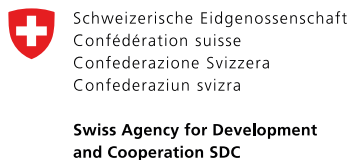


THE 1ST URBAN MEKONG CORRIDOR DIALOGUE

Connecting Rapidly Growing Towns
and Cities for Inclusive Green Development



Vientiane, Lao PDR
27-28 February 2024



CONTENTS

4 Executive Summary

7 Participants

8 Dialogue for Rapidly Growing Towns and Cities Along the Mekong Corridor for Inclusive Green Growth

14 City Visions for Inclusive and Green Growth

30 Knowledge Sharing: Solid Waste Management and Plastics in the Mekong Corridor

47 Knowledge Sharing: Water Management and Nature-based Solutions in the Mekong Corridor



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This report captures the visions and actions of Mekong cities for inclusive green development, shared at the 1st Urban Mekong Corridor Dialogue in Vientiane, Lao PDR, 27-28 February 2024.



EXECUTIVE SUMMARY

City leaders, representatives from civil society, the private sector, and international partners adopt a commitment to inclusive green growth, marking a pivotal step towards sustainable regional development.



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The cities and towns along the Mekong River, one of Asia's longest transboundary rivers, face significant challenges including population growth, rural-to-urban migration, and climate change impacts. These challenges necessitate a comprehensive planning approach that harmonises economic growth with environmental sustainability and social equity.

The Urban Mekong Corridor Dialogue is a pioneering programme under the Urban Mekong Corridor Initiative (UMCI) that focuses on connecting the region's rapidly growing towns and cities for inclusive green development. It embodies a collective effort to address the multifaceted challenges of rapid urbanisation, environmental sustainability, and social equity across the region.

The UMCI – spearheaded by Cities Alliance in partnership with the Swiss Agency for Development and Cooperation (SDC) and United Cities and Local Governments Asia-Pacific (UCLG ASPAC) – held the first of a series of Urban Mekong Corridor Dialogues in Vientiane, Lao PDR, from 27–28 February 2024, with the keen involvement of Lao PDR and the host city, Vientiane.

Building a Foundation for Collaboration

The Dialogue sought to foster collaborative solutions and a paradigm shift towards sustainable urban development. It brought together high dignitaries from the Mekong countries, including vice-ministers, governors, vice-governors, and mayors from 10 towns and cities along the Mekong Corridor. Inter-governmental bodies including the Mekong River Commission (MRC), civil society, private sector, and international development partners joined to contribute their experience and commitment.

This high-level participation demonstrates a strong regional commitment to tackling urban and environmental challenges collectively. It also underscores the significance of the Dialogue as a platform for fostering regional collaboration as well as sharing knowledge and best practices among cities and towns along the Urban Mekong Corridor.

The Dialogue's agenda focused on several key areas: Promoting collaborative efforts to address interconnected challenges, establishing partnerships within the Urban Mekong Corridor network, and enhancing the capacity of towns and cities to develop comprehensive, competitive interventions. Sessions included discussions on inclusive green urban development, knowledge sharing on best practices for sustainable urban growth, and technical expertise on solid waste management (SWM) and ecosystem challenges.

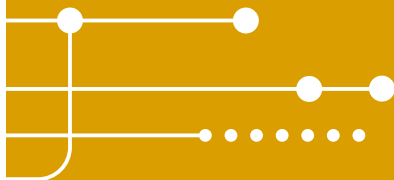
A notable feature of the Dialogue was its emphasis on mentorship relationships with innovative cities in the Association of Southeast Asian Nations (ASEAN) region. Such relationships facilitate replicating and accelerating effective strategies for urban development.

The first Urban Mekong Corridor Dialogue concluded with a forward-looking perspective, announcing that

Phnom Penh, Cambodia, would host the second one in June 2024. This decision cements the Dialogue's role as a recurring platform for regional cooperation and highlights the commitment of participating countries and cities to continue their collaborative efforts towards sustainable urban development in the Mekong region.

The successful convening of this first Dialogue, with its focus on building partnerships, sharing knowledge, and fostering a collective vision for the future, lays a solid foundation for subsequent meetings and reinforces the importance of regional solidarity in addressing the complex challenges facing the Urban Mekong Corridor.

MEKONG CITY LEADERS COMMIT TO INCLUSIVE GREEN CITIES



At the conclusion of the Dialogue, city leaders, along with representatives from civil society, the private sector, and international partners, collectively adopted seven significant outcomes, marking a pivotal step towards regional sustainable development. By declaring their commitment to the goals and principles of the UMCI, they recognised the unique challenges and opportunities presented by the rapid urbanisation and development of the Mekong region. The commitments include:

1. **Collaborative Action.** Actively participate in collaborative efforts by sharing knowledge, resources, and good/best practices to address the critical challenges, risks, and opportunities facing the Mekong Basin.
2. **Inclusive Urban Approach.** Work towards an inclusive approach to urban development, ensuring that small and intermediary cities and local governments are given particular consideration and support.
3. **Inclusive Green Growth.** Promote and implement strategies for inclusive green growth, aligning sustainable economic development with environmental stewardship and social equity.
4. **Multi-Level Stakeholder Engagement.** Engage in open and inclusive communication and collaboration across various levels of governance with all stakeholders, including civil society, the private sector, and international partners.
5. **Regular Participation and Review.** Meet biannually to review progress, discuss collective challenges, share experiences, and adapt strategies as needed, ensuring the continuous relevance and effectiveness of the initiative's efforts.
6. **Representation and Advocacy.** Represent the interests and needs of the respective cities, local governments, and organisations by advocating for policies, strategies, initiatives, and actions that support the objectives of the UMCI.
7. **Collaborative Access to Finance and Technology.**

PARTICIPANTS

LAO PDR

H. E. Mr. Phouvong Luangxaysana, Vice Minister of the Ministry of Natural Resources and Environment (MoNRE)

H.E. Mr. Athsaphangthong Siphandone, Governor of Vientiane

H.E. Mr. Phouvong Vongkhamsao, Vice Governor of Vientiane

H.E. Mr. Somdy Phonesavath, Vice Mayor of Luang Prabang City

H.E. Mr. Keolundone Chanthapany, Mayor of Thakhek

H.E. Mr. Pasongsinh Chaleunsouk, Mayor of Kaysone City

H.E. Mr. Boualy Phetsongkham, Mayor of Pakse City

Mr. Sudaxay Khampengxayn, Deputy Director General Department of Environment, MoNRE (represented by Mr. Phothala Souksakhone)

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Mr. Somphone Xaysongkham, City Party Committee, Secretary of Youth Union of Pakse City and Head of Project Implement Unit of Pakse City

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H.E. Mr. Vorayan Bunnarat, Governor of Mukdahan Province

Mr. Somphong Khumsuwan, Chief District Officer of Mukdahan Province

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Ms. Baythone Iovanxay, Consultant, ADB urban infrastructure projects

Mr. Phai Akone Sakountava, Chief Operations Officer and Co-founder, Econox Laos



**DIALOGUE FOR RAPIDLY GROWING
TOWNS AND CITIES ALONG THE
MEKONG CORRIDOR FOR INCLUSIVE
GREEN GROWTH**



Welcome Remarks: **H.E. Mr. Atsaphangthong Siphandone, Governor of Vientiane Capital**

Governor Siphandone graciously welcomed delegates from across the Mekong region and ASEAN nations and said the city is honoured to facilitate a platform for constructive dialogue and exchange on pressing urban challenges and opportunities within the Mekong Corridor.

He emphasised the importance of regional collaboration and sustainable urban development and underscored Vientiane's commitment to these ideals. The city is both a participant and leader in the pursuit of inclusive and green urban development, and by hosting the Dialogue it seeks to contribute to the regional discourse on urban development, aiming to foster solutions that are both innovative and sustainable.

The governor acknowledged the collaborative efforts of Cities Alliance, UCLG ASPAC, and SDC in bringing together a diverse group of stakeholders. He encouraged delegates to leverage this unique opportunity for networking, knowledge sharing, and building lasting partnerships.

His address reflected a vision of partnership and progress. As the Dialogue paves the way for future engagements, including the next meeting in Phnom Penh, Governor Siphandone's remarks set a tone of optimism and collective action towards achieving resilient and inclusive urban environments across the Mekong region.

In order to address the adverse impacts of climate change, partnerships between cities along the Mekong Basin will be crucial and will require capacity building, knowledge sharing, and networking among partners

Let us continue to work together to ensure that our vision and commitments turn into reality.

- H.E. Mr. Atsaphangthong Siphandone,
Governor of Vientiane Capital



Welcome Remarks: **H.E. Mr. Phouvong Luangxaysana, Vice Minister of Natural Resources and Environment, Lao PDR**

Vice Minister Luangxaysana highlighted Lao PDR's commitment to environmental stewardship and its role in promoting a collaborative approach to addressing the complex challenges of urbanisation in the Mekong Corridor.

