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All quotations from interviewees are anonymous. Any errors or omissions are our own.

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### **Acronyms**

ADB Asian Development Bank

CDHS Cambodian Demographic Health Survey
CIUS Cambodian Institute for Urban Studies
CMDGs Cambodian Millennium Development Goals

**CPP** Cambodian People's Party

CR Cambodian Riel currency ~US\$1=4000 CR
CSCN Cambodian Street Children's Network
CSES Cambodian Socio-Economic Survey
JICA Japan International Cooperation Agency

JMP Joint Monitoring Programme, implemented by UNICEF and WHO

**KOICA** Korean International Cooperation Agency

MDGs Millennium Development GoalsMIH Ministry for Industry and HandicraftMIME Ministry for Industry Mines and Energy

Mol Ministry of Interior

**MoEF** Ministry of Economy and Finance

MoP Ministry of Planning

MPWT Ministry of Public Works and Transport

NCDD National Council for Sub-National Democratic Development (NCCD)

**NPWSS** National Policy for Water Supply and Sanitation

MPWT Ministry of Public Works and Transport

MRD Ministry of Rural Development

NCDD National Committee for Democratic Development

NGOs Non-governmental organisations
PEA Political economy analysis

PIN People In Need

**RGC** Royal Government of the Kingdom of Cambodia

**SDGs** Sustainable Development Goals

STT Sahmakum Teang Tnaut

UNICEF United Nations Children's' Fund

UNITAC United Nations Transitional Administration in Cambodia

WASH Water, sanitation and hygiene

WB World Bank

WHO World Health OrganisationWSS Water supply and sanitation

# **Executive summary**

The Millennium Development Goals (MDGs) embedded a recognition that water and sanitation are fundamental pillars of development. Their successors, the Sustainable Development Goals (SDGs), went a step further and shifted the focus from service delivery to service delivery 'for all', thereby adding a fundamental concern with equity. Despite significant progress, however, huge disparities in the use of improved water and sanitation facilities between the richest and the poorest, as well as between quintiles, remain.

This report is part of a global study commissioned by WaterAid, aimed at understanding plausible pathways of change to promote broad-based and equitable access to water, sanitation and hygiene (WASH) services. We conducted a political-economy analysis exploring the incentives, constraints and opportunities for change, with a focus on the poorest fifth of the population. Two other country case studies and a synthesis report are available.

We selected the case study of Cambodia considering its reported good progress in recent years in improving access to urban sanitation in the context of impressive overall economic growth and poverty reduction. Coming out of three decades of devastating civil conflict, Cambodia has experienced sustained economic growth since the early 2000s, driven by free trade, open investment policies and macroeconomic stability - all of which have led and contributed to increases in tourism, construction, the garment sector, agriculture and foreign direct investment.

Accompanied by explicit government policies promoting access to basic infrastructure, improvements in rice production and the introduction of minimum wages in apparel manufacturing, economic growth in Cambodia has been accompanied by remarkable poverty reduction. In the period 2004-2011, poverty rates in Cambodia decreased from 53.2% to 20.5%, surpassing all expectations and exceeding the Millennium Development Goal target. However, poverty reduction was only possible because many of the poor - who were just below the poverty line in 2004 - were able to move just above the poverty line in 2011. In addition, the wealth gap between the rich and the poor has increased in absolute terms. The average per capita daily consumption of the richest 20% of the population is more than 8 times that of the poorest 20%.

Against this backdrop of on-going strong economic growth and increasing household consumption over the past decade, Cambodia has made considerable progress in helping people gain access to improved water and sanitation services. In urban areas, Cambodia achieved complete coverage for improved water supplies in

2015. For sanitation, the progress has been even more remarkable; the total number of people with access to improved facilities has risen from 19% to 88% in urban areas. Despite the impressive gains in access, disparities remain especially between urban and rural populations, and between the poorest and better-off groups of society. In addition, one of the most pressing challenges in urban Cambodia, remains to improve the level of sanitation services and ensure that faecal matter is safely collected, transported out of the residential environment, treated and safely disposed of.

The data shows substantial progress in extending access to improved sanitation for Cambodians, including the poorest ones. This links to the general improvement of living conditions in cities, and in the capital Phnom Penh. Progress has been driven by the investments of wealthier urban households in on-site sanitation. Economic transformation and growth have further attracted the attention of the government and donors to service delivery in cities, primarily Phnom Penh and Siem Reap (for tourism), but also cities along the economic growth corridor (Bavet, Poipet, Kampot, Battambang and Pursat). This has resulted in project-based investments in largescale infrastructure for wastewater management, as well as sewerage and drainage systems.

However, our analysis found that some categories of people remain excluded from urban progress in general, and progress in terms of sanitation (and other basic) service delivery in particular. Their marginalisation is a consequence of the geography of where they live (peripheral and peri-urban areas tend to remain unserved), the type of work they do (low-paid and/or temporary jobs oblige people to rent poorly serviced accommodation) and other social factors such as gender, age, and disability. We found several reasons why these inequalities persist, from the sector-specific, structural and systemic factors, to the incentives, behaviours and power relations that hinder progress towards expanding sanitation access to the urban poor, such as:

- Data on inequalities is not available and/or well
- Poor users tend to live and earn their living precariously, reducing opportunities for collective mobilization;
- Incoherence in the institutional arrangements leads to a collective action problem in which neither donors nor the Government are willing to make the first move to prioritise the sector;

- Decentralisation is ongoing but not very effective, undermined by capacity and financing challenges and an inability to use it as a framework to increase local accountability and responsiveness;
- Planning and implementation of lower-cost/pro-poor alternatives to sewerage undermined by lack of strategy, lack of data, unwillingness to pay (and government oversight to regulate/ subsidise), physical/ technical issues, and all finally compounded by a lack of solid evidence on the costs of inadequate sanitation.

Therefore, the drivers of inequality in the case of urban sanitation in Cambodia are both structural and inherent in the WASH system. People that already live at the margins of society, for reasons that are deeply rooted in the economic, political and social trajectory of the country, are further excluded from accessing basic services such as sanitation. Rapid economic growth can provide additional income to people that can afford better services, but can also result in the unplanned growth of cities, and the consequent failure of service providers to comply with the increased demand. The most peripheral areas, where the poorest generally live, are the first ones to be left out. The difficult issue of land tenure with which Cambodia - like many other developing countries - still needs to get to grips, contributes to the exclusion from service delivery of those people living in informal settlements.

For organisations like WaterAid, there are several entry points to initiate change towards more inclusive WASH services. First, it is important to frame sanitation the right way and link it to issues such as drainage and waste management that are currently at the top of the government's and donors' agenda. NGOs and civil society organisations would be well-advised to seek policy coalitions to take advantage of this framing, raising the awareness and interest of the government in sanitation generally and for poor users in particular.

Donors can play an important role in 'shaping the debate', provided that their efforts are coordinated and in line with the government's agenda and priorities. However, they and other relevant actors in the sector need to reengage in the existing urban infrastructure working group. This group could, for example, convene specific sessions on topics of relevance to the urban sanitation sector or on areas such as informal settlements in Phnom Penh, or on secondary cities that have been less of a focus of investments and interventions aimed at increasing pro-poor access to basic services.

It is also important to initiate the right sector and non-sector reforms to address bottlenecks to urban sanitation for the urban poor. Priority should be given to reforms aimed at making sanitation financially viable. NGOs and donors could support with studies exploring the opportunity to engage FSM providers on a commercial basis in larger cities where they could benefit from economies of scale.

Efforts at removing the bottlenecks in the urban sanitation sector should be embedded into reforms aimed at guaranteeing tenure security, especially for people currently living in informal settlements. Collaborative efforts by civil society and NGOs working on land tenure issues and property rights, particularly for the poorest, could create a stronger voice that demands reform at the national level. To support these processes, advocacy efforts need to be rooted in a more thorough understanding of responsibilities and incentives operating at different levels of the government.

Finally, civil society and non-governmental organisations should act as a broker and catalyst for better information on service delivery performance for the poor and excluded. For instance, it could pilot new methods of data collection (e.g. social media and SMS surveys for poor urban households), work with trusted entities and rights groups to help them use that information effectively, and ally with other service sectors to highlight wider gaps in service provision to poor and excluded groups.

#### **Key messages**

- Coming out of three decades of devastating civil conflict, Cambodia has reported good progress in improving access to urban sanitation in the context of overall impressive economic growth and poverty reduction.
- People already living on the margins of society, for reasons that are deeply rooted in the economic, political and social trajectory of the country, are further excluded from accessing basic services such as sanitation.
- Inequalities persist because of sector-specific, structural and systemic factors, such as poor data availability, precarious living conditions of the poorest, incoherence in sectorial institutional arrangements and incomplete decentralisation reforms that have failed to ensure local accountability and responsiveness.
- Entry points to initiate change towards more inclusive WASH services include linking sanitation to issues such as drainage and waste management, initiating reforms aimed at making sanitation financially viable, addressing the issue of tenure security and improving information on service delivery performance for the poor and excluded

## 1.Introduction



#### **Understanding inequalities and WASH services:** general overview of the study

It is often argued that investments in water supply and sanitation (WSS) generate wide-ranging economic benefits and are therefore a key tool for poverty reduction (see e.g. Slaymaker et al., 2007; Howard and Bartram, 2003). Already the Millennium Development Goals (MDGs) embedded a recognition that water and sanitation are fundamental pillars of development. Their successors, the Sustainable Development Goals (SDGs), went a step further and shifted the focus from service delivery to service delivery 'for all' thereby adding a fundamental concern with equity.

Relevant actors in the water, sanitation and hygiene (WASH) domain now accept, albeit to different degrees, that various forms of social and economic inequalities mediate access to WASH services. The World Bank's World Development Report 2004, Making Services Work for Poor People, (World Bank, 2004) provided landmark analysis of why countries still fail to deliver services to their citizens, with a focus on access to quality services in education,

health, water, sanitation and electricity (World Bank, 2004). Since 2010, the Joint Monitoring Programme (JMP) of UNICEF and the WHO has introduced wealth quintile analyses to understand trends of inequalities in access to drinking water and sanitation between rich and poor in rural and urban areas. However, heterogeneity among 'the poor' is significant.

In this study, we chose to focus on the poorest quintile of the population, to highlight the challenges of service delivery for the 'poorest of the poor'. As data from the 2015 JMP report show, not only there are still huge disparities in use of improved water and sanitation facilities between the richest and the poorest (especially for sanitation, and equally pronounced in urban and rural). There are also significant gaps between quintiles. In many countries, access to improved water and sanitation for the bottom wealth quintile is significantly lower than that of the second wealth quintile. This is true, for example, in the case of urban sanitation in Ethiopia, where access for the lowest quintile has increased only of 26% between 1990 and 2010, versus an impressive increase of 70% for the second quintile (UNICEF and WHO, 2015). Besides income, other inequalities, reflecting geographic location,

gender, ethnicity, age, disability/health conditions can also mediate access to water and sanitation services, but are often more difficult to monitor and hence address (Stewart et al., 2011; Stewart, 2002; Cobham, 2014).

Our research aims to understand what plausible pathways of change exist and what actions could support that change. Findings will be applied to inform the approach of WaterAid and others to support governments, and their partners, to 'pull the levers' towards achievement of SDG 6, particularly target 6.2.1

#### 1.2. Research approach and methodology

Our approach built on previous ODI-led political economy analyses (PEA) highlighting the interplay between the technical and political dimensions of specific sectors to understand service delivery outcomes (Harris, 2013; Mason et al, 2013; Mason et al, 2014). These used a selection of sector characteristics as a structured entrypoint to explore incentives, constraints and opportunities for introducing change. This study added a focus on drivers and patterns of social and economic exclusion to shed light on the policy and institutional changes and investments that are required to promote broad-based and equitable access to WASH services. We asked:

- What are the main drivers of inequality in access to WASH, how do they affect, and how are they affected by broader patterns of inequality and poverty at country level?
- To what extent countries that have made the highest progress in terms of achieving broad-based and equitable WASH access have also made progress in terms of achieving broad-based and equitable growth?
- What are the sector-specific (e.g. technical characteristics) structural and systemic factors (policies, regulations, and informal rules) that have driven and/or hindered progress towards achieving broad-based and equitable WASH access?
- What incentives, behaviours and power relations (and combinations thereof) drive or hinder progress towards achieving broad-based and equitable WASH access?

We adopted a problem-driven approach to PEA. This consisted of identifying a specific problem – in the case of this study, the progress or lack of progress in improving access to WASH for the poorest. We then analysed the structural features that characterise the problem, or the formal and informal policies and regulations and informal

#### **Box 1: Six categories of incentives**

- Oversight: The extent to which oversight systems
  effectively link actors along the service delivery
  chain, expose them to incentives and sanctions
  set by others, and permit them to deploy
  incentives and sanctions for others.
- Coherence: The degree of coherence in policies and processes for implementation in terms of whether they are applied (or can be expected to be applied) in a uniform and integrated manner across time, space and groups of people.
- Autonomy: The capacities and scope to come together to solve shared problems locally, or act individually.
- **Rents:** The availability and distribution of rents i.e. the potential for actors to derive a benefit without contributing productively.
- Credibility: The extent to which competitive advantage, political or otherwise, can be obtained by making and fulfilling commitments to an electorate or another power base.
- Moral hazard: The degree to which risk-takers are insulated from the consequences of their decisions.

