

A large, modern conference room with a high ceiling and recessed lighting. The room is filled with people seated at long wooden desks, facing a stage area. On the stage, several individuals are seated at a long table. The wall behind them features a large, circular emblem of the United Nations. The room is well-lit, and the atmosphere appears to be a formal meeting or conference.

Economic and Social  
Commission for Asia  
and the Pacific

**ESCAP**

**MUNUC 37**

Model United Nations of the University of Chicago

## CHAIR LETTERS

Dear Delegates,

Welcome to MUNUC 37 and the ESCAP committee! I'm Lulu, one of your co-chairs, and I am so excited to work with you all this weekend.

I am a second year at UChicago and I am (tentatively) majoring in Public Policy and History. However, I'm taking full advantage of UChicago's late deadline for declaring majors, since I'm also considering studying several other subjects. In addition to chairing this MUNUC committee, I also compete on UChicago's travelling Model UN team and I'm running a large GA for UChicago's college-level MUN conference, ChoMUN. I was born and raised in Toronto, Canada, and as a proud Canadian, I can often be found listening to the CBC, downplaying the severity of Chicago winters and spelling words like colour with the additional 'u' in them. If you find any such words spelled in Canadian English throughout this background guide, I'm the reason why!

In this committee, you will be asked to discuss different ways to promote the improvement of economic, social, and environmental policy in Asia and the Pacific, specifically considering either the challenges of sustainable urbanisation in climate crises or how to address the gender-food gap in agricultural systems. In doing so, we hope that you gain a better understanding not only of the many issues facing the Asia-Pacific region now, but also of the complex nature of solving global problems and the necessity of considering many perspectives and 'lenses' in your solutions. In order for the solutions you propose to be effective, they must consider the many facets of the problems they address. The topics we have chosen should require you to weigh many different perspectives regarding them. If you choose to discuss urbanisation in climate crises, you must consider not only the environmental perspective, and how to best promote environmental sustainability, you must also consider the social, economic, and cultural effects of the solutions you promote. How will you maintain economic growth,

improve quality of life, and protect cultural values as a part of your solutions? If you choose to discuss the gender-food gap, too, you must not only consider how to combat food insecurity, you must also consider how social and cultural norms in the regions you are creating solutions in can contribute to disproportionate food insecurity for women and tailor your solutions to consider this.

We are hoping that this committee will be filled with lively debate, thoughtful solutions, and lots of learning for new and experienced delegates alike. To that end, we will be looking for delegates who engage deeply with the committee, both in their research beforehand and in the committee room. I advise delegates to focus their research on mechanisms for solving the problems rather than on the history of the problem or any quick facts that may be found via a google search. This background guide should only be a starting point in your research. Furthermore, we are looking for delegates who raise their placards to speak often and who lead through collaboration and inclusion in unmoderated caucuses.

Model UN is a really excellent opportunity to develop public speaking, leadership and writing skills so I encourage you all to do your research and try your hardest in committee! Even though it can be scary, I hope you all try to give as many speeches and write as many clauses as possible to take advantage of this opportunity. I will not hesitate to shut down any concerning rhetoric or behaviour we notice or are alerted to. I look forward to getting to know you all and watching you engage with the committee! I really hope you enjoy it! If you have any questions or concerns, feel free to send me an email!

All the best,

Lulu DeLuca

ldeluca@uchicago.edu

Salvete everyone,

My name is Benjamin Wu, and I'm honored to serve as your Chair at MUNUC 37 this February. I'm a third-year student at the University of Chicago, majoring in Biochemistry and Economics with a minor in Human Rights. I've been involved in Model United Nations since high school, and my passion for it has only deepened as a student here. MUN is an exceptional platform for developing leadership, diplomacy, and critical thinking skills, and I'm eager to see the thoughtful debates and creative solutions this committee will bring. I can't wait to embark on this exciting journey with all of you.