He underscored the significance of sustainable development and environmental protection within the Mekong region. Lao PDR is dedicated to both of these goals, which align with regional efforts to address the challenges of urbanisation, climate change, and resource management.

The vice minister acknowledged the collaborative efforts of international partners, including Cities Alliance, UCLG ASPAC, and SDC, in supporting the Mekong region's journey towards sustainable urban development. He emphasised the importance of integrating environmental sustainability into urban planning and development strategies to ensure the well-being of current and future generations.

He also called for innovative solutions and shared learning among Mekong countries to address critical issues such as waste management, water resources, and green spaces. Tackling these challenges effectively requires collective action and strong partnerships.

The vice minister expressed optimism for the outcomes of the Dialogue and his anticipation that it will foster greater cooperation and facilitate actionable strategies for sustainable urban growth in the Mekong region.



This dialogue marks the commencement of a series of events that will convene key stakeholders from diverse sectors and governance levels to share expertise, best practices, and challenges related to urban development in the Lower Mekong Basin.

It is with a sense of urgency and determination that we address two pivotal themes: **Waste management, particularly the scourge of plastic pollution, and Nature-based Solutions.**

– Dr. Bernadia Irawati Tjandradewi,
UCLG ASPAC Secretary-General



Welcome Remarks: UCLG ASPAC

Dr. Bernadia Irawati Tjandradewi, UCLG ASPAC Secretary-General, set the tone for a dialogue aimed at transformative change and the advancement of the Urban Mekong Corridor Initiative.

She stressed the importance of collaborative solutions to address the complex challenges facing the Lower Mekong Basin, such as climate change, water scarcity, and biodiversity loss. By connecting cities and local governments in the region, the initiative aims to promote a resilient network that benefits all stakeholders.

The Dialogue serves as a platform for sharing expertise, best practices, and challenges related to urban development. Acknowledging the participation of local government leaders and national ministries, Dr. Tjandradewi highlighted their role in articulating shared visions for the region's urban development. She also appreciated the contributions of the MRC and international development partners, underscoring the importance of cross-border and interdisciplinary partnerships.

Dr. Tjandradewi concluded with a call to action, urging stakeholders to turn challenges into opportunities and work collectively towards a sustainable and resilient urban future for the Mekong region.



Welcome Remarks: Swiss Agency for Development and Cooperation

Ms. Adeline Aubry, Head of Inclusive Economic Development at SDC, underscored the importance of collaborative efforts in addressing the challenges and leveraging the opportunities presented by urban migration.

She emphasised the critical role cities play in managing urban growth driven by rural-to-urban migration and highlighted the challenges and opportunities migration presents for urban areas. As centres of innovation and economic activity, cities are destinations for migrants seeking better opportunities. Thus, cities are tasked with promoting inclusive growth and ensuring safety, protection, and access to basic services for all residents.

Recognising the pivotal role of cities and local governments in sustainable development, Switzerland has focused on the human aspects of urbanisation, including migration and social cohesion. Since 2018, in collaboration with Cities Alliance, Switzerland has supported a global programme to empower cities and communities to harness the development potential of urban migration.

Ms. Aubry expressed excitement about bringing this initiative to the Mekong region, in partnership with Cities Alliance and UCLG ASPAC, to build inclusive societies where no one is left behind. The Swiss Cooperation Programme's goal in the Mekong region for 2022-2025 is to "enable people, in particular young people, women and disadvantaged groups, to be more prosperous, resilient and better included in development processes."

She concluded with a call for transformative change through dialogue and expressed Switzerland's commitment to monitoring the Dialogue's progress as a board member of Cities Alliance.

Urban spaces have emerged as powerful catalysts for innovation and as economic, social and political centres with employment opportunities and services.

We are looking forward to using synergies with other initiatives in the region so we can contribute to building inclusive societies where no one is left behind.

- Ms. Adeline Aubry, Head of Inclusive Economic Development at SDC



Welcome Remarks: Cities Alliance

Dr. Brigitte Hoermann, Cities Alliance Lead for the Global Programme Cities and Migration, noted that the Dialogue brought together delegates from the Mekong region and ASEAN nations, symbolising the collaborative efforts towns and cities along the Mekong corridor are taking to foster inclusive and green urban development.

Dr. Hoermann emphasised Cities Alliance's role as a pivotal global partnership that brings together a diverse array of urban constituencies, including central and local governments, civil society, the private sector, and international development partners. This collaboration aims to leverage the unique strengths and resources of each member towards the realisation of more inclusive and environmentally friendly urban environments.

She also highlighted the financial contributions of Cities Alliance members to a global multi-donor trust fund, which plays a crucial role in directing resources towards impactful local projects.

Two Cities Alliance members - the Government of Switzerland (through SDC) and UCLG ASPAC - have already joined hands to facilitate the UMCI, and more members and partners are signaling interest in being part of a green and inclusive development of the Mekong region.

This initial Dialogue is intended to establish a foundation for national and transnational collaboration that enables participants to build relationships, share experiences, and learn new strategies. It sets the stage for a series of Dialogues to come.

This event marks a significant step forward in the journey towards sustainable urban development in the Mekong region and showcases the collective commitment to creating inclusive and resilient cities.

- Dr. Brigitte Hoermann, Lead, Global Programme Cities and Migration at Cities Alliance



CITY VISIONS FOR INCLUSIVE AND GREEN GROWTH



The transition to green and smarter cities across the Mekong region requires a paradigm shift towards collaborative urban planning, where cities learn from each other and work together to achieve sustainable and equitable development outcomes.

- Professor Brian H. Roberts, Regional Economic Development Specialist, Senior Advisor to Cities Alliance

The Urban Mekong Corridor Initiative

Dr. Brigitte Hoermann, Lead, Global Programme Cities and Migration, Cities Alliance

Dr. Hoermann highlighted the transformative dynamics shaping the Mekong region. The UMCI responds to the rapid population growth, urbanisation (primarily driven by rural-to-urban migration), and significant economic development that towns and cities along the Mekong Corridor are experiencing. While these trends present vast opportunities for progress and development, their accelerated pace poses unique challenges, especially for towns and smaller cities that may lack the resources to harness these dynamics for inclusive and sustainable growth effectively.

Dr. Hoermann emphasised the critical need for a collaborative platform to navigate these challenges. The UMCI serves as such a platform, bringing together diverse urban stakeholders from various sectors with a shared interest in fostering sustainable and inclusive urban development. Through the UMCI, stakeholders can meet, discuss, and forge new partnerships, aiming to collectively leverage the rapid changes for the greater good.

The initiative acknowledges the positive potential of these trends but recognises that the benefits may not reach all segments of society or lead to sustainable growth without strategic collaboration and resource sharing.

Thus, the UMCI's role is pivotal in ensuring that the Mekong region's urbanisation and economic growth are managed in a way that benefits all residents – fostering cities that are not only thriving, but also equitable and resilient to future challenges.

The UMCI's action plan for 2024–2026 includes:

- Convening Urban Mekong Corridor Dialogues twice a year hosted by the diverse cities along the corridor;
- Partnership engagement; and
- Testing small-scale inclusive and green city solutions with a focus on nature-based water management solutions and management of solid waste and plastics.

The initiative strives for a comprehensive approach to tackling the complexities of urbanisation in the Mekong region to create resilient, inclusive, and sustainable urban environments.

Connecting Mekong's Cities

Professor Brian H. Roberts, Regional Economic Development Specialist, Senior Advisor to Cities Alliance

Professor Roberts emphasised the vital importance of connectivity for the sustainable development of cities along the Mekong River. Towns and cities must shift from a competitive stance to a collaborative approach to harness collective strengths and achieve more sustainable development outcomes.

The key rationale for collaboration rather than competition among cities is based on the understanding that enhanced connectivity leads to various shared benefits, such as greater economic vitality, social inclusion, resource efficiency, innovation, and environmental sustainability. For instance, the Delhi-Mumbai Industrial Corridor (DMIC) in India shows how strategic infrastructure development can boost economic growth by connecting a network of cities along a dedicated railway freight corridor. This project is expected to positively impact around 180 million people by fostering industries, manufacturing, and urbanisation along the corridor. It emphasises job creation, innovation, and the development of smart cities through the collaboration of five states and 28 large cities.

The future of sustainable development in the Mekong River Basin hinges on towns and cities becoming more interconnected and collaborative, transcending traditional boundaries to forge a shared path towards green growth and inclusivity.

- Professor Brian H. Roberts, Regional Economic Development Specialist, Senior Advisor to Cities Alliance

Similarly, the Upper Rhine cross-border polycentric metropolitan region that spans France, Germany, and Switzerland illustrates the advantages of international cross-border collaboration and investment. The region has focused on strategic infrastructure to support sustainable development, utilising federal cooperation instruments for transportation, urbanisation, and regional policy to enhance connectivity and manage environmental challenges effectively.