Source: Harris and Wild (2013)

rules, as well as how formal rules are informally applied in practice. We also considered power, incentives and behaviours, thus going from what formal and informal rules maintain the status quo, to a deeper interrogation of why those rules, and therefore the problem, persist. Data for the agency diagnosis were primarily gathered through key-informant interviews during fieldwork, and following the six categories of incentive proposed by Harris and Wild (2013) (see Box 1).<sup>2</sup>

#### 1.3. This report: Cambodia case study

This report presents the case study of Cambodia. We focus on sanitation service delivery in Cambodian cities, and look at how and why it improved for the poorest quintile of the population, and who remains excluded. We selected Cambodia in light of its reported good progress in recent years in improving access to urban sanitation in

- Sustainable Development Goal 6 aims to ensure availability and sustainable management of water and sanitation for all by 2030. It has 6 targets specifying the need to improve water quality, increase water-use efficiency across all sectors, implement integrated water resources management, and restore water-related ecosystems. Sub-targets 6.a and 6.b focus on international cooperation and capacity-building support to developing countries, and supporting the participation of local communities in improving water and sanitation management. For more information, see: https://sustainabledevelopment.un.org/sdg6.
- 2 For Cambodia, fieldwork took place from 20th to 29th September 2016. During this period, the researcher conducted key informant interviews with 19 expert interviews who were identified purposively in consultation with WaterAid Cambodia (see appendix 1).

the context of overall impressive economic growth and poverty reduction. Cambodia has exceeded the MDG poverty target and is one of the best performers in poverty reduction worldwide. Its poverty rate more than halved from 53% in 2004 to 20.5% in 2011 (Sobrado et al, 2014). Cambodia's pro-poor growth has also resulted in a decrease of relative inequality, although the gap between the rich and the poor has increased in absolute terms (Sobrado et al, 2014).<sup>3</sup>

Against this backdrop of strong economic growth and increasing household consumption over the past decade, Cambodia has made considerable progress to help people gain access to improved water and sanitation services, most notably in urban areas, where around between 27% and 30% of the population lives (NIS, 2012). The immediate question that springs to mind is what drove this progress? We focused on urban areas as they are the ones in which progress has been most remarkable. Until the 2000s, Cambodia had experienced low rates of urbanisation, especially when compared to the other south east Asian nations, following the anti-urbanism policy of the Khmer Rouge in the 1970s and subsequent decades of civil war, which stalled urbanisation (see Box 2, p.5). However,

urbanisation has rapidly picked up since. The total urban population is projected to increase to around eight million by 2030, with an urbanisation rate of 40%.4 This could threaten current achievements in terms of improved service delivery and access in Cambodia's cities and small towns, with consequences for poverty reduction efforts. Understanding what drove progress in the past is essential to understand what can continue to drive it in the future.

Given that 55% of the urban population of Cambodia is concentrated in and around the capital Phnom Penh, our starting point was to investigate what drove progress in sanitation service delivery and access there. We then compared our findings with the situation of other urban and peri-urban parts of the country. We assessed the challenges that the poorest still face especially in these 'secondary' cities, and explored the urban realities in accessing sanitation, and what other factors cause and contributed to inequalities in accessing sanitation services in urban areas. From the literature, we also observed that while access to improved sanitation has increased, wastewater treatment still represents a problem. Why is this the case, and how are the poorest affected?

The Gini Index decreased from 38.1 in 1994 to 30.8 in 2012, see: http://data.worldbank.org/indicator/SI.POV.GINI?end=2012&locations=KH&start=

Data source: Updated IDPoor Data Round 8 2014 (2015) in WaterAid Cambodia (2015).

# 2.Understanding the problem



### 2.1. Economic growth and poverty reduction in Cambodia

Coming out of three decades of devastating civil conflict (see Box 2), Cambodia has experienced sustained economic growth since the early 2000s (Sobrado et al, 2014). From 2004 to 2011, Cambodia's per capita GDP grew by 54.5%. In 2015, the country's GDP growth rate was still at 7% (Sodeth, 2016). Cambodia's remarkable performance is attributable to a combination of factors,

including sustained peace, a demographic dividend,<sup>6</sup> free trade and open investment policies, and macroeconomic stability – all of which have led and contributed to increases in tourism, construction, the garment sector, agriculture, and foreign direct investment (FDI). The average per capita consumption (in constant 2009 Cambodian Riel CR currency) increased 37.8% between 2004 and 2011, accompanied by improved access to services such as electricity, sewerage or septic tanks and piped water, and increased ownership of consumer goods

<sup>5</sup> In constant 2000 US\$. Source: Sobrado et al. (2014).

Demographic dividend refers to a period with relatively low children and elderly dependence rate and abundant labour force. It is a period when the overall economy shows high labour force participation, saving and labour allocative efficiency rates. Since 1995 Cambodia's window of demographic opportunity has been opened and since then Cambodia is experiencing demographic dividend period in the form of surplus labour. Total dependency ratio (TDR) has started to decline because of the sharp decline of the under 15-years of age from 46.4 percent in 1995 to 36.8 percent in 2010, while the proportion of the elderly is still low but on the rise from just 3.5 percent in 1995 to 5.0 percent in 2010 and to 12.2 percent by 2045. Against the shrinking TDR and ever since 1995 the labour force is on the rise: every year about 211,000 new labourers entered the labour market for the period between 2000 and 2013 (UN, 2013).

#### Box 2: The conflict in Cambodia

It is not possible to understand the socio-economic conditions of Cambodia today without mentioning the impact of the Indochina conflict spanning Viet Nam, Cambodia and Laos, as well as Cambodia's nearly thirty years of internal conflicts and civil war from 1970 to 1999.

The war in Viet Nam started in late 1955, eventually spreading to Cambodia and Lao PDR. After a coup d'état in 1970, Cambodia underwent internal conflict, and most notably the revolution of 1975 that brought the Khmer Rouge's 'Democratic Kampuchea' to power. These years were characterised by forced labour and migration to rural areas, starvation, famine, imprisonment, executions, loss of all personal property, and the attempted purging of the intellectual and professional groups of the country. An estimated two million people died during this period.

The Viet Nam occupation from early 1979 ended the regime of the Khmer Rouge and backed a government later headed by (current) Prime Minister Hun Sen. However, fighting continued with the Khmer Rouge and other anti-state forces until the Paris Peace Accords were signed in October 1991. The 1990s continued with years of strife and political instability for Cambodia. Various political groups, often backed by their own military forces, continued low-intensity fighting in parts of the country until 1999, when the last remnants of the Khmer Rouge surrendered.

These conflicts have had a profound effect on Cambodia. Estimates of the death toll from 1970 to 1987 range from 2.3 to 3.9 million people, or from one-third to one-half of the 7.1 million Cambodians alive in 1970. All urban centres were predominately evacuated of civilian populations in 1975, and as of 2010, Cambodia still had the third lowest urbanisation rate across all 57 countries in Asia.

Source: Sobrado et al., 2014; WaterAid Cambodia, 2015.

such as televisions, cars, motorbikes and mobile phones (Sobrado et al, 2014).

Economic growth in Cambodia was and has been accompanied by remarkable poverty reduction. In the period 2004-2011, poverty rates in Cambodia decreased from 53.2% to 20.5%, surpassing all expectations and exceeding the Millennium Development Goal (MDG) target. This result was possible thanks to government policies promoting access to basic infrastructure improvements (roads, communication, rural irrigation), improvements in rice production (no price controls and no taxes), and the introduction of minimum wages in apparel manufacturing. Rice farming drove poverty reduction in rural Cambodia; from 2004 to 2009, the price of rice (in constant value) increased by 37.1%, boosting farmers' incomes and providing incentives for increasing production. In urban areas, poverty reduction was driven by increased salaried employment, which had reached over 50% by 2011 (Sobrado et al., 2011). According to Strangio (2014), 'cheap labour, untapped markets, and open economic policies have attracted large inflows of foreign investment from China, Taiwan, South Korea, Malaysia, Viet Nam, and Thailand, which have poured billions into the garment, construction, and tourism sectors - the main drivers of the recent growth'.

However, economic growth in Cambodia has also been narrowly based. Manufacturing grew by 18% and construction by 12% between 1996 to 2006, but these industries are usually confined to the small geographical area around Phnom Penh and neighbouring Takhmau7 and the corridor along National Route 4 linking to the main marine port of Sihanoukville. Services performed well, growing at an average of 8.5% between 1996 and 2006, particularly boosted by the growth of the tourism sector. Again, however, benefits remain narrowly concentrated in the city of Siem Reap, the gateway to the Angkor Temples. Agriculture, which remains the main occupation of 55% of Cambodians, grew by less than 5% per year (Hughes and Hu, 2011). The private sector remains dominated by informal and very small enterprises and farms, with only a few large, modern operations<sup>8</sup> (ADB, 2012).

Thus, a recent report by the World Bank noted that although poverty has significantly reduced in Cambodia, the poor 'did not go very far: most moved from being poor to being vulnerable' (Sobrado et al., 2014, 16). Poverty reduction was possible because many of the poor - who were just below the poverty line in 2004 – were able to move just above the poverty line in 2011. Poverty remains concentrated in rural areas, where about 70% of Cambodians live. In Phnom Penh, most poverty reduction has taken place between 2004 and 2007, while in other urban areas, it only started after 2009 (Sobrado et al.,

Whether poverty reduction trends in Cambodia have resulted in decreased inequality depends on the definition and methods used to assess the latter. The Gini Index has decreased from 0.326 in 2004 to 0.282 in 2011. However, the actual wealth gap between the rich and the poor has

<sup>7</sup> Takhmau is the Provincial capital of the neighbouring province Kandal, located roughly 14 km due south of the capital.

The 'Economic Census of Cambodia 2011' reports that less than 1.000 business establishments (908, <1%) in country employed more than 100 workers, with 79% of all identified establishments (~399,056) employing just one or two people, with just 3.4% of the 505,134 establishments identified being formally registered businesses.

#### **Box 3: Measuring poverty in Cambodia**

With the technical support of *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ), the Cambodian government initiated in 2006 the 'Identification of Poor Households' (IDPoor) programme within the Ministry of Planning (MoP). The IDPoor programme aimed to reduce duplication of efforts and resources by different organisations in identifying their target groups for poverty reduction interventions. Its seven-step participatory process to identify poor households should also facilitate acceptance of the selection of beneficiaries among local authorities and populations.\* The IDPoor methodology considers a series of criteria based on households' assets: a household is classified as IDPoor 2 (poor) if it scores between 45 and 58, and IDPoor 1 (very poor) if it scores between 59 and 65.

All rural areas of the country have been covered by the IDPoor programme, and rolling updates of the data are carried out every three years. Government sub-decree 291 of 2011 requires all government agencies, development partners, and NGOs to 'primarily use valid national poor household data' to identify and target poor households.

From the beginning of 2016, the IDPoor programme has started piloting of the developed procedures for implementation in urban areas – as promised in the National Strategic Development Plan (as this had been an identified deficiency).\* A pilot approach is being rolled out and is due to be formally adopted in 2017.\*\* The government covers the costs of the IDPoor process. Donors cover the costs of the technical assistance that is required to enhance and improve the institutional context, for example by funding training to the planning and budgeting committee representative groups to conduct the participatory procedure to identify poor households.\*\* One of the innovations of the new urban process is the inclusion of sanitation as one of the households' asset criteria, with 6 points for no sanitation, 4 for a shared facility, and 0 for having a toilet.

In 2012, the Cambodian government and donors also reworked and updated the country's poverty benchmarks, approach and data from previous Cambodian socio-economic surveys with the aim of better measuring well-being using per capital consumption. Two poverty lines have been estimated: the food poverty line corresponds to the cost of a basic food basket containing a minimum amount of 2,200 kcal/day; and the total poverty line includes the food poverty line plus an allowance corresponding to a minimum of non-food goods and services considered basic for a human being. Households are classified as extremely poor if their daily per capita consumption is below the food poverty line. Households are classified as poor if their daily per capita is below the total poverty line.

Source: WaterAid (2015) and key interviews.

increased in absolute terms (Sobrado et al., 2014). The average per capita daily consumption of the richest 20%

of the population is more than 8 times that of the poorest 20%; 'The gap between the rich and poor is among the widest in Asia, a reality that is immediately apparent to any visitor encountering the designer boutiques and SUV snarls of Phnom Penh at peak hour' (Strangio, 2014). Food price inflation in 2008 disproportionally affected the non-farming rural and urban poor, whose welfare has been further threatened by the adverse effects of the global economic crisis (ADB, 2012). Today, Cambodia's economy is controlled by a 'sprawling network of politicians, military brass, and business families arranged in vertical khsae9, or strings of patronage emanating from Prime Minister Hun Sen and his close associates' (Strangio, 2014). This 'Hunseconomics' has succeeded in 'forging a stable pact among Cambodia's (powerful) ruling elites, but has otherwise done little to systematically tackle the challenges of poverty and development' (Ibid).

#### 2.2. The urban poor in Cambodia

As of 2015, the total population of Cambodia was estimated at 15.4 million, of whom 2.9 million (or 18%) are now officially reported living in one of the country's 27 cities (NIS, 2013). These figures are likely to be underestimated as local authorities usually report only those families and households for whom they have official records ('family books'). A significant number of urban residents are still recorded in family books in rural areas, where they no longer live (WaterAid, 2015). As noted above, other estimates place the urban population at 20-30% of the national total.

The capital Phnom Penh and its growing metropolitan area are home to approximately half of Cambodia's urban residents. Other large cities and towns are Siem Reap (~250,000 inhabitants), Battambang (~150,000 inhabitants) and Poi Pet (~120,000 inhabitants). Most of the other 24 provincial centres and cities have urban

<sup>\*</sup> http://www.idpoor.gov.kh/en/home

<sup>\*\*</sup> Interview with representative of donor organisation conducted in Phnom Penh in October 2016.

<sup>9</sup> The Khmer word for string

<sup>10</sup> Administratively the 25 provincial capitals including Phnom Penh and two border areas, are known as 'Krongs' which interprets into Municipalities/cities.

#### Box 4: Defining 'urban' in Cambodia

Urban settlements in Cambodia are defined based on the following criteria developed by the Ministry of Planning:

- Population density higher than 200 persons/km<sup>2</sup>;
- Total population higher than 2,000 people in each commune:
- Male and female population not employed full time in agriculture higher than 50%.

A 2008 royal sub-decree designated the capital Phnom Penh and 26 Krongs ('cities') in (then) 23 provinces. The sub-decree has since been amended in 2011 as administrative readjustment has occurred (bringing the number of provinces to 25, and Krongs to 27). The reclassification of urban areas that took place in 2011 has resulted in an increase of the percentage of the population living in urban areas from 20% to 27%. It is likely that the numbers living in urban areas have continued to grow since 2008, resulting in the current figure of

The capital Phnom Penh is made up of 12 khans (urban districts) and 97 Sangkats (urban communes). In the rest of the country there are 26 designated municipalities: 24 provincial capitals and two border municipalities. A total of 289 urban communes are reported, including 64 communes outside designated cities that qualify as urban some of which are substantial, with more than 50,000 people.

