneficiaries. Similarly, the notions of *vulnerability* and *empowerment* can be problematic in the face of a development narrative that favours large-scale projects and trickle-down economics. In this environment, 'any innovations that are contrary to government priorities are not going to be widely accepted' (Bartlett, 2014, p. 1). This is why JICA has successfully engaged in urban-related work in Lao PDR over many years, where infrastructural projects have steered clear of any progressive agenda and focused upon strong technical assistance in areas of great need to the Lao government. Furthermore, even if certain concepts are in usage within policy directives, this does not mean that they are either understood or incorporated into actual practices. *Participation* is a good example, present in name, but not always in performance. As one interviewee asserted, the government does not disagree with the concept. But a double negative hardly lays a platform for affirmative action.

In identifying a disconnect between policy language and practice, one must acknowledge contrasts between how power is wielded in Lao PDR. Firstly, in spite of a centralised single-party state there is much authority outside of a central administration, particularly at the provincial level. Although one NGO suggested this was a difficult tier to engage with, Bartlett suggests that success can result in productive work. Another interviewee highlighted that discussions at the lower levels can be more direct, and lead to more pointed joint activities. Therefore, as much as there is a need to engage in national level policy dialogues, working at other tiers remains vital, particularly to encourage project ownership and implementation through field experiences.

Secondly, individual positions, relationships and patronage networks are as important in Lao governance as the collective party identity. One NGO spoke of the need for relationships to be both formal (through documents), using the government, and informal (through keeping the individual contact). Combining the two should have the power to last, with collaboration benefitting both the party mandate and the status of the individual official involved. When looking at how to better engage with government officials and departments, Bartlett highlights how NGOs are successful if their aims also help officials 'achieve personal or political objectives' (Bartlett, 2014, p. 11). One NGO development worker calls his contacts at least once a month to maintain personal dialogue, and remind them that the NGO remains available to help. Indeed, you are unlikely to be successful as a development practitioner unless you can fit in with the criteria of government work, a frame where

development policy is becoming increasingly dichotomised and placed into a one-size-fits-all structure. Therefore, NGO support must sit within very particular parameters, where the donor has to let the official define the needs, and act as a facilitator or implementer rather than take the lead. In this, it is vital to identify the overlaps between the narratives of government and development partners, and at least initially focus on this common ground (figure 20). In this sense, working for more ‘conventional’ development, which also engages the interests of urban climate resilience, would represent a pragmatic and productive mechanism to build up relationships and trust with government actors, and offer a means for them to claim ownership of a project that fits in with their own policy directives. One interviewee claimed that this could be beneficial in that the NGO actually had more space to give constructive criticism of a project, since they were not taking the lead. With government officials and departments often dependent upon technical support to boost their own capacities, such criticism can be welcome within a well-functioning relationship.

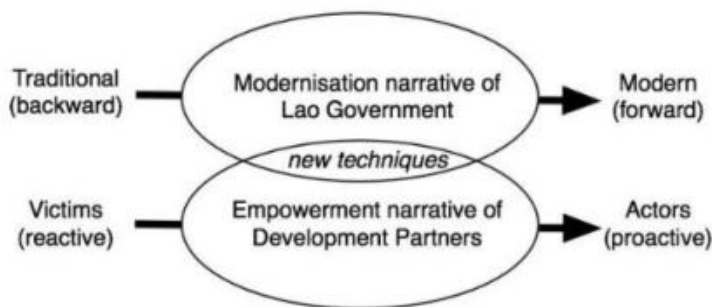


Figure 20: The intersection of modernisation and empowerment

Working with particular urban systems such as transport or wastewater could offer a ‘way in’ to engagement, with more innovative integrated approaches encompassing a language of transformation introduced over time. The offering of positive case studies can also be useful to develop projects based on concrete models. These can include regional examples, in which the field of urban climate resilience has much to offer. For example, Oxfam Laos has a growing interest in urban issues, and despite a lack of experience in the Lao context, can look to their global programme in countries such as the Philippines and Bangladesh, not only to assist their own activities but also to present to government partners. But as Bartlett correctly states, working in Lao PDR demands ‘focus *and* flexibility *and* sufficient time’ (Bartlett, 2014, p. 19). This is particularly the case for urban issues in which many organisations operating in Lao PDR are only just starting to engage, through topics such as gender and livelihoods. Those who have had greater involvement, such as JICA, have done so through direct technical assistance. Earlier in 2017, the Lao Red Cross undertook a pilot project on ‘Building Urban Resilience’ through schools in different district of Vientiane Capital. Speaking with a project worker, it was clear that this represents a true beginning, the first tentative steps to improve internal organisational understanding of urban systems in Vientiane, and develop corresponding programmes. This is the frame that practitioners working with new progressive ideas must bear in mind if wishing to operate in Lao PDR. It would be better to spend time getting to know and understand the discipline in its country context, rather than jumping in with new ideas.