The Mekong Basin faces connectivity challenges that need to be addressed through the creation of north-south, coastal, inland, and east-west corridors

to enhance regional development. The Mekong River, crucial for linking river economies, requires proper management to address environmental challenges and support the transition to a green economy. By working together, cities can achieve more efficient use of resources, create innovation hubs, and collectively address environmental issues - leading to more resilient and prosperous communities.

THE MEKONG RIVER COMMISSION

The MRC is an intergovernmental organisation established to promote and coordinate the sustainable management and development of water and related resources for the mutual benefit and well-being of Mekong member countries, including Cambodia, Lao PDR, Thailand, and Vietnam.

Its mission focuses on four key result areas:

- Enhancing national plans, projects, and resources from a basin-wide perspective to foster integrated water resource management
- Strengthening regional cooperation among member countries to address common challenges and share benefits of the Mekong River
- Improving monitoring and communication of the basin conditions to inform decision-making and policy development
- Operating as a leaner and more effective river basin organisation, optimising its role in the region

The MRC plays a pivotal role in facilitating joint management and shared utilisation of the Mekong River, emphasising a collaborative approach that underscores the interconnectedness of member countries and their shared ecosystems.



CITY VISIONS: MAYORS AND GOVERNORS

I urge each of you to seize this opportunity to chart a course towards a more sustainable and resilient urban future. May this Dialogue serve as a productive and enriching platform for knowledge exchange, partnership building, and the advancement of the Urban Mekong Corridor Initiative. Together, let us turn challenges into opportunities, obstacles into stepping stones, and aspirations into reality. The journey ahead may be arduous, but with unity of purpose and unwavering resolve, we can navigate the Urban Mekong Corridor towards a brighter tomorrow."

– Dr. Bernadia Irawati Tjandradewi, Secretary-General of UCLG ASPAC



Vientiane sees its future intertwined with that of its Mekong neighbours, understanding that our joint efforts are vital for nurturing a green and inclusive urban landscape.

- H.E. Mr. Phouvong Vongkhamsao, Vice Governor of Vientiane Capital

Vientiane, Lao PDR

H.E. Mr. Phouvong Vongkhamsao, Vice Governor of Vientiane Capital

Vientiane's vision of becoming a green city by 2030 is characterised by livability, attractiveness, environmental friendliness, quality economic growth, efficient resource use, modern technologies, resilience to natural and climate risks, social inclusivity, and improved quality of life for all citizens. This ambitious vision is supported by setting focus tasks aimed at overcoming key challenges, including sustainable waste and wastewater management, sustainable travel and transportation, and the development of public green spaces.

Vientiane has embarked on comprehensive strategies to enhance SWM, aiming to ensure 100 per cent waste collection coverage by 2030. Vientiane's strategy also embraces Nature-based Solutions (NbS) to tackle urban environmental challenges. The city's commitment to NbS signifies a broader approach to urban planning, where natural and engineered solutions are combined to create a sustainable and resilient urban environment.

Vientiane's comprehensive strategy for inclusive green development showcases a forward-thinking approach to urban planning and sustainability. Vientiane aims to transform into a model green city by 2030, setting a precedent for sustainable urban development in the Mekong region.





Luang Prabang, Lao PDR. © UCLG ASPAC



Luang Prabang, Lao PDR

H.E. Mr. Somdy Phonesavath, Vice Mayor of Luang Prabang

As a UNESCO World Heritage site, Luang Prabang is a centre of cultural heritage and tourism. The city also plays a pivotal role as central administration for Luang Prabang Province and northern Laos. It is a member of several international organisations, including the ASEAN Smart Cities Network and the International French-Speaking Mayors Association (AIMF), and networks with 16 friendship cities globally.

Projections indicate a steady increase in population from 92,028 in 2015 to 114,692 by 2035, highlighting rapid urbanisation and the city's attraction as a hub for economic and educational opportunities. The economy of Luang Prabang has shown significant growth; its GDP comprises agriculture and forestry (22 per cent), services and trade (18 per cent), and industry and handicraft (60 per cent).

In 2023 the economy grew 6.2 per cent, bringing the total GDP to an average of LAK 6.194 billion (US\$1,452) per person per year. This growth is supported by tourism services and trade in the urban area, agriculture and forestry in rural areas, and industry in the suburban areas.

Luang Prabang envisions enhancing its status as a World Heritage site while fostering sustainable development that balances cultural preservation with economic growth. The city aims to continue its trajectory towards becoming a model of heritage conservation and sustainable tourism, serving as a living example of harmony between past and present, culture, and commerce.

Luang Prabang believes in the power of collaboration across the Mekong to preserve our rich cultural landscapes while fostering green and inclusive urban development, setting a precedent for future generations.

- H.E. Mr. Somdy Phonesavath, Vice Mayor of Luang Prabang



Thakhek, Lao PDR
Mr. Keolundone
Chanthapany,
Mayor of Thakhek

Located in Lao PDR's Khammouane Province, Thakhek is a significant urban hub with a strategic position that plays a crucial role in the socio-economic development and connectivity of the region.

Thakhek and its neighbouring cities form a vital trade corridor stretching 129 km along the waterways that connect Laos to Thailand. This geographical advantage has made these cities central to local trade and livelihoods. Demographic data indicates a diverse and growing population that benefits from the city's strategic location for commerce and trade.

Thakhek faces various environmental and economic vulnerabilities, including climate-related hazards that pose significant challenges to the city's development and sustainability. Its strategic development plan emphasises trade and services, industrial development, and agriculture as key areas for growth.

Through effective resource management, community cooperation, and strategic planning, Thakhek is addressing its environmental and economic challenges head-on. The city's focus on sustainable practices, demographic growth, and strategic economic sectors underscores its potential to thrive as a resilient and prosperous urban centre in the Mekong region.



Pakse, Lao PDR
H.E. Mr. Boualy
Phetsongkham,
Mayor of Pakse

Pakse City in Champasak Province, Lao PDR, is an emerging urban centre striving towards sustainable development and efficient waste management. It has over 12,000 households and over 88,000 inhabitants. The majority of citizens engage in trade and services (63 per cent), civil service (28 per cent), and agriculture (eight per cent).

With a focus on enhancing the city's infrastructure and environmental sustainability, Pakse has implemented significant measures in SWM and NbS to address urban environmental challenges.

Pakse envisions becoming a model city for sustainable development in Lao PDR, where effective SWM and NbS drive urban resilience and environmental sustainability. Through comprehensive SWM strategies and the integration of NbS, Pakse aims to achieve a harmonious balance between urban development and natural resource conservation, ensuring a livable, green, and resilient urban environment for current and future generations.



Kaysone Phomvihane City, Lao PDR

**Mr. Prasongsinh Chaleunsouk,
Mayor of Kaysone Phomvihane City,
Savannakhet Province, Lao PDR**

In harnessing the synergy of Kaysone Phomvihane's unique position, we recognise that collaboration across the Mekong's borders is key to unlocking sustainable growth and environmental harmony for all.

- Mr. Prasongsinh Chaleunsouk, Mayor of Kaysone Phomvihane City, Savannakhet Province, Lao PDR

Kaysone Phomvihane City is a burgeoning municipality spread over an area of 779.03 km² and the heart of Savannakhet Province. It has a population of 133,857 and a population density of 172 people per km². The city is structured into 67 villages and 13 village clusters, reflecting a well-organised urban layout marked by orderly roads, buildings, parks, and houses.

Strategically positioned as an economic, trade, and transportation hub, the city leverages its role as a point of exchange in the East-West Economic Corridor. Its Special Economic Zone and the Lao-Thai Friendship Bridge to Mukdahan enhance its status as a centre for domestic and international trade. The presence of natural attractions and cultural sites further enhances its development potential.

Kaysone Phomvihane City aspires to capitalise on its strategic location and rich cultural heritage to become a dynamic centre of trade, industry, and sustainable development, fostering an urban environment that supports growth while preserving its unique identity.



Nong Khai, Thailand

Mr. Rachan Sunhua, Governor of Nong Khai Province, Thailand

Nong Khai has a goal of developing the province in the next 20 years to become a sustainable city to live in, a leader in agricultural bio-industry, a creative tourism economic corridor, and a business centre that grows in a balanced and sustainable way.

- Mr. Rachan Sunhua, Governor of Nong Khai Province

Nong Khai is located across the Mekong River from Vientiane, Laos, and the river plays a pivotal role in the intertwined development of these neighbouring cities. The construction of the first Thai-Lao Friendship Bridge in 1994 served as a critical infrastructure, cementing Nong Khai's position as a gateway for border trade links within the ASEAN region, particularly with Indochina and Southern China.

This bridge facilitates transportation connections and contributes significantly to fostering trade and investment between the two nations, operating under the concept of parallel cities, regional economic integration, and enhanced cross-border cooperation and economic development across Southeast Asia.