Source: WaterAid, 2015; NIS, 2012.

populations ranging from 12,000 to 100,000 people

live in urban areas. For Phnom Penh, estimates of the urban poor population range from 168,000 to 257,484.11 Battambang municipality is reported to have 107 informal settlements, with 2,250 poor households (around 10,600 residents; as of 2009) (Goad and Meas, 2012). The Siem Reap municipality estimates that of its 246,000 residents, 17% (or an average of 42,000 people) can be classified as poor (WaterAid, 2015). A recent analysis by the newly established Cambodian Institute for Urban Studies (CIUS)

provides indicative ranges for urban poverty of between 7% (e.g. in Ta Khmau and Khemara municipalities) and 23% in Preah Vihear municipality, based on a comparison of the Government's Sub-National Poverty Rates Estimates approach and what is being reported for the 27 Krongs by the IDPoor programme.<sup>12</sup> The CIUS' study also highlights severe discrepancies between the estimates of poor households of the sub-national administration commune databases and those in the IDPoor's database, which could be due to the fact that the IDPoor programme in urban municipalities is only at pilot stage (see Table A2 in Appendix 2).

However, it is evident that the poverty situation is changing quickly, and rapidly outdating prior reported figures (WaterAid, 2015). After the signing of the Paris Peace Agreement in 1991, large-scale migration to cities started at a very rapid pace from a combination of (i) refugees in the border camps in Thailand and (ii) from the countryside in search employment. This was driven by the influx of funds and opportunities into cities, and particularly Phnom Penh, during the United Nations Transitional Administration in Cambodia (UNTAC)<sup>13</sup> and the large number of international non-governmental organisations (NGOs) who arrived, once the embargo on foreign assistance was lifted as part of the agreements, and foreign investment quickly started to flow in creating additional opportunities.

To make space for Phnom Penh's modern development to accommodate the needs of the rising Cambodian middle class and foreign investors, several waves of evictions have occurred since 1999. An estimated 150,000 people (or approximately 11% of the city's population as of 2014) are reported to have been displaced into some of 54 resettlement sites on the outskirts of the city and beyond in neighbouring provinces (Strangio, 2014). These sites were initially plagued by poor infrastructure and social services. They often lacked proper sanitation and depended on private suppliers for clean drinking water and electricity, although some improvements have been made over the years in some of these settlements, often at the behest of development partners.

A study by the Cambodian NGO Sahmakum Teang Tnaut (STT) found that most people living in informal settlements, both old and new migrants, engage in lowpaid, labour intensive occupations. They are predominately street vendors, food and service workers, rubbish collectors, garment workers, or students. Up to 60% of

<sup>11</sup> The first estimate is based on the 2013 survey conducted by the National NGO Sahmakum Teang Tnaut (STT) according to which at least 33,605 urban poor families live in Phnom Penh alone. Using an average household size of five, this suggests that there are 168,000 urban poor people spread across 340 settlements (STT, 2014). The second figure is provided by the Phnom Penh Urban Poverty Assessment, which the Municipality of Phnom Penh undertook with UNICEF support in 2012 (PPM, 2012).

<sup>12</sup> Based on an analysis of 13 indicators generated by the Government Commune Data Bases for the years 2004-2012 (reported in English is: Komar, S. (2012) 'Poverty Reduction by Capital, Provinces, Municipalities, Districts, Khans and Communes, Sangkats'.

<sup>13</sup> It is reported UNTAC employed 50,000 nationals at one stage to support the first democratic elections held in 1993 under the UN mandate http://www. un.org/en/peacekeeping/missions/past/untacfacts.html.

#### Box 5: Cambodia's revised MDGs for water and sanitation

The Royal Government of Cambodia has adopted localised national goals, known as the Cambodian MDGs (CMDGs), with 2015 targets set for each subsector.\* The global MDG targets for water and sanitation were adapted to the country situation and in some cases acted as intermediary targets to long-term sector goals.

In the case of sanitation, the target was modestly set at 74% in urban areas and 30% in rural areas. For water, the Government of Cambodia set a target of 80% for urban areas and 50% for urban areas. The National Strategic Development Plan 2014-18 contains more ambitious targets of 80% and 60% for urban and rural sanitation, and 85% and 60% of piped access for urban and rural water supply respectively by 2018. The National Strategic Plan for Rural Water Supply, Sanitation and Hygiene (RWSSH) 2014-2025 sets universal access targets for rural water and sanitation by 2025.

Progress toward these targets depends on the definitions of 'access,' 'safe,' and 'improved.' The original MDG targets were presented in terms of 'access to safe water', but this changed in interpretation in 2003 to 'access to an improved water supply'. Cultural differences and local context have further refined the JMP definitions adopted. In the current version of the government's Rural Water Supply, Sanitation, and Hygiene Strategy, the Ministry of Rural Development (MRD), for example, has included protected and filtered ponds as improved water sources. However, shared latrines are not considered an improved sanitation facility even though it is culturally appropriate for an extended family with one or more households to share a latrine facility (Royal Government of Cambodia, 2014b).

\* Note that financing for this approach was supported by the UN in the early 2000s.

Source: ADB (2012); WaterAid (2015); World Bank (2015).

households surveyed reported earning less than US\$ 75 per month – with an average household size of over five members, this means that the average income level is US\$ 0.5 per day per person (UNFPA, 2015). Rents are about US\$ 10 per month per person, and often need to be paid in advance every two or four weeks (STT, 2012). Using the UN definition (UNFPA, 2007), many of these settlements could be classified as slums (STT, 2012). Health problems, including HIV/AIDS and malnutrition are key challenges among Phnom Penh's poor communities (WaterAid, 2015).

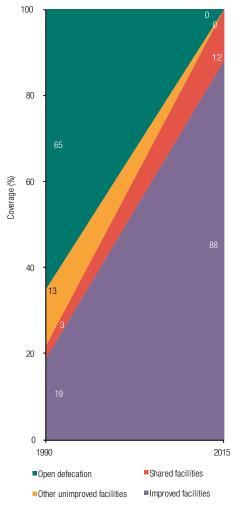
Limited accurate information exists on other vulnerable groups. For example, only 1.3% of the urban population are considered people with disabilities – a percentage that is contested by disability action groups throughout the country (CIPS, 2013). Also, there are at least 3,493 street children, according to a snapshot surveying approach conducted by the Cambodian Street Children's Network in seven of the major municipalities in the country in 2014. It is estimated that 100,801 of the 803,027 children in urban areas nationwide are working, of whom one quarter are involved in hazardous labour activities (O'Leary and Metha, 2015).

#### 2.3. Urban sanitation snapshot

#### 2.3.1. Overview of urban sanitation in Cambodia

Against a backdrop of on-going strong economic growth and increasing household consumption over the past decade, Cambodia has made considerable progress in helping people gain access to improved water and sanitation services, most notably in urban areas. According to the latest estimated data of the Joint Monitoring Programme (JMP update, 2015), Cambodia achieved

Figure 1: Estimated trends of access to sanitation in urban contexts in Cambodia, 1990-2015



Source: UNICEF and WHO, 2015.

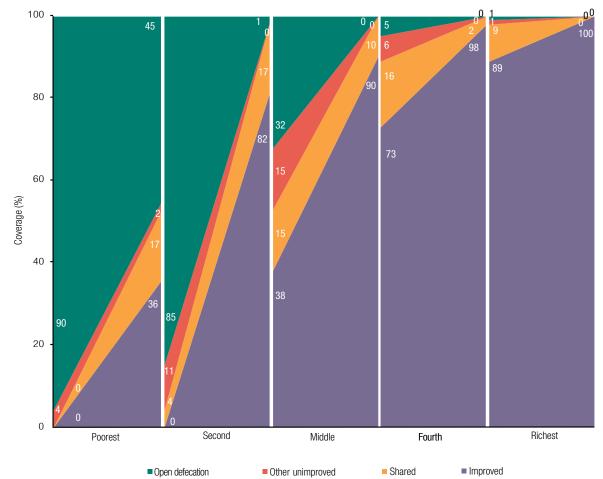


Figure 2: Estimated trends of access to urban sanitation by wealth quintile, 1995-2012

Source: UNICEF and WHO, 2015.

complete coverage for improved water supplies in 2015 (UNICEF and WHO, 2015).14 For sanitation, the total number of people with access to improved facilities has risen from 3% to 42% between 1990 and 2015. In urban areas, 88% of Cambodians had access to improved facilities and open defecation has been eliminated as of 2015, as compared to 19% in 1990 (UNICEF and WHO, 2015). This progress has affected all quintiles, and particularly the poorest ones: for the lowest quintile living in urban areas access to improved sanitation has increased from 0 to 36% between 1990 and 2015; 82% of the bottom 40% (B40) have now access to improved sanitation (from 0% in 1990)15.

Despite the impressive gains in access, disparities remain especially between urban and rural populations, and between the poorest and better-off groups of the society. For example, in urban areas, universal access to sanitation among the richest compares to only the 53% of the poorest quintile having access to improved sanitation (36% to private toilets, 17% to shared facilities) (UNICEF and WHO, 2015) (Figure 2). In addition, while access to improved sanitation is estimated at 100% for Phnom Penh, it is only 75% in other cities. It is also worth considering this progress against the performance of other countries in Southeast Asia. Doing so highlights that Cambodia has one of the lowest sanitation coverage rates in the region, and the highest per capita losses attributable to poor sanitation. In 2005, the total annual financial loss due to poor sanitation and hygiene was about \$160 million equivalent to \$12 per capita. The annual economic impact of poor sanitation in Cambodia was about \$448 million (in 2005 adjusted values), which amounts to about \$33 per capita per annum in economic loss, or about 7.2% of Cambodia's GDP in 2005 (Kov et al., 2008).

It is estimated that less than 2% of the total urban population are currently served by sewer and treatment systems that are connected to a functioning wastewater treatment plant (World Bank, 2015). One of the most pressing challenge in urban Cambodia, as in many East Asian cities, is in fact to ensure that faecal matter is safely

<sup>14</sup> However, data from the 2013 Cambodia Inter-Censal Population Survey and Cambodia Socio-Economic Survey, however, highlight that 8% of the population in urban areas are still defecating in the open, and 3% use some form of unimproved sanitation (NIS 2013; 2014).

<sup>15</sup> However, it is questioned how the official JMP baseline/benchmarked figures could have ever been zero in 1990 as nearly all the provincial capitals had established either in colonial time or during the 1950's and 1960s.

#### **Box 6: The success story of Phnom Penh Water Supply Authority**

The case of the Phnom Penh Water Supply Authority (PPWSA) is generally heralded as an example of a global best practice of a water utility in a developing country. While initial investments and improvements began soon after the Paris peace accord in 1991, the experiment took a leap forward through a law passed in 1996 which granted legal autonomy to the PPWSA. Subsequent reforms of the urban water sector centred on changing the societal culture of free water usage to a market based one, characterised by producer/consumer relation, and reorganising the internal functioning of the agency based on donors' recommendations with respect to financial and human resource management; and measuring output efficiency in technical terms.

Over a few years, PPWSA had successfully extended reliable and affordable services to 85% of Phnom Penh residents. Siem Reap followed suit with the establishment of an autonomous utility, by 2014 just ten water works functioned under the Ministry of Industry and Handicrafts (MIH), while licensed or concessional private water operators served 16 other municipalities and urban centres.

According to Hughes and Hu (2011) a key factor for the success of the PPWA has been that the 1996 law separated policy and other responsibilities for piped water from significant vested political interests. This facilitated the implementation of reforms driven by the World Bank, ADB, JICA and AFD. Autonomy prevented higher-level politicians and officials from interfering in PPWSA financing, staffing and planning. PPWSA was also able to control its own procurement procedures, and to generate and maintain a healthy revenue stream that could be used to reward staff. Technical staff were elevated to the board, and performance incentives were introduced and attached to pay scales. Key to these was the leadership role of Ek Sonn Chann, a high-ranking politician whose 'age and experience' (Hughes and Hu 2011, 201) allowed him to transform the expectations and practices of his staff internally, and to ward off interference from outside.

Today, with the support of development partners, the focus is shifting from project investments towards a complementary focus on building institutional and human capacities of water service providers (both from the public and from the private sector) to advance the professionalism of the urban water utility sector; 'PPWSA is a great example of pro-poor investments in the WASH sector (even during the mass evictions of the mid-2000s, PPWSA was able to supply informal settlements thanks to its expanded network); its success has also been due to the massive investment and confidences of donors into it' (key informant interview).

While the private water operators sector is growing, challenges remain concerning their technical and managerial performance, as well as accessing finance for expansion and new scheme developments. Regulation and sector monitoring remains deficient with limited capacities and available resources within the Department of Potable Water Supply of the Ministry of Industry and Handicraft.

Source: Hughes and Hu (2011); World Bank (2015); interviews.

collected, transported out of the residential environment, treated and safely disposed of. While significant improvements have been made in reported urban sanitation coverage, septic systems are often reported to operate ineffectively resulting in the failure of septic tanks and direct disposal of faecal matter into waterways and open drains. Urban household sanitation investments have been supported in the past by some of the larger donors, namely the Asian Development Bank and the World Bank Group as well as others (UNHABITAT, and some NGOs), through project based approaches. <sup>16</sup> However, the primary focus of financed larger projects has generally been on water supply (see Box 6).

For waste water management, Phnom Penh had previously used natural lakes and lagoons as treatment facilities before discharging to the riverine system. However, urban pressures have resulted in many of these 'lakes' being filled in for development. Additionally, the natural treatment capacities have been far exceeded, turning these lakes and ponds in toxic areas, which

have progressively silted up, as no sludge removal was undertaken. While 'new' waste water treatment plants have been built in two of the leading provincial municipalities, less than 5% of the household populations of Siem Reap and Sihanoukville have been served by a wastewater treatment plants, as households have been often unwilling to connect due to low willingness-to-pay. In Battambang, an older treatment plant theoretically serves its entire catchment area, but is not functioning due to a lack of operation and maintenance funds (World Bank, 2013).