As your Chair, I'll guide our discussions and ensure the committee runs smoothly and efficiently throughout each session. My goal is to maintain order and create a space where everyone feels comfortable engaging in meaningful dialogue and sharing ideas openly. With the help of the dais, I'll work to keep debates focused, respectful, and productive, while also encouraging creativity and collaboration. Whether we're in formal debate, unmoderated caucus, or navigating parliamentary procedure, I'm here to support you as we work toward impactful and well-rounded resolutions. If you have any questions or need feedback along the way, feel free to reach out—I'm excited to see the ideas you'll bring to the table and help make this committee a success!

Outside of MUNUC, I am actively involved in immunology research at KCBD, focusing on the symbiotic relationship between intestinal microbiota (specifically HSP 25) and the human host. Additionally, I am a member of Alpha Kappa Psi, the pre-professional business fraternity, and I compete as an épéeist for the UChicago Fencing Team. An interesting fact about me is that before college, I served for five years as a combat aviator in the United States Marine Corps.

Feel free to reach out to me if you have any additional questions or concerns or just want to have a cup of coffee (macha latte preferred). My email is [benjaminwu007@uchicago.edu](mailto:benjaminwu007@uchicago.edu).

Semper Fidelis,

Benjamin Wu

## HISTORY OF THE COMMITTEE

The Economic and Social Commission for Asia and the Pacific (ESCAP) is one of five regional subsidiary bodies of the United Nations Economic and Social Council. ESCAP is the most comprehensive of the five regional subsidiary bodies, comprising 53 member states which together are home to roughly two thirds of the world's population. ESCAP is primarily concerned with the promotion of economic and social development in Asia and the Pacific through regional cooperation on infrastructure projects and capacity building in several target areas. Target areas include macroeconomic policy, poverty reduction, trade, investment and innovation, transport, environment, information and communication technology, energy policy, and disaster risk reduction.

ESCAP was created in 1947 as a forum for regional collaboration in working towards post-war reconstruction and economic development. Since then, ESCAP's mandate has expanded, and they now meet annually to work towards promoting general economic and social development, regional connectivity, and sustainable development in response to more modern problems. This session will give delegates the opportunity to consider how states in Asia and the Pacific can work together on economic, social, and environmental policy to ensure the continued wellbeing of their citizens.

As a regional body reporting to the Economic and Social Council, resolutions passed by ESCAP do not hold binding legal authority over member states. Despite this, your resolutions in this session of ESCAP will provide vital and influential direction to the international community and the governments of the countries you represent in their efforts towards resilience to climate crises and food insecurity.

# TOPIC A: SUSTAINABLE URBANISATION IN CLIMATE CRISES

## Statement of the Problem

The rapid growth of urban centres in the Asia-Pacific has been a defining megatrend in the region across the last half century. In 1990, the urban population of the Asia-Pacific region was just over 1 billion<sup>1</sup>. In 2023, that number was approximately 2.5 billion<sup>2</sup>, roughly 54 percent of the global urban population. By 2050, the UN predicts that this number will surge to roughly 3.4 billion<sup>2</sup>. While the expansion of cities in the Asia-Pacific is a reflection of the rapid economic growth and technological progress in the region, and is a hallmark of the region's twenty-first century narrative, such growth has also resulted in a variety of complex challenges. Rapid demographic change and increasing urban density not only puts pressure on existing resources and social structures, it also exacerbates the risks associated with climate crises<sup>1</sup> and makes the need for *sustainable* urbanisation increasingly urgent. Some of the primary challenges produced by urbanisation in the region which must be addressed include persisting infrastructure gaps and housing shortages, high cost of living, widening social inequality, increasing pollution and energy demands, as well as the consequences of the COVID-19 pandemic<sup>2</sup>. Owing to the increased energy usage and unsustainable production-consumption patterns associated with their growth, cities in the Asia-Pacific have been, and continue to be, key contributors to global climate change. Over 70% of greenhouse gas emissions in the Asia-Pacific are generated in urban centres<sup>3</sup>, and the quantity of emissions has increased rapidly, alongside urbanisation trends. Cities are particularly vulnerable to the negative effects of climate change. Cities in the Asia-Pacific are regularly reported as having some of the worst ambient air