Nong Khai Province has established three key strategic positions to advance its vision of Nong Khai as a livable city with sustainable development and effective environmental management:

1. **Organic Agriculture:** Nong Khai aims to transition towards organic agriculture, guided by the holistic principles of the Bio-Circular-Green (BCG) model, which integrates bioeconomy, circular economy, and green economy. The city has adopted the Nong Khai Basic Organic Standard to elevate its agricultural products to international standards.
2. **Mekong Basin Tourism City:** Nong Khai is set to become a premier tourism destination that showcases its natural heritage, culture, and local identity, enriching the visitor experience.
3. **Regional Trade Gateway:** In collaboration with neighbouring Lao PDR and Vientiane City, Nong Khai serves as a pivotal gateway for border trade within the ASEAN region, including Indochina and Southern China, promoting regional development.





Mukdahan's vision for development is anchored in the belief that cross-Mekong collaborations can cultivate a fertile ground for sustainable and inclusive progress, enriching lives on both sides of the river.

- H.E. Mr. Worayan Bunnarat, Governor of Mukdahan, Thailand

Mukdahan, Thailand

H.E. Mr. Worayan Bunnarat, Governor of Mukdahan, Thailand

The capital of Mukdahan Province in northeast Thailand, the city of Mukdahan plays a crucial role in the country's economic and social landscape, particularly as a gateway to Lao PDR and the broader Mekong region.

Mukdahan faces several development challenges and opportunities, including enhancing trade competitiveness, investing in international connectivity, and raising agricultural standards through technology and innovation. Other focus areas include tourism development based on the Mekong lifestyle and urban and community development for sustainable living. The vision for the next 20 years emphasises transforming Mukdahan into a modern commercial city with high-quality agriculture and tourism, connected to global markets.

Mukdahan aspires to be a modern commercial hub that leverages its strategic location along the Mekong River, fostering high-quality agriculture and becoming a pivotal point for international connectivity. It aims to sustainably balance economic growth with natural resource management and environmental conservation, striving for a community where modernity meets tradition in harmony.



Phnom Penh, Cambodia

H.E. Mr. Suy Serith, Vice Governor of Phnom Penh Capital City, Cambodia

Phnom Penh, the vibrant capital of Cambodia, stands at the confluence of three great rivers: the Mekong, Tonle Sap, and Bassac. With a population exceeding 2.5 million, including a daily influx of tourists and traders, Phnom Penh sprawls over 695.218 km², making it a densely populated area with 3,295 people per km².

Population trends have shown remarkable growth, from 616,000 in 1990 to an estimated 2,748,953 in 2023. This rapid urbanisation has made Phnom Penh a magnet for those seeking better economic and educational opportunities, prompting the government to adopt a new Master Plan on Land Use 2035 to manage urban development effectively.

Economically, Phnom Penh is a powerhouse, with average growth rates around seven per cent per year. It is Cambodia's economic centre and relies heavily on commerce (including garments), trading, small and medium enterprises, and a booming property business. Tourism also plays a significant role, positioning the city as a major tourist destination in Southeast Asia. The city's main employment sectors include agriculture (48.7 per cent), services (31.5 per cent), and industry (19.9 per cent), with a per capita GDP of US\$1,916 in 2003. The informal sector also contributes significantly to employment and GDP.

Phnom Penh envisions becoming an upper-middle-income city by 2030 and a high-income city by 2050. This vision is built on sustainable growth, political stability, and development, aiming for a prosperous, dynamic community living in harmony with its rich cultural and natural heritage.

As the largest city in the Mekong River collaboration, Phnom Penh is committed to sharing its journey and lessons learned in urban development with fellow towns and cities along the transboundary corridor, aiming to collectively achieve green and inclusive growth.

- H.E. Mr. Suy Serith, Vice Governor of
Phnom Penh Capital City, Cambodia



Kampong Cham City, Cambodia

**H.E. Heng Vanny,
Deputy Governor
of Kampong Cham
Province**

Located in the heart of Cambodia along the banks of the Mekong River, Kampong Cham City is a vital commercial, cultural, and educational centre in Kampong Cham Province. Stretching across 22.15 km², the city has a population of 42,433, with a density of 1,915 individuals per km².

The economy of Kampong Cham is diverse, anchored in sales and trading (27.4 per cent), civil service (24.2 per cent), services (18.4 per cent), workers (16.4 per cent), agricultural work (11 per cent), and handicrafts (2.6 per cent). The Kizuna Bridge enhances the city's allure by facilitating accommodation, shopping, and tourism and contributes to the local economy through markets, room rentals, hotels, guesthouses, and restaurants.

Kampong Cham envisions itself as a thriving market town that maximises its geographical and cultural assets to become a regional hub for commerce, tourism, and education. By embracing its rich heritage and leveraging the strategic advantage of the Mekong River, the city aims to foster sustainable economic growth, enhance the quality of life for its residents, and attract national and international visitors.



Can Tho and the Mekong Delta, Vietnam

**Dr. Ngo Trung Hai, General
Secretary of the Association of
Cities of Vietnam (ACVN)**

Can Tho is a pivotal city in the Mekong Delta and the fourth-largest city in Vietnam. It is the economic centre of the Mekong Delta and a critical hub for transportation, commerce, and tourism. With its rich cultural heritage and strategic location on the Mekong River, the city is a vital link between the countries in the ASEAN region, Indochina, and Southern China, fostering trade and investment across borders.

The population of Can Tho is characterised by its dynamic growth, contributing to the diverse and vibrant fabric of the city. This demographic vitality fuels the city's economy, which is diverse and includes sectors such as agriculture, aquaculture, manufacturing, and services. The Mekong Delta, with Can Tho at its heart, is renowned for its agricultural output, particularly in rice, fruit, and fish, supporting not only Vietnam but also export markets.

Economic trends in Can Tho and the wider Mekong Delta region reflect a trajectory towards sustainable development, with initiatives aimed at integrating eco-tourism, cleaner industries, and sustainable agricultural practices.

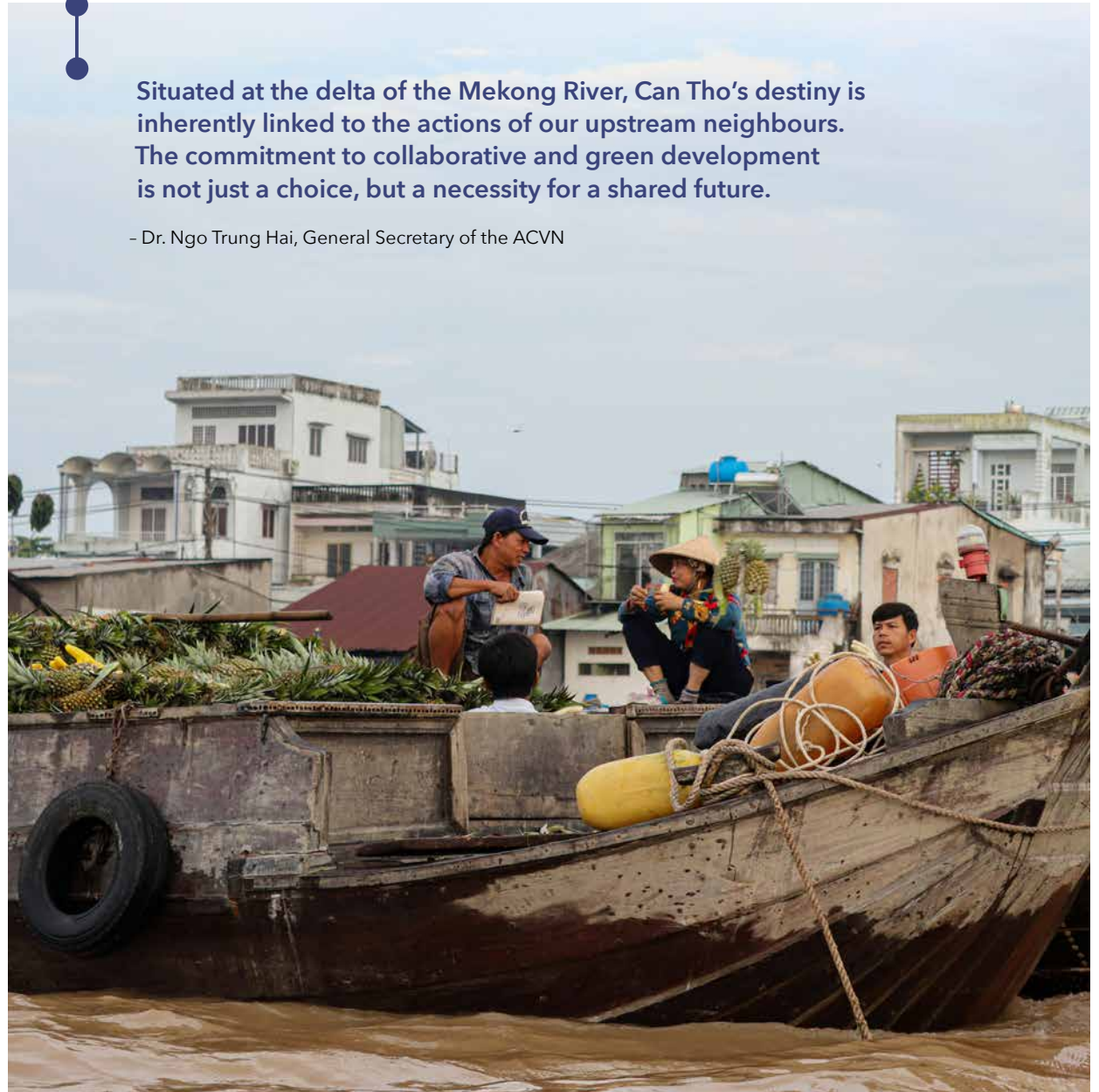
These efforts are designed to ensure that economic growth does not come at the expense of the environment, highlighting a commitment to green growth principles.