For the large number of urban residents using on-site facilities (septic tanks, soak-pits) a combination of public and private contractors are available for the removal and disposal of septage; and some municipalities also offer this service. In Phnom Penh there is a sanitary landfill managed by a private operator where tankers can safely dispose of septage for a fee, but it is common for waste to be dumped indiscriminately (ADB, 2012). The arrangements for applying and collecting fees for wastewater management is not standardized across the country. In Phnom Penh,

<sup>16</sup> For example, through the ADB financed Provincial Towns Improvement Project (1999-2007), which support 1,503 HH latrines and the World Bank's Provincial and Peri-Urban Water Supply and Sanitation (2003-2011) which supported 7,147 household latrines by project end, and post redesign.

#### **Box 7: Different governance levels of urban WASH**

Besides Ministries at the national level, government offices at the sub-national level also have responsibilities in the urban water and sanitation sectors:

- Provincial Departments of Industry and Handicrafts are responsible for providing technical support and training of municipal staff and private water providers. While the Departments of Public Works and Transport should be doing the same for sanitation, they mainly focus on the construction of related public infrastructure in terms of sewers/drains and more recently in treatment.
- Municipalities and district/khans are responsible for working with Public Water Authorities or private water suppliers to provide and expand access to and use of piped water supplies. They also play a role in encouraging users to connect to drains and sewers where these exist. However, levels of understanding of urban sanitation issues remain low.
- Communes/sangkats are responsible for reducing poverty through use of sangkat funds, most of which are currently used for roads (but some could be used for WASH, although there are numerous other competing demands on the limited resources made available to communes/ sangkats).

Source: WaterAid (2015)

PPWSA collects sanitation fees through a fee of 10% on the water bill. Outside the capital, water supply and wastewater fees are generally collected separately on the basis that water supply coverage is still low and recovering wastewater charges only from network users would place a heavy burden on a small customer base (World Bank, 2015).

#### 2.3.2. The legislative framework for urban sanitation

Over the past decade, Cambodia has put in place several reforms aimed at creating institutions and setting up relevant policies and strategies to achieve its WASH objectives. The National Policy for Water Supply and Sanitation (NPWSS), passed in 2003, was the first document providing direction for improved service delivery in both the urban and rural subsectors (Royal Government of Cambodia, 2003). It was jointly prepared by the Ministry of Industry, Mines and Energy (MIME) (now Ministry of Industry and Handicrafts (MIH)) and the Ministry of Rural Development (MRD) and was approved/ adopted by the Council of Ministers. It included policy provisions establishing the government as the regulator of the sector, and the role of communities in managing their water supply and sanitation facilities and services. It further introduced demand-driven and pro-poor approaches for service delivery, and gave an enhanced role to the private sector based on the principles of transparency and competition (Royal Government of Cambodia, 2003). For urban sanitation, the NPWSS supported and promoted the development of appropriate technologies and infrastructure to meet user demand and affordability, and the progressive linkage of onsite and neighbourhood sanitation systems to zonal and citywide ones. It also encouraged the establishment of a sanitation management hierarchy from household to communes/ sangkats and the ministry (WaterAid, 2015).

The more detailed National Strategic Development Plan (NSDP) 2014-2018 went one step further in defining concrete objectives in terms of water and sanitation coverage for both rural and urban areas (more than 80% for sanitation) to be achieved by 2018 (Royal Government of Cambodia, 2014a). It earmarked \$305 million from the national budget to cover the financial requirements for urban 'water and sanitation.17 The Rectangular Strategy for Growth, Employment, Equity and Efficiency, currently in its third phase since its launch in 2004 (Royal Government of Cambodia, 2004), also envisaged a more active role of the government in the development of urban infrastructure. However, it only made cursory mention of water supply and sanitation.<sup>18</sup> While a sector-related strategy for urban water is being developed by the MIH<sup>19</sup>, a similar strategy for the urban sanitation sector is non-existent, reflecting the lack of clear leadership and commitment at and by ministerial levels, likely due to the lack of responsibilities

<sup>17 &#</sup>x27;Table: 5.3 Allocation by Sector and Sub-sector of Total Investment based on NSDP 2014-2018', Chapter V: Costs, Resources and Programming (NSDP Pg212)

<sup>18</sup> From Rectangular Strategy Phase III: 'Further expanding the coverage of clean water supply to the rural and urban areas through the rigorous implementation of 'The National Strategy for Rural Water Supply and Sanitation 2011-2025', including formulation of a clear action plan and encouraging participation from the private sector (page 25 section82 (6).

<sup>19</sup> The Ministry of Industry and Handicrafts is developing an 'Urban Water Supply Sector Strategy', aimed at providing clean water supply in urban areas, including to the poorest; it supports the introduction of private sector partnerships, of integrated urban water supply and environmental management, and of provisions to strengthen the management of publicly-owned water supply agencies. Source: WaterAid (2015).

and demarcation of who is responsible for the first step in the urban sanitation ladder.

Finally, it is worth noting that Cambodia has an evolving process of de-concentration and decentralisation, which started during the United Nations administration of Cambodia in 1992-1993. The 2005 'Law on the Administration and Management of Commune/Sangkat' (Royal Kram NS/RKM/301/05) attributed Communes and Sangkat the mandate to develop, manage and implement their development plans (see Box 7). The 2008 'Law on Administrative Management of the Capital, Provinces, Municipalities, Districts and Khans' colloquially called the 'Organic Law' (Royal Kram No. NS/RKM/0508/017), also gave them administrative responsibilities for planning, implementation, and financing of infrastructure, services and development in general - under the coordination of the National Council for Sub-National Democratic Development (NCCD), housed within the Ministry of Interior (MoI) (Denney, 2016).

Table 2 below presents the key actors with roles in WASH in Cambodia. The MIH and the MPWT are the most significant ones. Ministries all have departments at provincial level and may have offices at district level responsible for the delivery of sector-related activities, coordination and technical support.

The MPWT is responsible for policy, planning, coordination and the implementation of infrastructure investment projects. In 2011 the Department of Sub-National Public Infrastructure and Engineering was established to set technical standards and tariffs for urban sanitation.<sup>20</sup> However, this department is still in the early stages of development and is not yet fully staffed and resourced. Provincial departments of MPWT are responsible for planning, project implementation, and the operation and maintenance of drainage, sewers and treatment facilities. Improving on-site sanitation and the safe collection, management, treatment and disposal of faecal sludge does not appear to rank high on the priority list of the MPWT and/or cities themselves. There does appear to be some private sector involvement in faecal sludge management, but its coverage is apparently limited and largely goes unregulated

### 2.3.3. The bottlenecks to pro-poor sanitation service delivery in urban Cambodia

Cambodia has made good progress in reducing poverty thanks to a positive process of economic transformation and growth. However, inequalities have remained high, especially between rural and urban areas, and within urban areas. The current economic growth is based on the manufacturing and services sectors, but this has also encouraged a generation of new urban 'renters'. These largely settled down in informal settlements, at risk of eviction, and excluded from access to basic service delivery, including water supply and sanitation.

Our study identified several patterns that determine the current situation of the urban poor in Cambodia with respect to access to improved sanitation:

- 1. Progress in urban areas is largely driven by progress in Phnom Penh, masking the situation in other urban centres. In addition, exact data and information on levels of access to basic services such as sanitation in informal settlements is missing, and 'pockets of inequalities' are hidden.
- 2. The urban sanitation sector has been characterised by incoherent mandates/responsibilities, in turn resulting in the lack of strategy and policy inputs to drive the subsector, especially as compared to urban water supply. NGOs and donors have focused on sanitation in rural areas, less so in urban ones. The sanitation discourse is mostly linked to drainage/flood protection and framed as a health and or environmental issue.
- 3. While overall access has improved, it still excludes large shares of people living in peri-urban/informal settlements in cities. In addition, not enough investment has been made into the rest of the sanitation chain, and particularly faecal sludge management. These services tend to be provided by small-scale private operators, without appropriate regulatory and control mechanisms, and often at an unaffordable cost for the urban poor.

In the next section, we apply political economy analysis concepts and tools to explore these patterns in greater depth.

<sup>20</sup> The Department of Sub-National Public Infrastructure and Engineering has 3 offices: (i) Office of Planning and Techniques for Wastewater (ii) Office of Wastewater and treatment plant and solid waste management, and (iii) Office of Sewerage system treatment to set technical standards and tariffs for urban sanitation

Table 1: Key actors in the WASH sector in Cambodia

Sector	Actor	Role
Overall	Ministry of Economy and Finance	Responsible for allocating annual and national budgets to sectors; responsible for financial management of the two autonomous state water supply operators, and the approval and repayment of development loans and credits that have been used to build and expand public sector facilities.
Overall	Ministry of Interior (MoI), National Committee for Democratic Development (NCDD)	Responsible for sub-national administration, planning and development processes through its network of appointed heads (Governors) of provinces, districts and endorsing the elected commune chiefs, and villages leaders. It is also responsible for leading and supporting the implementation of the government's decentralisation and de-concentration framework and the 'Organic Law' (through its Secretariat for the National Committee for Democratic Development). It functions according to a demand-responsive approach from 'tier four' upwards* for the use of development funds, including the provision of sanitation
Overall	Ministry of Water Resources and Meteorology (MOWRAM)	Responsible for water resources planning and management, hydrological flood control and water extraction licences. It is organised in three directorates: inspection, administration and technical affairs. Six departments report to the Directorate of Technical Affairs, including the Department of Water Supply and Sanitation.
Overall	Ministry of Industry and Handicrafts (MIH) (formerly the Ministry of Industry, Mines and Energy, MIME)	Its Potable Water Supply Department is responsible for regulating urban piped water supplies and private sector concessions.
Overall	Ministry of Planning	Responsible for guiding and managing national socio-economic development planning, managing the government's statistical functions, and monitoring and implementing plans and national programs in all sectors (including for MDGs/SDGs).
Overall	Ministry of Health (MoH)	The mandate of the Department of Preventive Health is intended to cover environmental health issues, including setting thresholds for water supply and sanitation, though these roles are currently undertaken by the responsible line Ministries (MIH, MRD, MoE),
Urban sanitation	Ministry of Public Works and Transport (MPWT)	Responsible for urban drainage, sewerage, and has responsibilities for wastewater treatment, solid waste management, roads, etc.
Urban sanitation	Ministry of Environment (MOE)	The Department of Pollution Control (including provincial departments) regulates and monitors the quality of effluent passing to natural waterways or storm-water drain sand is meant to license all operators transporting and/or discharging septic waste.
Urban sanitation	Ministry of Land Management, Urban Planning and Construction (MLMUPC)	Responsible or checking the architectural design of new developments for sanitation and wastewater treatment arrangements. For all new developments, the developer applies to MLMUPC or its local offices depending on the scale of the development for approval for architectural design of sanitation services and septic tanks infrastructure. The MLMUPC has a checklist of approval parameters — it must seek the approval of the MIH for the technical design of the water supply arrangements for large scale developments and with MPWT for drainages and sewage systems. Once approvals have been obtained, a permit is issued and the work may proceed under the supervision of the relevant departments. Once the work is completed, the MOE, or its provincial department, monitors the quality of effluent being discharged from the system.
Rural water/sanitation	Ministry of Rural Development (MRD)	Responsible for rural development, including rural water supply (Department of Rural Water Supply) and hygiene and sanitation including in peri-urban areas (Department of Rural Health Care, DRHC). Each of the 27 krong (cities) has a Department of Rural Development delivering these services for the rural portions of the cities.

Sector	Actor	Role
Interagency coordination units	Water and Sanitation Sector Working Group	Chaired by the Director of the Department of Rural Water Supply in the MRD, this working group meets monthly to exchange information and discuss technical issues. It is attended by other MRD departments, NGOs and some development partner representatives.
Urban sanitation	ADB	Leading multilateral financing institution in the sanitation sector, funding numerous projects in urban areas under its umbrella of financing covering economic corridors (southern and central). Major recent projects: recent projects: Solid waste management in Phnom Penh Wastewater treatment plant in Siem Reap and now in at least five corridor towns (municipalities), via Second GMS Corridor Towns Development Project Integrated Urban Environmental Management in the Tonle Sap Basin Project GMS Southern Economic Corridor Towns Development Project
Urban water and sanitation	JICA	Key donor in the urban water and sanitation subsector; major lending projects: Niroth water treatment facility near Phnom Penh, and the expansion of the Siem Reap water supply system. A third project involves the rehabilitation and expansion of water distribution systems in the provincial capitals of Pursat, Battambang and Sihanoukville. Major investment in the combined sewer drainage system in Phnom Penh and a feasibility study on waste water treatment plant.
Urban water and sanitation French Development Age (AFD)		Urban drainage system in Siem Reap Support to urban water: New water treatment plant in Phnom Penh, provided support for private sector water suppliers through favourable credit terms and technical assistance; ongoing support to Phnom Penh Water Supply Authority.
Rural and Urban water and sanitation	Water and Sanitation Program	One of the leading multilateral actor supporting the rural and urban water supply and sanitation sub-sectors.
Urban sanitation	UN-Habitat	Provided financial and technical assistance for several projects through community-based projects in emerging urban areas. Initially four priority towns - Kampong Cham, Svay Rieng, Pursat and Kampong Thom, later expanded
Urban sanitation	UNICEF	In the process of developing an urban programme in Phnom Penh, may include sanitation, will target parts of one Khan/district only. It broad child centre mandate and issues affecting give it a nationwide supporting mandate in both rural and urban areas
Urban sanitation	International agencies and NGOs	WaterAid, Community Management Development Partners (CMDP), Community Empowerment Development Team (CEDT), Centre for Development (CDF), Habitat for Humanity Cambodia, World Vision Cambodia (WVC), Groupe de Recherches et d'Echanges Technologiques (GRET), Bremen Overseas Research and Development Association (BORDA), have all undertaken urban sanitation projects with varying degrees of success.
Urban sanitation	CSOs	At least 239 CSOs actively implementing projects in Phnom Penh alone, most which focusing on poverty alleviation.

<sup>\*(</sup>i) National, (ii) Provincial, (iii) District/khan, (iv) Commune/sangkat, (v) Village.