What are implications in terms of addressing climate change? As recently as 2012, attempts to mainstream climate change have proved troublesome in Lao PDR, due to a lack of inter-ministerial coordination and a financial dependency on outside assistance (Saito, 2013). However, in the 8<sup>th</sup> NSEDP, disaster preparedness has been given attention as one of the three key priorities, with climate change named as a cause (see page 15). This offers another entry-point to work and engage in Lao PDR. If the language of climate change is not yet fully assimilated into the work of urban planning, an interest in disaster preparedness is being associated with the need to improve coordinated thinking. It is here that there is space for shared learning, although one should be careful about overplaying the innovative language set that it encompasses. Some of the attention to climate change may be lip service, and the concept remains an abstract one that can be hard to grasp (a problem hardly confined to Lao PDR). However, with international funding available in areas such as disaster preparedness,

combined with an ASEAN focus to integrate the Sendai Framework for Disaster Risk Reduction, interest is growing. The Prime Minister himself is promoting the notion of *green growth*, and in October 2017, Lao PDR became a member of the Global Green Growth Institute (GGGI). One of the provisional fields of interest involves green cities. Overall, engagement in Lao PDR should understand priority policy directives, how the mainstreaming of urban climate resilience can align with these, and let officials take ownership of resulting activities through shared learning experiences.

A parallel can be drawn between the image presented here for engagement in Lao PDR and the notion of bricolage put forward by Carmin et al. (2012). Here they note how new policy domains can emerge through the stitching together of existing material. This seems to chime with the clumsy model of governance presented by Friend et al. (2014), where linkages between planning and implementation are crude, and actors often work in competition to each other. Admittedly, within the strict policy frame of Lao PDR, where work can principally be conducted through official channels, there seems little space for innovation and entrepreneurship. Yet it has been noted how decentralised power is wielded outside of the national level, and so there are opportunities to seek out champions of urban resilience. In this sense, there is much to be gained from a bits-and-pieces approach, slowly finding overlaps with official directives, and piecing these together to something that could collectively result in a more innovative approach to urban climate resilience. This demands an overview of where true government interests lie. To do so, one could do worse than to look at larger donor projects, particularly where financial support takes the form of a loan, thereby representing a financial commitment by the Lao government. The proposed US\$100 million Sustainable Urban Transport (SUT) system for Vientiane represents one such example, based primarily on a loan from the Asian Development Bank.

With this discussion in mind, the conclusions of Bartlett (p. 25) can be adapted to act as a set recommendations for development practitioner wanting to engage in issues of urban climate resilience in Lao PDR:

- When engaging with government, one must be careful of introducing the innovative language of urban transformation and resilience too soon, instead building up a common understanding through overlaps with a modernisation narrative
- Development approaches must conform and contribute to the directives of individual officials and their departments, otherwise engagement will falter. Indeed, building up relationships and trust are as important as looking for direct results from joint activities.
- Working with field-based cases is a good way to engage with government actors, as these can become a source of policy development (rather than data)
- Different tiers of power should be engaged as there remain spaces for implementation through non-national levels
- A useful starting point is to work within system components of urban development, such as transport or wastewater, and slowly build up the notion of integrated thinking, planning and implementation
- Disaster preparedness is a good entry point for issues relating to climate change, as a concept grounded in concrete climate events that is easier to understand, a strong presence in national policy directives, and opportunities for international funding
- There is space for shared learning, and a common language must be found to slowly encourage government ownership and mainstreaming of urban climate resilience
- A combination of focus and flexibility and sufficient time is needed in order to generate policy outcomes (*retained from Bartlett*)

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