Can Tho's vision is to be a region of high development relative to the country by 2050, offering quality of life for its residents and becoming an attractive destination for tourists and investors. It envisions prosperous communities thriving in harmony with preserved and developed vital wetland ecosystems, leveraging natural and cultural resources for sustainable socio-economic growth.

Situated at the delta of the Mekong River, Can Tho's destiny is inherently linked to the actions of our upstream neighbours. The commitment to collaborative and green development is not just a choice, but a necessity for a shared future.

- Dr. Ngo Trung Hai, General Secretary of the ACVN

Can Tho, Vietnam. © nathan_cima





KNOWLEDGE SHARING: SOLID WASTE MANAGEMENT AND PLASTICS IN THE MEKONG CORRIDOR

Through innovative policies, community engagement, and cross-border collaboration, we can stem the tide of plastic pollution and safeguard the integrity of the Mekong River for generations to come.

- Dr. Bernadia Irawati Tjandradewi, Secretary-General of UCLG ASPAC

The Role of Local Governing Bodies in the Lao PDR's National Plastic Action Plan

Mr. Sudaxay Khampengxayn, Deputy Director General, Department of Environment, MoNRE

Lao PDR's development of a National Plastic Action Plan (NPAP) stems from its need to manage the use, production, and disposal of plastic waste countrywide. The forthcoming plan aims to reduce greenhouse gas emissions by 60 per cent in 2030, in line with the National Determined Contribution (NDC) of Lao PDR in 2021, and contribute to the Sustainable Development Goals (SDGs), specifically Goal 12. It also seeks to minimise the volume of garbage sent to landfills, thereby reducing the government's expenditures on creating new landfills, and exhibit Laos' commitment to international cooperation on environmental issues.

Key focus and intervention areas of the NPAP 2023-2030 include establishing a management framework for plastics, decreasing plastic leakage into the environment, generating value from waste, and encouraging the use of environmentally friendly alternatives to single-use plastics. The plan is structured in phases, starting with the preparation of a committee and an activity plan in Phase I (2022-2024) to improve the plastic waste management system. Phase II (2025-2027) will focus

on enhancing recycling infrastructure and adopting circular economy principles, turning waste into raw materials. By Phase III (2028-2030), the aim is for Lao PDR to progress towards a low carbon, green economy.

For cities and the local level, the plan affects waste management systems by reducing the use of single-use plastic bags and establishing a proper waste management system for all types of pollutants. The action plan will require local governing bodies to develop systems and tools to drive and implement practical execution of these initiatives. Local governments will be critical in the dissemination and promotion campaigns to reduce plastic use and facilitate voluntary participation from all stakeholders.

Once the NPAP is adopted, the next steps include establishing the proposed committee, creating and disseminating the activity plan, and continuing to develop recycling infrastructure and circular economy practices. Monitoring and evaluation systems will be implemented to ensure the effectiveness of the interventions, alongside necessary amendments and updates to keep the strategies relevant and efficient.

Pollution has no borders. Research on marine plastic drift from the Mekong River shows that 47 per cent is stranded on the coast of the Philippines, 24 per cent on the coast of Indonesia, 17 per cent on the coast of Vietnam, and eight per cent on the coast of Malaysia.

- Dr. Kongmeng Ly, Ecosystem Specialist, Mekong River Commission



Mekong River Commission's Riverine Plastic Monitoring Programme

Dr. Kongmeng Ly, Ecosystem Specialist, MRC



The MRC has established a Riverine Plastic Monitoring (RPM) programme as part of its commitment to combatting riverine plastic pollution in the Mekong River. The programme aims to assess the basin-wide status and trends of riverine plastic waste pollution through a regional study. It generates data, information, and knowledge that support decision-making on the management of riverine plastic pollution, utilising developed methodologies, protocols, and components for both macro and microplastic monitoring.

A crucial part of the MRC's role in plastic management includes the development and finalisation of detailed methodologies for the RPM, which incorporate various sampling techniques such as fish net sampling in fishing communities, sampling at artificial barriers such as ports and dams, and laboratory quantification and identification of microplastics.

The MRC's interventions align with international efforts including the 2019 ASEAN Bangkok Declaration on Combating Marine Debris, and they actively engage in policy dialogue, advocacy, and public awareness programmes. These actions are complemented by potential local actions, such as capacity building for sustainable monitoring and enforcing (voluntary) bans on single-use plastics and provision of alternatives, with the aim of providing sustainable, evidence-based policy-making tools for the region.

The MRC's Riverine Plastic Monitoring Programme underscores the need for transboundary capacity building and sustainable monitoring - methods, evidence, research, and data for evidence-based policymaking.

- Dr. Kongmeng Ly, Ecosystem Specialist, MRC

Civil Society and the Private Sector



ສະພາການຄ້າ ແລະ ອຸດສາຫະກຳ ແຫ່ງຊາດລາວ
Lao National Chamber of Commerce and Industry

The Plastic Free Laos label was created to help reduce plastic waste in Lao PDR. Businesses can become certified with the label when they pass the criteria for reducing single-use plastic in operations and services. Plastic Free Laos provides education, tools and support during this process.

The label is managed and implemented by Econox Laos and coordinated by the Small and Medium Enterprise Service Centre in collaboration with the Lao Hotel and Restaurant Association and the Lao National Chamber of Commerce and Industry.



Zero Waste Laos was initially established in 2019 as a volunteer group for promoting sustainable waste management through awareness campaigns via social media platforms in Vientiane, Lao PDR. Its vision is to contribute to achieving sustainable waste management by promoting the 3Rs (reducing, reusing, recycling), composting at the community level through the 3Rs, and circular economy waste innovations.



BRIDGING THE INFORMAL AND FORMAL WASTE SECTOR



The informal waste sector plays a critical role in the management of waste in developing cities, contributing significantly to waste collection, sorting, and recycling. It is estimated that without the efforts of informal waste pickers, recycling rates would plummet, underscoring their importance in environmental sustainability. The World Bank notes that integrating the informal and formal sectors through Public-Private Partnerships (PPPs) can enhance waste management efficiency. Approaches such as Private-Sector Participation (PSP) in solid waste management are potential tools to bridge this gap, aiming for a cohesive waste management ecosystem that acknowledges the contributions of informal workers. This integration not only promises a more effective waste management system but also seeks to improve the socio-economic conditions of waste pickers, who are predominantly women, ensuring safer and more economically sustainable livelihoods.

CASE STUDY

Luang Prabang, Lao PDR

H.E. Mr. Somdy Phonesavath, Vice Mayor of Luang Prabang



Luang Prabang, Lao PDR. © Diy13-AdobeStock.com

Luang Prabang has undertaken significant steps to address waste management challenges, demonstrating a commitment to environmental sustainability alongside preserving its cultural heritage. The city's waste management strategy is focused on improving municipal solid waste (MSW) systems from upstream to downstream. Supported by international partnerships and local initiatives, these efforts include the adoption of decentralised wastewater treatment solutions (DEWATS) and the development of a master plan for urban drainage and sewerage.

A notable initiative is the application of NbS for wastewater treatment, specifically the utilisation of wetlands in the city centre. This approach involves the community in managing grey and black water through a process that integrates traditional knowledge with modern environmental engineering, showcasing a commitment to innovative and sustainable waste management practices.

These strategies are part of a broader vision to manage urban development sustainably in a way that emphasises the preservation of natural spaces along the Mekong and Nam Khan rivers. Implementing these measures will allow Luang Prabang to protect its unique environment and heritage while addressing the needs of its growing population. By integrating traditional practices and modern technology with strong community involvement, Luang Prabang is preserving its natural and cultural heritage and setting a precedent for sustainable urban development in heritage cities worldwide.



Girl riding a bicycle in flood area. tuayai/@AdobeStock.com

I see great potential for cities along the Mekong Basin to reduce waste and improve wastewater and waste management via integrated urban planning approaches as well as tackling climate change mitigation and adaptation, ecosystem preservation, and restoration and circular economy.