# 3. Political economy analysis of urban sanitation in Cambodia

#### What has driven progress in the urban sanitation sector?

#### 3.1.1. Individual incentives and historical legacies driving progress in access to improved sanitation

A World Bank study conducted in 2015 revealed that improvements in urban sanitation access have been achieved largely through private self-supply investments in on-site facilities (World Bank, 2015). In cities, most people have access to improved sanitation; those that can afford it built their own toilet or rent a house that is already provided with a toilet (which is common in Phnom Penh and other old cities, as this was standard practice in the French colonial era). They may pay private operators for performing de-sludging services, although current levels of de-sludging activities do not appear to correspond to the reported levels of sanitation coverage in urban areas, suggesting that many households do not dispose of their waste material safely.

Progress in access to improved sanitation in urban areas, which occurred largely through self-supply, resulted from a number of interconnected factors. Houses and institutions in cities generally had sanitation infrastructure from the colonial period; more generally, the urban population has been more accustomed to improved sanitation, and hence is more keen on investing in it. The increased levels of wealth of urban households, a sub-product of the economic growth that has characterised Cambodia in the 1990s and 2000s, also contributed to raising the willingness to invest in household sanitation. However, this means that poorer households may remain excluded from improved sanitation as they may not have the financial means to

access it. Many poorer households are constituted of rural migrants; as open defecation has typically been the practice in rural areas of Cambodia, they may not see the need to invest in on-site sanitation facilities.

Compared to access to improved sanitation facilities, progress in terms of safe disposal and treatment of excreta material has been more limited. A few donors such as the Japanese International Cooperation Agency (JICA) and the Asian Development Bank (ADB) have been at the forefront of project-based investments in large-scale infrastructure, for example in critical flood protection measures, as well as sewer and waste water systems.21 However, urban sanitation has typically been the 'orphan child' of donors' investments in Cambodia, as water service delivery, road or energy infrastructure have been prioritised to a much larger extent.<sup>22</sup> Investments have focused on the capital Phnom Penh as 'Phnom Penh was the only real urban centre of Cambodia, and it was easier for donors to exploit economies of scale and benefit a large amount of people with one investment.'23

#### 3.1.2. Fast urbanisation drives renewed interest in urban sanitation

In recent years, the fast rate of urbanisation of other cities has become clear to both donors and the Government of Cambodia. The National Institute of Statistics (NIS), part of the Ministry of Planning, had to undertake two reclassifications of urban areas in 2004 and 2011. In response, ADB is supporting public sector infrastructure such as wastewater treatment plants and sewer network in Bayet, Poipet, Kampot, Battambang and Pursat. International NGOs like WaterAid are also redirecting

<sup>21</sup> Interviews with representatives of donors' organisations conducted in Phnom Penh in September and October 2016.

<sup>22</sup> The World Bank's Water and Sanitation Programme (WSP) estimated that urban sanitation needed about US\$86.7 million per year annual capital investment between 2012-2025, while anticipated public capital expenditure (Capex) was likely to be US\$5.9 million, leaving an annual deficit of US\$79 million. This investment is needed to cater for the projected 275,000 people per year needing sanitation in urban areas (Table 2.2 WSP 2015).

<sup>23</sup> Interview with representative of donors' organisation conducted in Phnom Penh on 20th September 2016.

their urban sanitation focus towards secondary cities.<sup>24</sup> The Government of Cambodia is raising the awareness of provincial and district governors of the importance of including investments in sanitation infrastructure in their development plans.<sup>25</sup> Partly, this renewed interest in urban services and infrastructure has been driven by the international agenda of development partners, which is paying increasing attention to cities under the SDGs. In the case of Cambodia, the mass evictions of the 2000s have also highlighted the importance of improving service delivery in informal and peripheral urban settlements, to contain and prevent conflict. However, infrastructure investments alone do not explain the significant progress in terms of access to improved sanitation facilities registered by the JMP between 1990 and 2015.

#### 3.2. When data masks inequalities

# 3.2.1. Lack of reliable data on inequalities: an obstacle to programmatic approaches to inclusive urban sanitation

Our analysis critically revealed that the available and reported data on improved access to urban sanitation do not tell the full story. Large pockets of urban Cambodians remain excluded from adequate and safe sanitation. This means that progress for the poorest may be less impressive in reality. In turn, the lack of reliable data was found to be one of the factors paralysing effective decision-making to tackle inequalities, limiting investments in urban sanitation from the government and donors' side. Admittedly, this last point refers more to progress in terms of faecal sludge management, rather than provision of sanitation facilities to households (which has largely been driven by selfsupply). However, as noted above, the lack of investments into proper sewerage and wastewater treatment systems risks compromising gains from improved access for the poorest and especially those living in informal settlements.

A first problem with the data relates to the JMP statistics themselves or rather their interpretation. Some respondents noted that 'the starting point of a 3% (national) sanitation coverage in 1990 or 19% in urban areas was unrealistically low; provincial capitals definitely had higher rates, as houses were built following the French planning guidelines, which included sanitation'. <sup>26</sup> One

possible explanation for this is that after decades of civil war, the government did not have accurate demographics and socio-economic data; the NIS conducted a socioeconomic assessment of the country in 1994, but some parts of the country were still inaccessible due to the civil conflict. With a lower baseline, the relative progress registered was too optimistic; 'the reality is that, for instance, around 40% of the households in the outer khans of Phnom Penh do not have access to sanitation - in fact, there are no latrines at all'.27 A recent study conducted by WaterAid estimated that 11% of households in Phnom Penh do not have access to improved sanitation, but may share a neighbour's toilet (WaterAid, 2015). The conflated progress in terms of access to improved sanitation in urban areas may have hidden the extent of the problem to the government as well as donors, directing interventions and investments towards more priority areas such as flooding, or waste collection.

### 3.2.2. Incoherent and incompatible approaches to data and information use for monitoring

Another issue is that the CDHS, CSES and national censuses all use different definitions and, in some cases, methodologies for data collection, implying that their results cannot be easily compared. Some donors and government departments plan and target their interventions based on JMP statistics, which in turn use CDHS data.<sup>28</sup> Data collection used for national planning and reporting purposes is reliant on annual CSES surveys, with more in-depth assessments every five years, or when national censuses are undertaken every 10 years;<sup>29</sup> 'one of the problems we face is that the wealth quintile breakdown of data on access to water and sanitation services is not available on a yearly basis, unless some NGO, donor or government agency commissions secondary analyses, and this rarely happens.'<sup>30</sup>

This means that there is no agreement on how many poor households exist in urban contexts, where exactly they are located, to what services they have access, and how their situation changes over time. For example, the Urban Poverty Reduction Office of the Municipal Department of Planning in Phnom Penh has reported the existence of 215 organised urban poor communities (2015 data). Some of our interviewees reported that 'this is misleading because it excludes those communities that

<sup>24</sup> Interview with NGO representative conducted in Phnom Penh on 26th September 2016.

<sup>25</sup> Interview with representative of government conducted in Phnom Penh on 28th September 2016.

<sup>26</sup> Interview with international organisation representative conducted in Phnom Penh on 27th September 2016.

<sup>27</sup> Interview with representative of NGO conducted in Phnom Penh on 27th September 2016.

<sup>28</sup> Interview with representative of government conducted in Phnom Penh in October 2016.

<sup>29</sup> Interview with representative of government conducted in Phnom Penh in October 2016.

<sup>30</sup> Interview with representative of NGO conducted in Phnom Penh on 27th September 2016.

#### **Box 8: Land titles in Cambodia**

The legal framework related to land ownership, rights and land tenure is based on the principles set out in the Cambodian Constitution, which under Article 44 states, 'All persons, individually or collectively, shall have the right to ownership. Only Khmer legal entities and citizens of Khmer nationality shall have the right to own land.' The legislative framework is further developed in the 2001 Land Law and supplemented by various sub-decrees, prakas, circulars and administrative documents.

The Constitution recognises that all persons, individually or collectively, have the right to private ownership. It provides for protection against arbitrary expropriation, requiring that privately-owned land can only be confiscated in the public interest, and only on the condition of fair and just compensation. The 2001 Land Law extends private ownership rights to residential and agricultural land, but retains state ownership over natural resources and the forests.

In reality, it is very difficult to obtain exact figures on recognised and registered title land and property. An analysis of a government district level dataset\* indicates that an average of 38% of urban households may have secure titles for property, ranging from single figures to a high of 96% of households in Pursat municipality. In urban areas, what have become known as 'soft titles' are endorsed and recognised at the level of communes/ sangkat but they are not official legal titles, and can be easily be disputed or disregarded at district, provincial and national level – especially if more profitable investments by more prominent individuals or companies are at stake. In urban areas, even less people have land titles as renting in multiple occupancy buildings is common.

Some donors like the World Bank and GIZ, had been working with the government to reform the land right regime in Cambodia. There have been successes and failures; for example, the World Bank suspended its activities in 2009 and halted the provision of loans for six years because of abuses in the systematic titling approach. The wave of mass evictions of the 2000s resulted in the approval of a Circular in 2010 (on the Resolution of Temporary Settlement on Land Which Has Been Illegally Occupied in the Capital, Municipal, and Urban Areas - more easily known as Circular #3). Initially foreseen as a tool to standardise the treatment of evictees, Circular #3 has since taken on a wider role defining measures ranging from identification of so-called illegal settlements, to provision of on-site upgrading and resettlement combined with basic service provision. Some see the Circular as an opportunity - perhaps the only opportunity - for households located on state public land to be possibly rendered legal. However, little guidance has been given on how to undertake the formal process, and, to date, there seems to be little documented evidence of the Circular #3 having been applied to recognise the land title of an individual or community.

\* MoP (2013) IND District for score http://www.mop.gov.kh/CMDGsScorecard/tabid/217/Default.aspx

Source: WaterAid 2015; Authors (from key interviews).

are not self-organised and yet exist, and has set a threshold that excludes communities with less than 30 households.'31 The incongruence between figures on poverty and access to sanitation and other services hampers the establishment of a sound data base on which accurate planning of investments can occur. It also opens the way to the manipulation of data with the goal of distributing resources based on political allegiances, rather than real needs.

The deficiencies in the monitoring and evaluation system are partly linked to capacity issues in the relevant government agencies and department at all levels from national through provincial and district levels. While improvements in some sector monitoring and evaluation

systems have taken place (e.g MAFF, MoWRM and MRD) this has been due to line ministries being supported by development partners such as the ADB.32 A joint effort is now being made by the MoP and MoEF to harmonise their reporting requirements to try and complement each other.<sup>33</sup>

An attempt at addressing this problem will be made through the rolling out of the new urban poor identification module for the IDPoor programme in 2017. Many NGOs, nevertheless, remain sceptical of its results, mostly because it does not consider informal settlements, as authorities do not recognise them.<sup>34</sup> According to the IDPoor database, for the 26 official urban municipalities and eight of the 12 khans of Phnom Penh, the total urban poor figure is of 57,605 poor households, with only

<sup>31</sup> Interview with representative of international organisation conducted in Phnom Penh on 27th October 2016.

<sup>32</sup> Interview with representatives of government conducted in Phnom Penh in September and October 2016.

<sup>33</sup> Interview with representative of government conducted in Phnom Penh in October 2016.

<sup>34</sup> Interviews with several respondents conducted in Phnom Penh in September and October 2016.

15,146 poor households in Phnom Penh. <sup>35</sup> NGOs' figures report ten times this figure (WaterAid, 2015). In addition, it is the sangkats who decides which households go on the IDPoor list, so data may be skewed for political reasons. Sometimes, IDPoor statistics may be even inflated by the sangkat authorities to justify spending. <sup>36</sup>

### 3.3. Precarious livelihoods for the urban poor

# 3.3.1. Structural reasons excluding people from sanitation markets: rapid urbanisation, employment opportunities, and tenure security

Some categories of people are more vulnerable than others, and our interviews highlighted the existence of 'pockets' of people that remain excluded from sanitation services. Their vulnerability is largely dependent on the geography of where they live (as expected, the peripheral and periurban areas tend to remain un- and under-served), the type of work they are doing (low-paid and/or temporary jobs oblige people to rent poorly serviced accommodations), and other social factors such as gender, age, and disability.<sup>37</sup> Our analysis highlighted that those that remain excluded from sanitation services, either by not having on-site improved sanitation facilities, or by not being served by the faecal sludge management system, largely live in informal settlements in urban areas. These people are often employed in low-paid and irregular jobs (garment factory workers, tuk tuk drivers), and live in slum-like accommodations. Their precariousness does not give them an incentive to mobilise collectively to demand for better services and also serves as an excuse for government authorities not to invest in service extension to these areas.

Of particular concern is the situation of renters, or people that come to Phnom Penh or other Cambodian cities to work in garment factories and end up sharing unhygienic and unserved accommodations in peripheral areas of Phnom Penh or other cities. The agreed minimum wage of garment workers, typically young women from rural Cambodia, is of \$140 per month (for 2016). There are numerous reports of them working six 11-hour days per week, while the statutory maximum before overtime is 48 hours for six permissible days' work. Workers live in small room with

other 3-4 people; sanitary facilities are 'shared' with other rooms within the building, and each of them serves 10-15 people, or more.<sup>38</sup> Despite the recent agreement to raise the minimum apparel workers' wages to \$153 per month for 2017, unions and labour advocates argue that wages remain below the cost of living. Small hikes in garment wages are often matched by an immediate increase in rent and utility costs by landlords; 'even within the factories, employers care about productivity and profit, not about the well-being of their workers; often the sanitation conditions are miserable, for example women can go to the toilets once a day, or there are no proper sanitation facilities on site and little or no consideration of women's menstrual hygiene needs'.<sup>39</sup>

Interviewees also noted the persistence of an inherently negative perception from the government's side of migrants and the urban poor. Their precarious economic conditions relegate them to the periphery of the city, often in informal settlements where they lack any form of tenure security. One of Cambodia' leading think tanks in a report (2006) previously stated that 'both the authorities and the better-off city dwellers tend to blame the poor for their wretched conditions and stigmatize the poor as socially undesirable, criminally inclined, even mentally defective. The usual response from middle-class people and from officials is that the urban poor should be sent back to the rural areas where they belong' (CICP, 2006).

The tenure issue is thus key to understand why some people remain excluded from basic services such as sanitation in urban Cambodia. The problem refers especially to those communities that are living on state private land. Because they do not own the land, they cannot formally apply for connections to services. Furthermore, they are subject to the risk of eviction if the government decides to use that land for other purposes.<sup>40</sup> In fact, while the rate and pace of evictions has slowed in Phnom Penh in recent years, the threat often remains and evictions are increasingly occurring in other urban areas of Cambodia. This may imply that utilities are less keen on delivering services to informal settlements, as they can be moved at any time. The PPWSA is an exception to this; its 'Water for the Poor' programme represented a commitment from the outset to supply water to poor households, including in informal settlements, by offering subsidized tariffs and connection fees (see Box 6) (WaterAid, 2009).

<sup>35</sup> The incomplete IDPoor review (which covered 220 of the 225 identified urban communes across 27 municipalities in 2012), reported figures of 62,019 IDPoor households in 2012, meaning 276,891 people were identified as being poor. The World Bank's 2013 poverty assessment reports that total urban poverty (Phnom Penh and other urban areas) was 30% in 2004 and 9% in 2011. To extrapolate this would indicate that 51,000 urban households across the country are poor (256,000 people), which roughly aligns with the above government figures.

<sup>36</sup> Interviews with several representatives of NGOs and international organisations conducted in Phnom Penh in September and October 2016.

<sup>37</sup> Interviews with representatives of international organisations and NGOs conducted in Phnom Penh in September 2016.

<sup>38</sup> Interview with representative of NGO conducted in Phnom Penh on 25th September 2016.

<sup>39</sup> Interview with several representatives of NGOs conducted in Phnom Penh in September 2016.

<sup>40</sup> The Cambodian State can own two different types of land: public state land is generally used for the construction of schools, hospitals, etc.; private state land is destined to other uses – for instance, it can be sold to investors. Only the Ministry of Economics and Finance has the right to convert public state land into private state land, thus detaining the control on what investments take place on government's land.

#### 3.3.2. Patronage relationships shape allocation of goods and services, further marginalising more vulnerable citizens:

This situation is further complicated by the fact that poor people living in informal settlements often come from the rural parts of the country, where they remain officially registered; 'informal settlements remain invisible.'41 As unofficial inhabitants, without land titles, renting small rooms without a contract, earning the bare minimum for living, these people do not have a voice in the development plans and processes that affect their communities. This also makes the numerous evictions and relocations of urban poor communities to unserved and far away settlements possible;42 'especially in Phnom Penh, the drive for development has put economic interests ahead of everything else, and especially the rights and needs of the poorest people who have been evicted from valuable lands with little in the form of compensation'.43

The government's tepid response to the criticisms and demands for better process after the wave of evictions in the mid to late 2000s consisted in the approval of Circular #3 in 2010.44 Demanded by the GIZ, which at the time was implementing a land reform programme in Battambang, Circular #3 was initially foreseen as a tool to standardise the treatment of evictees. It soon took on a wider role defining measures such as the identification of so-called illegal settlements, and the provision of on-site upgrading and resettlement combined with basic service provision. Many see the Circular as an opportunity – perhaps the only opportunity – for households located on state public land to be possibly rendered legal. GIZ made the implementation a key part of their continued support to the Government of Cambodia. However, the procedure spelled out by the Circular #3 is so complicated that few if any communities<sup>45</sup> are reported to have been able to follow it to the point of obtaining recognition. In addition, the very few decisions that have been made under Circular #3 appear to have been made with the support and approval of the Prime Minister, independently from whether communities managed to get to the end of the process. Circular #3 also does very little for renters as the options it sets for claiming home ownership in settlements are onsite upgrading, relocation, or other forms of resolution based on the local conditions (WaterAid, 2015; see also Box 8).

#### Who is in charge with urban 3.4. sanitation?

#### 3.4.1. Lack of government-owned policy programme for addressing inequalities in urban sanitation

Addressing the sanitation needs of the urban poor, or those that remain excluded from these services, does not emerge as a priority for the government of Cambodia at either national or subnational levels. Sanitation tends to be conceived in its environmental and health dimension, as opposed to economic, and addressed through interventions in drainage infrastructure and only recently in wastewater management. At subnational levels, larger infrastructure projects such as roads and irrigation have received far more attention in commune plans (see box 7), and sanitation projects have rarely if ever made the cut for funding. Our interviews highlighted that the government's plans and initiatives to target the urban poor remain ad hoc and subject to the personality and interest of individuals in power at local and/or national offices; 'sanitation becomes a political concern when it represents an environmental hazard that threatens the properties and investments of the wealthier citizens, or tourists as in the case of Siem Reap'.46

One of the key reasons for this situation seems to be the lack of a comprehensive sanitation sector strategy and investment plan for urban areas - conversely to the situation in rural areas (where the National Strategy for Rural Water Supply, Sanitation and Hygiene 2011-2025), or for the water sector (the 2010 Urban Water Supply Sector Strategy). The Phnom Penh Municipality is in the process of developing a sanitation investment plan, but this is not the case for other cities in the country.<sup>47</sup> Donors also bear some responsibility for this. They have supported the development of the water and sanitation sector in Cambodia, especially since the end of the civil conflict in the 1990s. They have in particular focused on the development of strategies and investment plans for rural water and sanitation, and in large-scale infrastructure and capacity-building in the urban water subsector (as illustrated by the case of the PPWSA). However, their assistance to institutional development for urban sanitation has been minimal.

<sup>41</sup> Interview with representative of NGO conducted in Phnom Penh on 27th September 2016.

<sup>42</sup> Interview with representative of international organisation conducted in Phnom Penh on 27th September 2016.

<sup>43</sup> Interview with representative of NGO conducted in Phnom Penh on 27th September 2016.

<sup>44</sup> The Circular is a five-page document that mentions a seven-step process through which the occupation of state land (both public and private) in urban areas can be 'resolved'. The term 'temporary settlement' is used to describe what are elsewhere termed 'urban poor'.

<sup>45</sup> There is official documentation of one Circular #03 process having been undertaken and completed for a community in Battambang with 50 households.

<sup>46</sup> Interview with representative of NGO conducted in Phnom Penh on 23rd September 2016.

<sup>47</sup> Information from key interviews conducted in Phnom Penh in September and October 2016.

### 3.4.2. Unclear roles and mandates for urban sanitation

At the same time, the lack of clear institutional responsibilities for the urban sanitation sector is one of the factors discouraging donors from engaging in the first place. The MRD has responsibilities for rural sanitation: they coordinate the provincial and communal action plans and collect data on the sanitation situations for monitoring purposes. In urban areas, there is no such ministry with a similar mandate, as noted in the WSP's Water and Sanitation Sector Financing Strategy for Cambodia (2010-2028) (WSP, 2010). A respondent in the MPWT admitted that 'there is a gap in terms of the mandate on urban sanitation, and there no attempts at filling it (at present)'.48 The main and strongest mandate formally lies with the MPWT, which is responsible for urban drainage, sewerage, and wastewater treatment. However, the MLMUPC is responsible for checking the design of new developments for sanitation and wastewater treatment arrangement. This creates confusion and often conflict between the two institutions, especially when it comes to operating and managing wastewater treatment facilities that can generate revenue.<sup>49</sup> The partial progress of decentralisation reform creates further confusion. If, as the decentralisation reform would require, responsibilities for urban sanitation were delegated to local level authorities, then the Ministry of Interior would be the key player at the national level.

In addition, the sector remains dependent on donors' investments as it does not generate sufficient revenues on its own to meet it demands. A World Bank report noted that 'funds for urban sanitation are inadequate, and budgets do not distinguish capital investment and subsidies for O&M support as gap-stoppers for inadequate revenue collection' (World Bank, 2015). According to policy, the population of Phnom Penh pays for wastewater management services through a surcharge on the PPWSA's water bill; no other town has a similar system in place, and even in Phnom Penh there is no evidence that this fee is actually allocated for sewage; 'the financial component is always added to infrastructure investments afterwards, yet it would be the most important one to consider; when you involve the Ministry of Finance, they take all the revenue and do not reinvest in the sector.'50 The lack of demonstrated revenue generating potential may be another factor contributing to the lack of interest of any Ministry to take a clear lead.

### 3.4.3. Lack of coordination mechanisms between donors and government

Appropriate coordination mechanisms in the urban sanitation sector are also missing. Donors, NGOs and government agencies are part of several technical working groups, for example on urban infrastructure (led by the MPWT), and rural WASH (led by MRD). However, these function to a different extent, mostly depending on their leadership; 'the technical working group on infrastructure has met once or twice in several years; that on rural WASH has been very active, discussing relevant issues such as climate change impacts on water supply in rural areas, and coordinating interventions'. In parallel, government agencies and development partners coordinate on a bilateral basis. Overall, however, 'it is hard to know what other actors in the sector are thinking or doing'. 52

Faced with fragmentation, donors pick different Ministries and agencies as their counterparts; for instance, the ADB channels its investments through the MPWT, while the World Bank has collaborated more closely with the MIH, and focused especially on water: 'for development partners, urban sanitation has always been an add-on'.'53

#### 3.4.4. Lack of collective action on urban sanitation

Our analysis revealed that incoherence in the institutional arrangements leads to a collective action problem in which neither donors nor government are willing to make the first move to prioritise the sector; 'donors say the fragmented approach to urban sanitation investments is due to the lack of coordination between ministries; ministries blame the lack of coordination between donors; in reality, each actor has its own agenda and it is not in their interest to coordinate.'54 While progress can and has been driven by private self-supply, and hence does not require strong collective action, addressing inequalities does; it requires proactive initiative and interventions from the government (which should have a social mandate to serve all its citizens) as well as donors supporting the sector, and the citizens themselves who should be organising and demanding for better services.

The lack of collective action was also visible in terms of community mobilisation. One of the reasons for this is that the link between lack of proper sanitation and health issues is difficult to spell out and be understood by people.

<sup>48</sup> Interview with government representative conducted in Phnom Penh on 26th October 2016.

<sup>49</sup> However, the MPWT is now taking a more proactive stance to address this lack of clarity in the attribution of responsibilities for urban sanitation: it is drafting a joint sub decree on sanitation management at the provincial level with the Ministry of Interior, as well as a sanitation law for discussion with the Council of Ministers (source: Interviews with key respondents from governments conducted in Phnom Penh in September 2016).

<sup>50</sup> Interview with representative of government conducted in Phnom Penh on 24th September 2016.

<sup>51</sup> Interview with donor conducted in Phnom Penh on 24th October 2016.

<sup>52</sup> Interview with NGO representative conducted in Phnom Penh on 23rd September 2016.

<sup>53</sup> Interview with respondent from international organisation conducted in Phnom Penh on 27th September 2016.

<sup>54</sup> Interview with NGO representative conducted in Phnom Penh on 26th September 2016.

Health figures at the municipal level tend to be poor and unreliable. The only official data come from public health services at health posts and referral hospitals, but these are not the first port of call for the sick, who usually rely on private providers, clinics and pharmacies that are more present in urban areas. Few studies have been conducted to address the link between poor sanitation and certain types of illnesses in urban Cambodia.55 There is also a case of communicating this type of data to citizens so that they can start demanding better services from the authorities in charge; 'if we can show that the lack of sanitation including in informal settlements affects the health and well-being of all urban dwellers, political action would follow. This was what happened in Siem Reap, where the municipal governor moved the project for a wastewater treatment station forward to avoid the negative repercussion of bad sanitation on tourism'.56

There have been very few instances of public mobilisation around sanitation issues. The NGO People In Need (PIN) has attempted to improve the sanitation and environmental situation of Phnom Penh's outer districts delivering latrines and increasing knowledge of sanitation practices in target communities. However, they commented that 'it is very difficult talking about sanitation there; these communities are situated in flood-prone zones, so people there see latrines as a hazard; you would need to build high-rise toilets, but they cost too much'. 57 The fact that people living in low-income and/or informal urban settlements that are subject to the constant threat of eviction also acts as a disincentive for them to think of investing into their communities. Equally, they do not rely on, and hence do not demand, the local government to provide for better services.

Interestingly, some instances of collective action around sanitation can begin to be seen in the case of Phnom Penh. Newspapers such as the Phnom Penh Post have denounced the poor sanitation condition of the city: 'it is an all-too common sight to see men relieving themselves against walls across the city, due to the lack of public restrooms'.58 As people in Phnom Penh enjoy a higher quality of life, they demand for better services, too, including public toilets; 'citizens become increasingly aware that bad sanitation has consequences on their health and on the environment in which they live; also everyone prefers living in a clean

city'.59 Pushed by demands from the rising middle-income class, the municipality has embarked upon several plans to 'beautify' the city, which have included the upgrading of public toilets, and putting 'Do Not Defecate' signs in parks and other public spaces.

#### 3.5. An incomplete decentralisation process

#### 3.5.1. **Decentralisation to improve service delivery?**

The decentralisation and deconcentration process that is ongoing in Cambodia has been, to date, undermined by capacity and financing challenges. This has made it difficult for the government to use it as a framework to increase local accountability and responsiveness. For urban sanitation, this has fundamentally meant that local authorities at sangkat level have not played a proactive role in promoting sanitation service delivery to their constituencies, including addressing the needs of the poorest and most vulnerable.

Local authorities, as part of their general mandate for poverty reduction, could - and already are to a limited extent - play a role in water supply and sanitation (and are increasingly held responsible for health and hygiene issues) with support from provincial departments, but the capacity for planning implementation and monitoring is weak at subnational level (WaterAid, 2015). On a yearly basis, commune councils submit a list of their needs to the district and provincial authorities during an integration workshop, ideally to align inputs and requirements. Based on the results of these workshops, communes and sangkats are authorised to implement their projects with the commune funds, which are provided by the government through the Commune/Sangkat Fund.