- H.E. Mr. Atsaphangthong Siphandone,
Governor of Vientiane Capital

CASE STUDY

Vientiane, Lao PDR **Mr. Somboun Arkhavongsa,** **Vientiane City Office for Management and Services**



Vientiane, the capital city of Lao PDR, is at the forefront of addressing its SWM challenges to enhance the quality of its urban environment. With a population of 948,477 across nine districts, the city generates an average of 450-500 tons of solid waste per day that is managed by one public and nine private companies. This waste is transported to an open dumping landfill 32 km from the city centre. The landfill has been operational since 2009 and covers an area of 70 hectares.

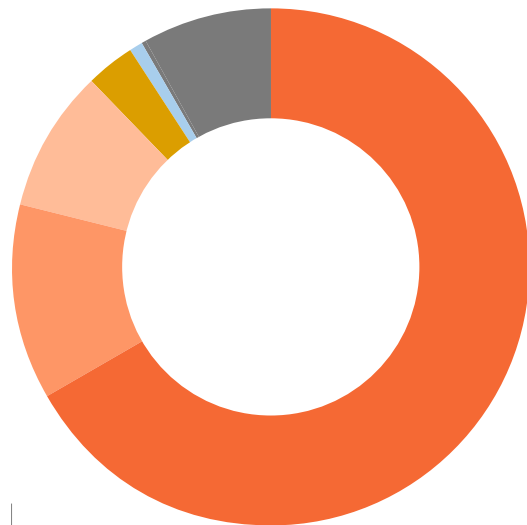
The composition of waste represents a significant challenge, with organic waste constituting 62 per cent and plastic waste 20 per cent. This highlights the urgency for sustainable waste management practices to mitigate environmental impacts. Vientiane's approach includes a robust waste collection service that covers 74 per cent of the service area, emphasising the critical need for comprehensive coverage and efficient waste processing.

Vientiane's Sustainable Solid Waste Management Strategy and Action Plan for 2021-2030 outlines ambitious goals to tackle these challenges head-on. Key strategies include ensuring 100 per cent waste collection rates for all citizens by 2030, maximising waste-to-resource opportunities through source separation, and increasing waste treatment capacity with mechanical and biological treatment facilities.

The city has also embraced technological solutions such as the Vientiane Waste Management Application to facilitate household and business services, including an Express and Payment service. This application is part of Vientiane's vision to become a model city where waste management is not just about disposal, but also about resource recovery and integration of informal waste pickers into the formal system.

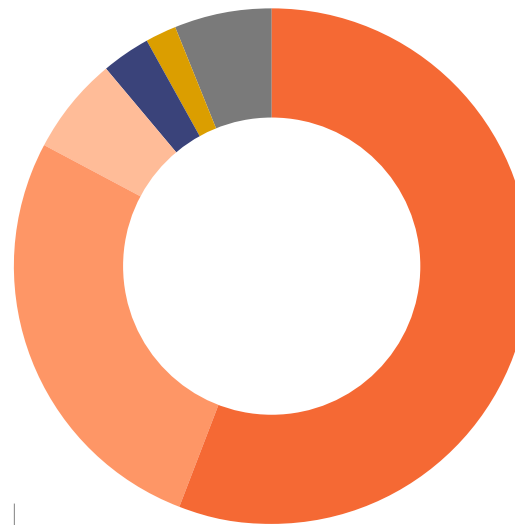
By 2030, Vientiane aims to be recognised for its comprehensive waste collection services and its commitment to waste-to-resource initiatives. The city envisions a future where source separation is a civic duty, per capita waste generation rates are significantly reduced, and the informal waste sector is formally integrated to ensure social protection schemes for waste pickers.

Composition of municipal solid waste in Vientiane (%)



- Organic Waste (67%)
- Plastic (12%)
- Paper and Cardboard (9%)
- Glass (3%)
- Cans (1%)
- Other Waste (8%)

Waste composition at the landfill in Vientiane (%)



- Organic Waste (56%)
- Plastic (27%)
- Paper and Cardboard (6%)
- Textile (3%)
- Glass (2%)
- Other Waste (6%)

I am hopeful that the goals of Vientiane's Regional Strategy and Action Plan will be achieved by 2030. However, the path to attaining these goals is still challenging due to our lack of technology, adequate infrastructure, capacity, and expertise in waste management and wastewater treatment.

- H. E. Mr. Atsaphangthong Siphandone,
Governor of Vientiane Capital

Nong Khai Province, Thailand

Jaratpong Kamdokrap, Chief of the Nong Khai Provincial Office for Local Administration



Nong Khai Province has embarked on an innovative journey to tackle the pressing issue of waste management. It has adopted a multi-faceted approach that emphasises household waste separation, the promotion of the circular economy, and the engagement of both the community and private sector in sustainable waste practices.

In Nong Khai Province, the daily production of solid waste amounts to approximately 490.63 tons. Of this, 67 per cent (328.77 tons) is managed effectively each day, showcasing the province's commitment to sustainable waste management practices. Specifically, 28.14 per cent of the waste is disposed of in accordance with academic and environmental principles, ensuring safe and environmentally friendly waste processing. A significant portion of the waste, 38.87 per cent, is repurposed or reused, reflecting the province's robust efforts in promoting recycling and the circular economy. This approach mitigates environmental impact and underscores the community's active participation in sustainable waste management practices.

Initiatives and Achievements

- **Wet waste separation programme:** To combat global warming, Nong Khai Province launched a programme encouraging households to separate wet waste. This initiative aligns with Thailand's Voluntary Greenhouse Gas Reduction standards and aims for universal household participation. As a result, 113,988 households have successfully adopted wet trash cans, significantly contributing to the province's environmental sustainability goals.

- **Recycle waste separation and circular economy:** The province has focused on the separation of recyclable waste, urging residents to embrace the circular economy's principles of reduce, reuse, and recycle. This effort includes widespread campaigns to raise awareness and encourage community participation in waste reduction and recycling. A notable outcome of this initiative is the establishment of 38 waste banks across Nong Khai, which collectively amassed 7,124.69 tons of recyclable waste in 2023, translating to significant community income of THB 35,839,937.28.
- **Hazardous waste collection:** Recognising the dangers of hazardous waste, Nong Khai has facilitated separate disposal mechanisms for such materials. Local administrative organisations have installed designated collection points in every village or community, leading to the safe disposal of 4,357.30 kg of hazardous waste in 2023.
- **Local volunteer network:** To bolster its waste management efforts, the province has established a Local Volunteers that Save the World network, recruiting at least one volunteer per household to participate in activities aimed at preserving natural resources and the environment. This initiative has attracted 119,299 households, resulting in a robust volunteer force of 121,685 members dedicated to environmental preservation.

- **Waste management clusters:** To streamline waste management operations, Nong Khai supports local government organisations in forming clusters, thus facilitating more efficient and effective waste handling processes.
- **Private sector engagement:** Nong Khai actively encourages private investment in waste management solutions that are environmentally safe and sustainable. A pivotal achievement in this domain is the partnership with Nong Khai Na Yu Co., Ltd., which led to the establishment of a facility capable of processing 380 tons of waste per day into 6 MW of electricity. The facility commenced operations in December 2022. This project is addressing waste disposal needs and contributing to solving the country's energy challenges.

Nong Khai Province's comprehensive approach to waste management showcases the potential of integrated, community-engaged strategies in achieving sustainability goals. Through a combination of household participation, circular economy practices, hazardous waste management, volunteer networks, and PPPs, Nong Khai sets a precedent for regions facing similar environmental challenges. Its experience exemplifies how localised initiatives can contribute significantly to global sustainability efforts, paving the way for a greener future.



Nong Khai Province expects that it will help manage solid waste more efficiently and contribute to making people in the Mekong River Basin region have a good quality of life, balance, stability, and prosperity.

- Jaratpong Kamdokrap, Chief of the Nong Khai Provincial Office for Local Administration, Thailand



CASE STUDY

Thakhek, Lao PDR **Mr. Keolundone Chanthapany,** **Mayor of Thakhek**

Waste management in Thakhek is addressed through community cooperation and the implementation of sustainable practices. Mayor Chanthapany emphasised that collaborative efforts to manage waste highlight the city's approach to environmental conservation and public health. This collective action towards waste management is crucial in addressing environmental challenges and ensuring the city's resilience against pollution and other environmental hazards.



CASE STUDY

Kaysone Phomvihane City , Lao PDR **Mr. Prasongsinh Chaleunsouk, Mayor of Kaysone** **Phomvihane City, Savannakhet Province**

Kaysone Phomvihane City boasts a modern waste management system capable of handling 80-90 tons of garbage daily across a ten-hectare site managed through private sector concessions. The waste segregation efforts produce 20 per cent recyclable waste, with plastic and biological waste forming significant components. A portion of the recyclable waste is procured by companies at the site for plastic pallet production and similar initiatives.

The city has gained international recognition for its waste management efforts. It has been selected for a river plastic reduction project and received ASEAN awards for environmental sustainability and clean tourism. These acknowledgments reflect the city's commitment to advancing waste management strategies, including youth-led initiatives to foster environmental awareness across schools and villages.