In 2016, the Commune/Sangkat Fund total allocation was \$76 million, which was on average \$467,000 per commune or sangkat per year. Provinces received an average of \$9 million per year, and districts/khans/ municipalities were allocated an average of \$132,000 per year. 60 According to legislation, 30% of the total budget is supposed to cover staffing and administrative costs. 61 Even with an increase of 13.5% to the Commune/Sangkat Fund compared to 2015, this does not leave much to communes

<sup>55</sup> One recent study in poor communities in Phnom Penh (PPMIAUP 2014), supported by UNICEF, indicated that children in slum communities were at significantly higher risk of diseases linked to poor sanitation than other children in the city. It reported a prevalence rate of 40% of children having a diarrhoeal illness, 73% having fever and 61% having the symptoms of a respiratory infection in a two-week period.

<sup>56</sup> Interview with representative of donor organisation conducted in Phnom Penh on 25th September 2016.

<sup>57</sup> Interview with representative of NGO conducted in Phnom Penh on 25th September 2016.

<sup>58</sup> http://www.phnompenhpost.com/post-property/phnom-penh-sanitation-caught-short.

<sup>59</sup> Interview with representative of NGO conducted in Phnom Penh on 25th September 2016.

<sup>60</sup> See: NCDD Annual Work Plan and Budget 2016.

<sup>61</sup> According to Articles 12, 28 and 29 of the Commune Administrative Law, each Commune/Sangkat Council should have from 5 to 11 members, based on demography and geography, and based on a sub-decree of the Ministry of Interior. In addition, each commune/sangkat shall have a clerk, and can employ staff outside the state framework to assist its affairs depending on necessity.

and sangkats to spend on service provision for their citizens. Most of the investments are for infrastructure construction projects, although, at least on paper, there seems to be a recognition of the need to 'consider financing non-infrastructure activities related to the provision of social services, in cases where this is demanded by their jurisdiction'. 62

Adding to the lack of resources, communes and *sangkats* often lack the administrative capacity and accountability mechanisms to respond to the demands of their constituencies; 'subnational administrations do not have sufficient technical capacity and resources; they would need more guidance from the national level.'63 Despite a recent increase in the monthly salary for provincial, district and commune councillors, as well as village chiefs, assistants and members, their salaries remain pretty low, ranging from \$300 for senior posts at provincial level, to \$56 for village chiefs.64 This does not encourage commitment and responsiveness to citizens' demands and needs. From their side, communities do not fully understand the benefits of sanitation and therefore do not demand for it; 'needs at subnational level are about roads, schools, and hospitals'65. People living in informal settlements come from rural areas, where open defecation used to be the predominant practice. From our discussions with people in informal settlements at the outskirts of Phnom Penh, sanitation does not seem to be high on their priority list; they are more concerned with solid waste management, especially during the rainy season when large parts of the informal settlements are flooded.

#### 3.5.2 Fragmented markets for FSM

For peri-urban areas and informal settlements, desludging is mostly done by informal service providers if at all<sup>66</sup> and these are not regulated in terms of price and quality of the service – 'these are small private operators; you call them, they send a truck with a tank of about 4,000 litres to remove the septage'.<sup>67</sup> In Phnom Penh, it is possible on payment of a fee for operators to discharge the contents of the tanker at a sanitary landfill site where the contents are covered with earth in a managed private sector operation. Alternatively, and as is the standard in provincial towns, tanker operators dump the contents at an unregulated site where no fee payment is required and the travel distance

is shorter. While discharge standards exist, compliance is not subject to ongoing third party monitoring, though the Ministry of the Environment is said to conduct annual checks. Thus, only the 40% of the wastewater that is collected is estimated to be treated (World Bank, 2015).

Also, and as noted in the previous section, the key government and donor stakeholders in the urban sanitation sector lack a strategic vision and coherent institutional framework to address the entire sanitation value chain, from collection to management, treatment and disposal of faecal waste, including on-site solutions (World Bank, 2015). In particular, the issue of faecal sludge management is not reflected in the NSDP 2014-2018, nor does it feature amongst the priorities of the MPWT. Our interviews revealed that there is not a consensus on how sanitation and wastewater services are best managed, regulated and delivered by local service providers.

There are also structural factors that contribute to excluding informal settlements from faecal sludge management services. The density of informal settlements and the cost of transporting the material to proper treatment sites (when these are available) are major factors that determine what faecal sludge management solutions prevail in urban contexts. For example, smallscale operators, quite common in Phnom Penh, Siem Reap and other major urban centres, are reluctant to engage in informal settlements or small towns, where they cannot realise economies of scale as the number of households to serve is too low.<sup>68</sup> There are also technical barriers to expanding the coverage of sanitation services to informal settlements and peri-urban areas. The issue of fluctuating groundwater levels is common, as many of the urban municipalities (an average of 12 out of 27) are located on flood plains, where rising groundwater during the monsoon season lifts the contents of usually unsealed pour flush pits and septic tanks, and overflows result in the contamination of surrounding areas. All these factors combine to leave informal settlements largely uncovered, which has severe health and environmental implications; 'when flooding occurs, the lack of proper faecal sludge management services becomes a severe hazard; children often fall sick as they are exposed to a contaminated environment'.69

<sup>62</sup> See: NCDD Annual Work Plan and Budget 2016.

<sup>63</sup> Interview with representative of NGO conducted in Phnom Penh on 25th September 2016.

<sup>64</sup> http://www.khmertimeskh.com/news/31691/gov---t-increases-allowance-for-provincial--commune-officials/.

<sup>65</sup> Interview with representative of NGO conducted in Phnom Penh on 25th September 2016.

<sup>66</sup> Most ring latrines are unsealed, which allow liquids to percolate into the surrounding soil in the dry season, but can easily overflow in the monsoon when groundwater levels rise dramatically ending up close to or overflowing onto the surface

<sup>67</sup> Interview with NGO representative conducted in Phnom Penh on 24th September 2016.

<sup>68</sup> Interview with NGO representative conducted in Phnom Penh on 22nd September 2016.

<sup>69</sup> Interview with NGO representative conducted in Phnom Penh on 24th September 2016.



#### 3.6. **Incentives to address inequalities in** urban sanitation

A useful way to sum up our analysis of the factors that promote or hamper progress in terms of improving sanitation access for the poorest and the most vulnerable people in urban areas in Cambodia is through the framework of analysis proposed by Harris and Wild (2013) (see Box 1, page 11).

#### 3.6.1. Oversight

Oversight systems are weak - there is little to no monitoring of sanitation conditions especially in informal urban settlements. For wastewater treatment, there is no monitoring of how much excreta goes into treatment facilities, and desludging services, mostly provided by small private operators, are not subject to any form of regulation, nor control. Decision-making at various levels of government is influenced by party politics – it is thus not transparent and excludes key stakeholders, and especially the poorest and most vulnerable that often have no representation and hence no voice to inform the decisionmaking process with their needs. The decentralisation reform, initiated in 2008, is slowly increasing the role of local authorities (sangkat), which are given a budget to spend on development projects, so that they can be more responsive to demands from their communities. However,

they still have limited capacity and budget to perform their roles.

#### 3.6.2. **Coherence**

For urban sanitation, there is a low degree of coherence in policies and processes for implementation. Clear institutional mandates are also missing, with urban sanitation falling under the areas of competence of several ministries. Moreover, the sector is characterised by poor coordination of funding and planning amongst government, donors and NGOs. Most of the progress in terms of access to improved sanitation in urban areas that is reported by the JMP data is driven by self-supply, and is mostly concentrated in Phnom Penh, while other cities in the country have remained excluded. Recently, nevertheless, their rapid economic and, consequently, demographic growth has attracted investments from donors in large-scale infrastructure for wastewater treatment and sewage and drainage. Pro-poor initiatives remain driven by international and national NGOs and focus on some communities, and some vulnerable groups of people, excluding others.

#### Autonomy 3.6.3.

The literature highlights a political and economic model of decision-making that is characterised by a strong control from the governing party and Prime Minister

Hun Sen (Hughes and Hun, 2011). This top-down and rent-seeking political model means that sanitation follows behind other priority areas that are more prone to generate revenue and give visibility to the government in the eyes of donors especially. In urban sanitation, this has meant investments in large-scale infrastructure, but without parallel attention being paid to decentralized systems that can more easily reach especially those communities living in more peripheral areas. Despite the decentralization reform, aimed to deconcentrate service delivery closer to the people, sub-national governments have de facto little real autonomy in terms of budget expenditure. The government's budget for urban sanitation itself largely depends on funding from donors. Donors' interventions, nevertheless, have occurred in an uncoordinated fashion, which reduces their potential role in putting sanitation in the government's agenda.

#### 3.6.4. Rents

Many commentators have described the Cambodian state as 'neopatrimonial' (Hughes and Hun, 2011; Global Witness, 2016). For urban sanitation, this fundamentally means that it will remain a low priority area unless it can provide opportunities for profit. This has not been the case to date. Existing wastewater treatment stations need to run with government subsidies before reaching cost-recovery; they are not as attractive as water supply authorities, especially in small towns with lower and more dispersed population. This results in limited investments in their maintenance and operation, in turn threatening their longterm sustainability. A model to increase the cost-recovery rate of wastewater treatment stations has been attempted in Phnom Penh, linking it up with the revenue stream of the PPWSA. However, replicating this model in small towns, and without a proper legislative and institutional framework in place to prevent and sanction predatory behaviour, this could give rise to conflicts between authorities for who manages the revenue, and how/whether it gets effectively reallocated for wastewater management.

#### 3.6.5. Credibility

As sanitation services are organised in fragmented markets (self-supply prevails, desludging services are provided by small-scale private operators), clients do not have a strong hold over their chosen service provider, and often pay higher prices for services of lower quality. In addition, the neopatrimonial political and economic context of

Cambodia results in politicians gaining and securing their power bases via clientelism, rather than fulfilling policy commitments to provide public goods and services. Even if citizens, including the most vulnerable, had a voice in demanding for better services, it may not be a good enough incentive for the government to act on it.

#### 3.6.6. Moral hazard

While the state does have a formal administrative structure that is underpinned by the rule of law, accountability remains weak, both across different parts of the state and between the government and its citizens (Hughes and Hun, 2011). Decisions on investments are taken at the Cabinet level. The decentralisation reform has only been partial, giving local authorities increasing responsibility to define their development agenda based on the demands coming from their constituencies, but with low budget and capacities to implement any significant change. There remains little political and fiscal incentive for the local authorities to be responsive to their citizens. There are also embedded discriminatory attitudes among government representatives about poor people and especially those living in informal settlements; their precarious situation is not deemed worth concentrating investments into permanent sanitation infrastructure and services.

#### 3.6.7. Collective action

In Cambodia, the role of the civil society in keeping government accountable has not been very strong. NGOs and civil society organisations have been vocal in highlighting the issue of informal settlements and evictions, but they lack consistent organising or facilitating force. In addition, the government has often opposed, and repressed in certain cases, demonstrations around certain topics, evictions being one of them. It keeps a tight control over the activities of local and national NGOs. Generally, the poor and disadvantaged people lack representation at government level, or are even deliberately excluded by government authorities, as in the case of people living in informal settlements. This has not favoured collective action and mobilisation amongst the poor, and especially those living in informal communities, to demand better sanitation services. In certain cases, this can also be attributed to the fact that demand for sanitation services is low, as some of the poorest and most vulnerable urban dwellers come from a rural background where open defecation used to be the practice

# 4. Conclusions

#### **Inequalities in accessing sanitation** in urban areas in Cambodia: why do they persist?

After exiting decades of civil war, Cambodia has experienced remarkable economic progress and poverty reduction in the last two decades. This is attributable to a combination of factors, including sustained peace, demographic growth, free trade, open investment policies and macroeconomic stability. This has led to increases in tourism, construction, the garment sector, agriculture, as well as attracting foreign direct investment. Poverty reduction has followed, with poverty rates decreasing from 53.2% to 20.5% in the period 2004-2011, exceeding the MDG target.

However, as noted by a recent (2014) World Bank's study, the poor 'did not go very far'; poverty reduction was possible only because many of those who were just below the poverty line in 2004 moved just above the poverty line in 2011. They thus remain highly vulnerable to economic, climatic, and political shocks. In addition, this positive outlook masks rising inequalities, embedded within a political economy context that promotes the exclusion of many for the benefit of few. The wave of mass evictions occurring especially in Phnom Penh in the 2000s revealed the vulnerability especially of that large proportion of the population moving from rural to urban areas to look for job opportunities, and settling in informal settlements on the outskirts of the city and often deprived of basic

These contradictions are reflected in the sanitation sector. The data shows substantial progress in guaranteeing access to improved sanitation to Cambodians, including the poorest ones. These have been linked to the general improvement of living conditions in cities, and in particular in the capital Phnom Penh. Progress has been driven by the investments of wealthier urban households in on-site sanitation. Economic transformation and growth have further attracted the attention of the government and donors to service delivery cities, and primarily Phnom Penh and Siem Reap (for tourism), but also cities along the economic growth corridor (Bavet, Poipet, Kampot, Battambang and Pursat). This has resulted in project-based investments in large-scale infrastructure for wastewater management, as well as sewerage and drainage systems.

The distinction between what could be achieved via self-supply and those aspects of service provision that

require collective and often public involvement was central to understand why some categories of people remain excluded from progress in terms of sanitation service delivery. If sanitation is left to households' investments, the poorest households will likely not be able to provide for themselves. Equally, the government has not effectively invested in sanitation infrastructure and provisions to ensure inclusive access. The geography where people live (peripheral and peri-urban areas tend to remain unserved), the type of work they do (low-paid and/or temporary jobs oblige people to rent poorly serviced accommodations), and other social factors such as gender, age, and disability add and reinforce such patterns of exclusion. We found several reasons why these inequalities persist, looking at the sector-specific, structural and systemic factors, as well as the incentives, behaviours and power relations that hinder progress towards expanding sanitation access to the urban poor.

- Data on inequalities is not available and/or well communicated.
- Poor users tend to live and earn their living precariously, reducing opportunities for collective mobilization.
- Incoherence in the institutional arrangements leads to a collective action problem in which neither donors nor Government are willing to make the first move to prioritise the sector.
- Decentralisation is ongoing but not very effective, undermined by capacity and financing challenges and an inability to use it as a framework to increase local accountability and responsiveness.
- Planning and implementation of lower-cost/pro-poor alternatives to sewerage undermined by lack of strategy; lack of data; unwillingness to pay (and government oversight to regulate/ subsidise); physical/ technical issues; all finally compounded by lack of solid evidence on costs of inadequate sanitation.