CASE STUDY

Mukdahan, Thailand H.E. Mr. Worayan Bunnarat, Governor of Mukdahan

Mukdahan Province has taken significant strides towards sustainable waste management and environmental conservation. The province's waste management strategy includes sanitary landfills, establishing recycling banks in all local government organisations, and promoting the separation of household waste to reduce global warming.

The establishment of eco-friendly bins in every household has been certified to reduce greenhouse gas emissions by the equivalent of 1,547.24 tons of carbon dioxide, amounting to THB 402,220. With the City Hall Recycling Waste Bank project, Mukdahan reduced greenhouse gases from the purchase of calculated waste by 55.221 tons of carbon dioxide equivalent (tonCO₂eq) in 2023.

Efforts to reduce and sort solid waste in government agencies have been successful, leading to the reduction of greenhouse gases. Additionally, Mukdahan has been declared a Smart City with a focus on Smart Energy, highlighting the potential of wind power plants, which contribute to clean energy production.

Mukdahan's environmental initiatives align with Thailand's national policy towards achieving carbon neutrality by 2050 and net-zero emissions by 2065. The province's approach to environmental management encompasses the sustainable development of cities, protection and restoration of natural resources, participatory environmental preservation, and the development of renewable energy sources. Mukdahan's case study demonstrates a proactive and integrated approach to waste management and environmental sustainability. Through innovative practices, community involvement, and alignment with national and international environmental goals, Mukdahan is making significant progress towards becoming a model for sustainable urban and rural development in the region.



CASE STUDY

Pakse, Lao PDR H.E. Mr. Boualy Phetsongkham, Mayor of Pakse

Pakse generates approximately 125 tons of solid waste daily, with organic waste constituting 48.07 per cent (60.8 tons/day) and plastic waste 16.13 per cent (20.2 tons/day). Despite these figures, the city's solid waste collection volume stands at 87 tons/day, including both formal (76.5 tons/day) and informal (10.5 tons/day) collections. However, about 38 tons/day of waste remain uncollected, indicating areas for improvement in waste management services.

To combat these challenges, Pakse's landfill - located 17 km northwest of the city centre in Sanasomboun District - spans 13.7 hectares and features impervious bottom layers for leachate extraction and treatment. Despite its operation as an open dump, ongoing installations aim to reduce landfill waste volumes and promote recycling and waste-to-resource initiatives.

CASE STUDY

Phnom Penh, Cambodia

Mr. Nuon Samnavuth, Director of the Waste Management and Environment Division of Phnom Penh



Phnom Penh faces significant challenges in managing solid waste. The Dangkor district landfill receives approximately 3,700 tons of MSW daily.

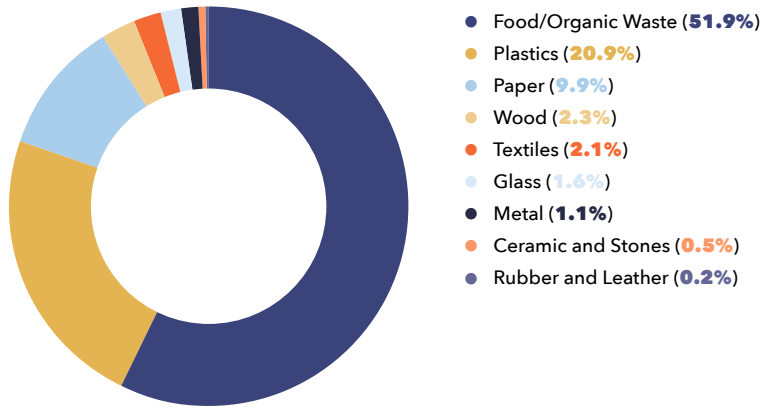
In a 2005 report, the Japan International Cooperation Agency (JICA) stated that about 73 per cent of all waste generated was recycled by the informal sector.

In late 2019, the Government of Cambodia reformed the MSW management system, establishing enterprises responsible for waste collection, transportation, and landfill management. This reform led to the division of the city into three zones, each awarded to different service providers through a competitive bidding process.

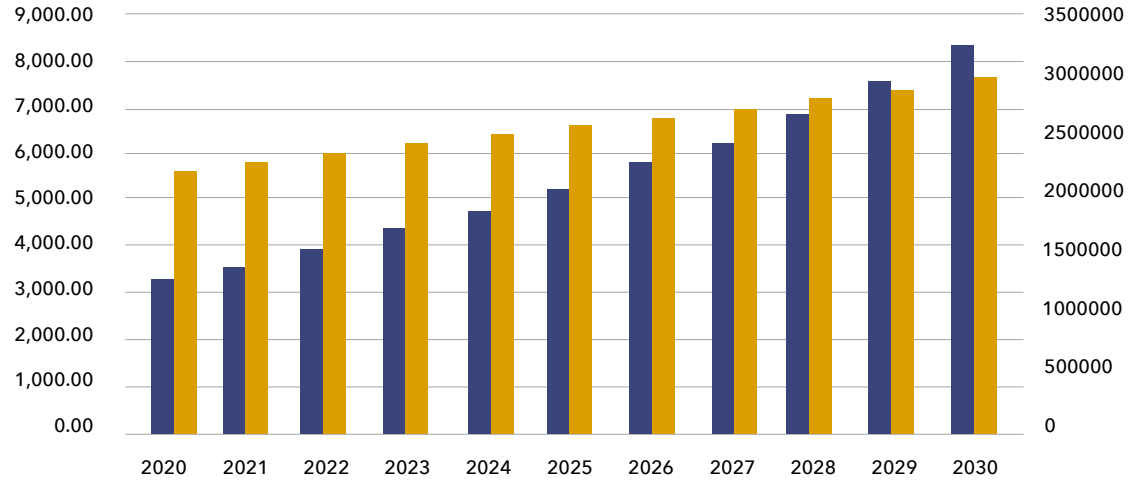
Since 1 July 2021, these new service providers have enhanced the quality of waste collection and transportation with modern equipment and regular collection schedules. As a result, waste volume transported to the Dangkor landfill increased from 2,700 to 3,700 tons per day. Additionally, the city is using innovative German technology to clean the Mekong, Tonle Sap, and Bassac rivers with a system that is capable of collecting 20 tons of garbage per day.

This case study reflects Phnom Penh's proactive approach to solid waste management, contributing to the city's vision of becoming a sustainable and prosperous urban centre by 2050.

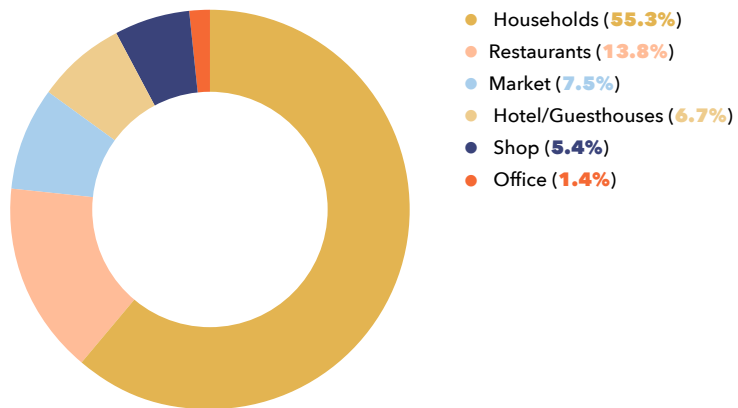
Composition of municipal solid waste




Waste quantity projection in Phnom Penh



Sources of municipal solid waste generated



- Total Estimated Waste Generation in Phnom Penh
- Projected Population



Integrating informal waste workers into the formal sector enhances recycling efficacy and unlocks the full potential of sustainable solid waste management.

-Dr. Maurice Rawlins, Senior Environmental Specialist, World Bank Lao PDR

CASE STUDY

Kampong Cham City, Cambodia

H.E. Heng Vanny, Deputy Governor of Kampong Cham Province



Kampong Cham City has partnered with the private sector (CINTRI) for solid waste collection and transportation since January 2023. The city generates 50 to 60 tons of garbage daily, and waste collection efforts are divided among home fundraising teams, CINTRI monitoring teams, and garbage weighing groups. Kampong Cham uses an official garbage collection app, SAMRAAM, and transports waste to a landfill 20 km from the city. Nonetheless, challenges remain in waste distribution, public education, and the introduction of modern landfill solutions.

Efforts are underway to improve waste management through radio broadcasts, educational campaigns, public bins, and fines for littering.

Partnerships with non-government organisations and civil society focus on plastic collection, youth involvement in waste management, setting garbage prices, and promoting waste storage.

Kampong Cham's approach to SWM illustrates a commitment to environmental sustainability and public health. Through collaboration with private and non-profit sectors, the city aims to enhance its waste collection services, promote recycling, and move towards more sustainable waste management practices, reflecting its broader vision for a cleaner, greener urban environment.