The drivers of inequality in the case of urban sanitation in Cambodia are both structural and inherent in the WASH system. People that already live at the margins of society, for reasons that are deeply rooted in the economic, political and social trajectory of the country, are further excluded from accessing basic services such as sanitation.

Rapid economic growth can provide additional income to people that can afford better services; this may well be one of the forces behind the increased rates of access

to improved sanitation as more and more urban dwellers have started gaining a high enough income to build a toilet in their house, or move to houses with toilet facilities incorporated. But rapid economic growth can also result in the unplanned growth of cities, and the consequent failure of service providers to comply with the increased demand. The most peripheral areas, where the poorest generally live, are the first ones to be left out. The difficult issue of land tenure, with which Cambodia, like many other developing countries, still needs to get to grips with contributes to the exclusion from service delivery of those people living in informal settlements.

Addressing inequalities in access to services requires a strong commitment from the government's side, eventually with the support of donors and civil society actors. Sectoral policies and strategies can promote action and attract investments, but need to be embedded in a wider political economy context that is open to pro-poor reforms. The neopatrimonial nature of the state has not been conducive to these kinds of reform to date, and this has resulted in a lack of incentives to address the needs of those with less voice to influence the political process. For different reasons, linked to their informality and invisibility, as well as instances of explicit discrimination from the authorities' side, the poorest and most vulnerable have not been able to organise collectively to demand improved services. Those doing it in their name (NGOs and civil society organisations) have faced repression and constantly battle against a lack of resources and capacity to fulfil their mission. However, our analysis also identified some windows of opportunity, or entry points, for advancing the urban sanitation sector and ensuring that progress is not only for some, but truly for all.

#### 4.2. Entry points for change

Our analysis highlighted that one of the bottlenecks to address urban sanitation in Cambodia is that it fails to attract the attention - and thus the investments - of government and donors alike, due to the lack of immediate visibility of its impacts, as well as its capacity to generate revenue streams for utilities and, ultimately, government authorities. 'Framing sanitation' right could, therefore, be an essential element to consider for donors and NGOs to push urban sanitation on top of the priority list of key sectoral actors. For example, as both citizens and government at local and national level in Cambodia seem to prioritise drainage (due to flooding issue) and waste management, these could be entry points to introduce (or re-introduce) a discourse on urban sanitation. This should be understood not only in terms of centralised infrastructure for wastewater treatment, but also decentralised on-site management. It would also be important to demonstrate the impacts of lack of sanitation in terms of human health - to create the demand for improved services.

Civil society organisations and NGOs would be well-positioned to seek policy coalitions to take advantage of this framing and raise the awareness and interest of the government in sanitation generally and for poor users in particular. For example, they could seek alliances with organisations that are active in the sectors of flood protection and drainage – eventually in connection to climate change adaptation/disaster risk reduction – and demonstrate the costs to cities for tourism and lost business revenue if these issues are not tackled in an integrated manner. For organisations with a presence in both the water and sanitation fields, one entry point could be through the institutional framework for the urban water sector, which is more established than for urban sanitation one, and already has a pro-poor focus.

Donors can play an important role in 'shaping the debate', as they are doing in bringing the climate change agenda to the attention of the government. However, more coordination is needed between them, as well as with the Government and ministries they are supporting. The urban infrastructure working group could be the forum where these discussions happen, but needs to be revived, and given clear leadership that takes it forward in a proactive way. One way to encourage relevant actors to engage in this forum could be by proposing sessions on specific topics of relevance to the urban sanitation sector, or on specific areas such as informal settlements in Phnom Penh, or secondary cities, or to leverage upon the incentives that each actor has for action in the sector. Examples of city sanitation planning that have occurred in other countries, such as Indonesia, could be also worth exploring for the Cambodia context (ISF-UTS & SNV, 2016).

Similarly, the local investment planning consultation can provide an entry point for introducing change. Local authorities may be more likely to take an interest in sanitation than national ministries. The decentralisation system allows needs to be expressed from the bottom up but requires: a) to be matched with adequate resources and capacity at the local authority level (not just dependent on willingness of one influential individual to act); b) to be accompanied by investments in awareness creation and behavioural change to create 'demand' for sanitation (not just toilets but FSM too); and c) be protected by the neopatrimonial/clientelistic system. Civil society and nongovernmental organisations with a presence on the ground could play a role for example in understanding what is needed to encourage prioritisation of sanitation, working as a broker between sangkat authorities and citizens in a selected number of sangkats. If sanitation emerges as a priority, there could also be a role for them to advocate with national-level authorities to allocate more resources to the sangkats specifically to address sanitation issues, for example through the establishment of a special fund.

It is also important to initiate the right sector and nonsector reforms to address bottlenecks to urban sanitation for the urban poor. Priority should be given to reforms aimed at making sanitation financially viable (like water and energy). In turn, this would attract the Government's attention and thus resources to the sector. One option is to replicate the Phnom Penh model (10% of revenue from water fees, collected by the PPWSA, goes to cover the costs of wastewater treatment facilities) in other small towns. This would require an effort from the government's side, bringing together the different ministries at national and municipal levels, to figure out what system for revenue collection and budget allocation can work best. It is also fundamental to establish appropriate safeguards to avoid rent-seeking behaviours that would hinder the efficiency of the sector. Civil society organisations, NGOs and donors could support by commissioning or conducting studies to explore opportunities to engage FSM operators on a commercial basis, at least in bigger cities where they can benefit from economies of scale.

It is also crucial that efforts at removing the bottlenecks in the urban sanitation sector are embedded into reforms aimed at guaranteeing tenure security, especially to people currently living in informal settlements. Organisations in the water sector should collaborate with others working on land tenure issues and property rights, particularly for the poorest, to create a stronger voice that demands reform at the national level. Circular #3 is a good first step, but our analysis revealed that a lot more work needs to be put into its concrete operationalisation. Advocacy efforts need to be carried out with competent authorities at national and local levels to issue guidelines to enable communities to comply with the requirements of the Circular #3 process– a prerequisite to be able to access high quality, reliable and affordable services. There is also a need to raise awareness about the very existence of Circular #3 among citizens and

their representatives at community level, so that they can exercise their rights.

To support these reform processes, advocacy efforts need to be rooted in a more thorough understanding of responsibilities and incentives operating at different levels of the government. Especially in a context like Cambodia, characterised by partial decentralisation, it would be important to identify opportunities for participatory planning processes, and capacity-building needs of locallevel authorities that can be addressed. At the national level, one potential entry point is the more open attitude and commitment to respond to popular demands of the ruling Cambodian People's Party (CPP) after the general elections of July 2013, mostly as a move to contain the rise of the primary opposition party (Denney, 2016).<sup>70</sup> Although it is not yet clear how significantly Cambodian politics is likely to change in the wake of this newfound interest in public opinion, some positive developments are occurring<sup>71</sup>, and should be leveraged upon by the civil society to convince the government to take issues like sanitation more seriously.

In addition, NGOs and donors can act as a broker and catalyst for better information on service delivery performance for the poor and excluded. For instance, it could pilot new methods of data collection (e.g. social media/SMS surveys for poor urban households), work with trusted entities and rights groups to help them use that information effectively, and ally with other service sectors to highlight wider gaps in service provision to poor and excluded groups. Finally, civil society organisations and NGOs are best positioned to focus and highlight the situation of some categories of excluded.

<sup>70</sup> In the general elections of July 2013, the primary opposition party - the Cambodian National Rescue Party - won 55 seats in Parliament, nearly doubling its previously held 29 seats and transforming itself into a serious political actor that the incumbent CPP must contend with. The CPP won 68 seats, down from 90 in the previous elections - equivalent to a loss of approximately 2.56 million votes. In: Denney (2016).

<sup>71</sup> For example, since the 2103 elections, the NCDD has redoubled efforts to deliver improved services to local populations – widely explained as being due to the CPP's need to be seen to respond to popular demands to maintain power in the 2017/18 local and national elections. In: Denney (2016).

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### **Annex 1: list of interviewees**

#### **Table A1: List of interviewees**

Organisation	Place and date of interview
People in Need	Phnom Penh, 22 September 2016
Centre for Development (CfD)	Phnom Penh, 22 September 2016
WaterAid Cambodia	Phnom Penh, 26 September 2016
UNICEF	Phnom Penh, 27 September 2016
UNCEF	Phnom Penh, October 2016
Ministry of Public Works & Transport, General Directorate of Public Works	Phnom Penh, 26 September 2016
UN Habitat	Phnom Penh, 20 September 2016
Community Empowerment Development Team (CEDT)	Phnom Penh, 23 September 2016
Urban Poor Women's Development (UPWD)	Phnom Penh, 27 September 2016
Worker's Information Centre	Phnom Penh, 23 September 2016
World Vision Cambodia	Phnom Penh, October 2016
GIZ	Phnom Penh, October 2016
Ministry of Interior (MoI), National Committee for Democratic Development (NCDD)	Phnom Penh, October 2016
Ministry of Planning	Phnom Penh, October 2016
National Institute of Statistics (NIS)	
Deputy Director General	
SNV	Phnom Penh, 25 September 2016
Cambodian Institute for Urban Studies (CIUS)	Phnom Penh, 27 September 2016
Ministry of Rural Development, (MRD), Department of Rural Health Care (DRHC)	Phnom Penh, 28 September 2016
Sahmakum Teang Tnaut (STT)	Phnom Penh, 27 September 2016
Water and Sanitation Programme (WSP), World Bank (WB)	Phnom Penh, 26 September 2016

### **Annex 2: reported urban poverty data for** municipalities

Table A2: Reported urban poverty data for khans/municipalities.

			MoP (2016 Poverty_ F	6) Subnational_ Rate 2015						
			2015 SNA Poverty Rates		IDPOOR DATABASE (accessed 09/2016)				Difference b/t 2015 Pov. Est. and IDPOOR	
Municipality/ <i>khan</i>	# of Sangkats	HH 2014	2015, %	Est. # of Households	IDPoor	Round	Year	Reported Households		
Serei Saophoan municipality	7	21,327	18%	3,892	17%	9	2015	3,368	- 524	
Paoy Paet municipality	3	22,157	19%	4,303	14%	9	2015	1,562	- 2,741	
Battambang municipality	10	27,767	17%	4,743	24%	7	2013	6,632	1,889	
Kampong Cham municipality	4	8,800	10%	854	20%	9	2015	566	- 288	
Kampong Chhnang municipality	4	8,493	16%	1,608	28%	7	2013	2,491	883	
Chbar Mon municipality	5	9,288	16%	1,713	9%	8	2014	721	- 992	
Stueng Saen Municipality	8	12,837	19%	2,411	20%	9	2015	2,193	- 218	
Kampot	5	7,316	8%	657	12%	8	2014	307	- 350	
Ta Khmau municipality	6	15,570	7%	1,222	9%	7	2013	815	- 407	
Khemara Phoumin municipality	3	5,639	7%	431	28%	8	2014	833	402	
Kracheh municipality	5	6,265	19%	1,188	18%	9	2015	1,105	- 83	
Saen Monourom municipality	4	2,676	21%	535	21%	8	2014	341	- 194	
Chamkar mon <i>khan</i>	12	24,015	1%	-	-	-	-	-	-	
Doun Penh <i>khan</i>	11	15,976	1%	-	-	-	-	-	-	
Prampir Meakkakra khan	8	13,388	1%	-	-	-	-	-	-	
Tuol Kouk <i>khan</i>	10	26,658	1%	-	-	-	-	-	-	
Dangkao khan	13	17,456	1%	143	15%	9	2015	2,483	2,340	
Mean Chey <i>khan</i>	4	31,835	1%	350	4%	9	2015	1,070	720	
Russey Keo <i>khan</i>	6	33,942	2%	662	8%	9	2015	1,375	713	
Saensokh <i>khan</i>	4	26,397	1%	219	8%	9	2015	1,139	920	
Pur SenChey <i>khan</i>	10	37,051	2%	830	6%	9	2015	1,556	726	
Chraoy Chongvar <i>khan</i>	5	13,493	2%	202	11%	9	2015	1,256	1,054	
Praek Pnov <i>khan</i>	5	12,019	1%	93	15%	9	2015	1,635	1,542	

			MoP (2016) Subnational_ Poverty_ Rate 2015						
			2015 SNA Poverty Rates		IDPOOR DATABASE (accessed 09/2016)				Difference b/t 2015 Pov. Est. and IDPOOR
Municipality/ <i>khan</i>	# of Sangkats	HH 2014	2015, %	Est. # of Households	IDPoor	Round	Year	Reported Households	
Chbar Ampov <i>khan</i>	8	26,522	1%	294	16%	9	2015	4,632	4,338
Preah Vihear municipality	2	5,016	23%	1,135	29%	7	2013	1,317	182
Prey Veng municipality	3	6,036	10%	636	23%	8	2014	1,114	478
Pursat municipality	7	14,591	19%	3,073	22%	7	2013	2,433	- 640
Ban Lung municipality	4	6,381	20%	1,193	14%	7	2013	844	- 349
Siem Reap municipality	13	44,553	16%	7,298	14%	9	2015	4,468	- 2,830
Preah Sihanouk municipality	5	17,156	8%	1,508	8%	8	2014	1,009	- 499
Stueng Traeng municipality	4	6,043	21%	1,270	16%	9	2015	670	- 600
Svay Rieng municipality	7	9,991	13%	1,328	11%	8	2014	932	- 396
Bavet municipality	3	9,169	11%	993	12%	8	2014	940	- 53
Doun Kaev municipality	3	9,169	14%	1,361	22%	7	2013	1,885	524
Samraong municipality	5	14,622	28%	4,025	22%	9	2015	3,179	- 846
Kaeb municipality	3	4,545	12%	596	12%	8	2014	325	- 271
Pailin municipality	4	7,485	20%	1,491	25%	7	2013	1,558	67
Suong municipality	2	8,298	9%	756	17%	9	2015	851	95
	225	589,942		53,013				57,605	

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