Kampong Cham, Cambodia. © Nhut/AdobeStock.com

CASE STUDY

Can Tho, Vietnam

Dr. Ngo Trung Hai, General Secretary of ACVN



Can Tho launched a project called For a Trash-Free Mekong River that exemplifies an innovative approach to waste management and environmental preservation. Centred around the Cai Rang floating market, the initiative tackles the challenge of managing the one ton of garbage produced daily from trading and tourism activities. Through the collaborative efforts of the Green Development Support Centre (GreenHub), the Centre for Research in Resources and Rural Development (RECERD), government, and local communities, the project aims to significantly reduce waste in the Mekong River, enhancing the living conditions of over 150,000 residents in the Binh Thuy and Cai Rang districts.

Key achievements include the construction of waste classification models at the source, promotion of circular economy practices, and extensive trash collection activities on the Hau River. Notably, the initiative has introduced organic waste composting techniques, such as the Banana Circle, reducing landfill reliance and promoting sustainable organic farming practices.

This waste management strategy aligns with the Mekong Delta's broader regional planning vision for 2030 and beyond. It emphasises the 3Rs of waste with the ultimate goal of achieving zero landfill use. By prioritising modern waste treatment technologies, including waste-to-energy production, Can Tho and the Mekong Delta region are on a path toward sustainable urban development and environmental conservation.

In addition to highlighting Can Tho's commitment to tackling waste and promoting nature-based solutions, the city's experience serves as a model for sustainable urban management in riverine and deltaic environments worldwide.



Can Tho, Vietnam. © CravenA/AdobeStock.com



Vietnamese floating market. © herzform /AdobeStock.com



War Xiang Thong temple in Luang Prabang, Laos. © Darunrat/AdobeStock.com

KNOWLEDGE SHARING: WATER MANAGEMENT AND NATURE-BASED SOLUTIONS IN THE MEKONG CORRIDOR

In Mukdahan, nature is the world's largest infrastructure.

– Dindo Campilan, Regional Director for Asia, IUCN

This session provided insights into how cities can leverage natural systems to address climate change impacts, pollution, and biodiversity loss.

Nature-based Solutions are actions that protect, manage, and restore natural or modified ecosystems by addressing societal challenges such as climate change, water security, and natural disasters. These actions yield benefits for human well-being and biodiversity, advocating for a balance where species and habitats thrive within healthy ecosystems. NbS encompasses approaches that are inspired by, derived from, and based on nature, contributing to a broader strategy of ecosystem management.

Dindo Campilan, Regional Director for Asia at the IUCN, underscored the importance of integrating green infrastructure such as forests, floodplains, wetlands, and mangroves alongside traditional gray infrastructure to develop hybrid solutions. This blend aims for a long-term vision where societal challenges are met with an increased reliance on NbS, providing multiple benefits from a single intervention.

Cities are at the forefront of environmental challenges and essential to nature conservation. Well-managed urban areas can support high biodiversity levels, often located within globally recognised biodiversity hotspots. Examples of NbS in cities include green roofs, green walls, urban parks, and sustainable urban drainage systems, aligning current “greening” practices with the principles of NbS. These initiatives adapt to climate change impacts such as heat, flooding, and water scarcity and enhance urban biodiversity and recreational spaces.

Examples of NbS projects across the Lower Mekong include the URBAN project for urban resilience in flood-prone cities in Thailand, the Mekong Eba South project for climate resilience, the Sub-National Climate Fund for NbS investments, and wetlands-based adaptation in Southeast and South Asia. These projects exemplify the implementation of NbS in addressing urban and rural environmental challenges.

Flooding occurs during the rainy season in a community area on the riverbank, but it is not too serious because the Mekong River helps to drain the area very well.

– H.E. Mr. Worayan Bunnarat, Governor of Mukdahan, Thailand

SINGAPORE: THE KALLANG RIVER

- The natural river carries 40 per cent more water than a concrete channel.
- Biodiversity has increased 30 per cent, with 60 species of wildflower, 50 species of birds and 20 species of dragonflies.
- Lessons learned from the Bishan-Ang Mo Kio Park project have been integrated into the National Design Guidelines.



Before and after the renaturalisation of the Kallang River, Bishan-Ang Mo Kio Park in Singapore. © Atelierdreiseitl, CC BY-SA 3.0



CASE STUDY

Thakhek, Lao PDR H.E. Mr. Keolundone Chanthapany, Mayor of Thakhek

Thakhek's water management system is a key aspect of its sustainable urban management. The city has established four water reservoirs to support urban development and meet the community's needs efficiently. These reservoirs are part of a broader initiative to ensure sustainable water use throughout the city, conforming to national water management standards. This approach not only secures water for domestic and agricultural use, but also mitigates potential water scarcity issues, reflecting Thakhek's commitment to sustainable resource management.



CASE STUDY

Kaysone Phomvihane City, Lao PDR Mr. Prasongsinh Chaleunsouk, Mayor of Kaysone Phomvihane City, Savannakhet Province

Kaysone Phomvihane City addresses its water management challenges, particularly flooding, through a blend of engineered and natural solutions. While the city's increasing population and infrastructure development exert pressure on its drainage system, the establishment of flood protection dams and pumping stations illustrate a proactive approach to water management.

The city is also engaged in innovative projects that apply natural methods to manage water-related issues. In collaboration with the Ministry of Natural Resources and Environment and other partners, Kaysone Phomvihane utilises the Huai Khee Lamang Stream's ecosystem to bolster urban resilience against climate change. These initiatives demonstrate how integrating NbS can effectively complement conventional infrastructure to enhance urban water management.



CASE STUDY

Phnom Penh, Cambodia

**H.E. Mr. Suy Serith, Vice Governor of
Phnom Penh Capital City**

Located at the convergence of the Mekong, Tonle Sap, and Bassac rivers, Cambodia's capital city faces unique water management demands. Phnom Penh is undertaking various initiatives to improve water infrastructure and management, aiming for resilience against flooding and ensuring clean water supply.

In collaboration with JICA, Phnom Penh executed four phases of drainage system upgrades in the city centre and is currently studying the fifth phase to extend improvements to peri-urban districts. By the end of 2023, the drainage network reached 947,643m, supported by 15 pumping stations. Flood prevention strategies include regular maintenance of drainage systems, increasing underground water storage, and improving waste management to prevent blockages. The city is also interested in exploring the potential of NbS to complement its existing gray infrastructure for enhanced flood prevention and management.



CASE STUDY

Pakse, Lao PDR

**H.E. Mr. Boualy Phetsongkham,
Mayor of Pakse**

Pakse's approach to environmental sustainability includes integrating NbS into its urban planning. These initiatives focus on leveraging natural processes and ecosystems to mitigate environmental degradation and enhance urban resilience. By prioritising green infrastructure and sustainable urban drainage systems, Pakse aims to address critical issues such as waste management, water conservation, and biodiversity preservation within the urban fabric.

CASE STUDY

Kampong Cham City, Cambodia

H.E. Heng Vanny, Deputy Governor of Kampong Cham Province, Cambodia



Amid rapid population growth and infrastructural development, Kampong Cham City is grappling with the challenges of an inadequate drainage system. The current drainage network spans over 30 km, and the city struggles to cope with the demands of effective water management, particularly during the rainy season when parts of the city experience flooding, especially lowland areas.

Although these floods tend to be short-lived, lasting between three and five hours, they reflect the city's need for a more robust water management system to prevent potential disruptions to urban life. This includes both rainy floods and the seasonal flooding of the Mekong River.

In response to the flooding challenges, the city has developed a significant flood protection infrastructure. There are two flood protection dams with sluice gates within the city: the Prek Deum Chan dam (1,500m) and the Thmor Koul dam (1,050m). Kampong Cham has also implemented three pumping stations to manage water levels during floods, and one of them is mobile for greater flexibility in responding to fluctuating flood conditions.

Kampong Cham is interested in exploring the potential of NbS to complement its existing gray infrastructure for enhanced flood prevention and management.



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The Resilient Systems of Secondary Cities and Migration Dynamics Programme

This initiative is part of the global Resilient Systems of Secondary Cities and Migration Dynamics Programme supported by the SDC from 2018-2026. The programme supports initiatives designed by secondary city stakeholders to provide migrants and host communities with equal access to quality public services, labour market integration, and economic opportunities. It facilitates regional collaboration on urban planning and advocacy and fosters local partnerships among diverse city stakeholders and national and international actors to implement approaches that are locally relevant and work for all residents.

Cities Alliance has more than 20 years of experience in applying innovative and integrated solutions for inclusive and green cities in rapidly urbanising



economies. It provides technical expertise and grants to local and national actors to deliver programmes that foster social inclusion and sustainable urban development. Cities Alliance leverages the collective expertise of its partnership to catalyse new urban thinking and solutions at a local and global level.

UCLG ASPAC is a regional section of UCLG, which began its work in 1913 as the International Union of Local Authorities. UCLG ASPAC is the key knowledge management hub on local government issues in the Asia-Pacific region and the only voice of local governments officially recognised by the United Nations. It enables collaboration between cities, local governments, and their associations and encourages democratic local governance.

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Cities Without Slums

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