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<sup>1</sup> United Nations Human Settlements Programme, "Sustainable Urbanization in Asia," 1-2

<sup>2</sup> Economic and Social Commission for Asia and the Pacific, "Crisis-resilient cities for a sustainable Asia-Pacific region," 2

<sup>3</sup> Intergovernmental Panel on Climate Change, "Climate Change 2022: Mitigation of Climate Change," 160

quality in the world, with high concentrations of nitrogen dioxide, and particulate matter.<sup>4</sup> Natural disasters and flooding also occur regularly, and are particularly disastrous in cities<sup>1</sup>.

Ultimately, the problems which need to be addressed are twofold, but interconnected: the problems associated with urbanization and the problems associated with climate crises. Urban issues are exacerbated by climate crises and climate crises are exacerbated by large urban centers. Ensuring sustainable, healthy urbanization means not only improving resilience to climate crises when they occur but also mitigating their occurrence through prioritising sustainable urban infrastructure in the first place.

## Challenges Produced By Urbanisation

As the quantity of people living in Asian urban centers increases, the need for investment in the provision of public services and the improvement of public infrastructure also increases. However, in many Asian urban centers across the region, rapid urban population growth is outpacing infrastructure funding and development. Poor infrastructure development also has a variety of corollary negative effects which currently affect Asian urban centers, including housing shortages, public health emergencies, food insecurity, and pollution. This section of the background guide will give an overview on some of the major urban issues cities in the Asia-Pacific face.

## Infrastructure Gaps

Proportion of the population living in urban centers and urbanization rates varies significantly across regions in the Asia-Pacific. In some countries, like Singapore, 100% of the population lives in urban centers. In other countries, like Cambodia, only 26% of the population lives in urban areas. While the urbanization *rate* in countries like Vietnam and Cambodia is very high, in other areas in the Asia-Pacific, countries like the Republic

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<sup>4</sup> World Health Organization, “WHO Ambient Air quality database,”



of Korea are experiencing negative urbanization rates.<sup>5</sup> Despite this variance, the general trend in the Asia-Pacific is one towards rapid urbanization, and according to a World Bank report, cities across the region are generally not providing sufficient infrastructure, jobs, and services at a pace as rapid as urban development.<sup>6</sup> These challenges are primarily due to horizontal growth and informality, as well as a financing deficit.

Urban growth, particularly in South and South-East Asia, is often characterized by *horizontal growth* rather than *vertical growth*. Edge expansion and ribbon developments along major roads contribute not only to urban sprawl, but also to inefficient resource consumption.<sup>7</sup> Within urban planning circles it is increasingly believed that a certain level of density is required for sustainable cities where urban services are accessible. Transportation, water, sanitation, housing, and energy systems are not only easier and cheaper to provide within a more compact area, a more compact area is said to ‘improve the urban experience.’<sup>8</sup> Urban planners and **chrono-urbanists** increasingly promote concepts like ‘Smart Cities’ and ‘15-minute cities’ where residents can access employment, commerce, education, entertainment, and education within a reasonable walking distance from their residences. In areas characterized by large amounts of *horizontal growth*, however, there are also often high levels of **informality**. **Informal settlements** are primarily residential areas where housing units have been constructed on land which occupants have no formal, legal claim to occupy.<sup>9</sup> Informal workers and businesses in

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<sup>5</sup> ESCAP, publication, Trends in and Impacts of Urbanization in Asia and the Pacific (Bangkok: United Nations, 2022).

<sup>6</sup>“Better Infrastructure, Jobs, Services in Cities Urgently Needed in East Asia Pacific: World Bank Report,” World Bank Group, October 3, 2017, World Bank Group, <https://www.worldbank.org/en/news/press-release/2017/10/03/better-infrastructure-jobs-services-in-cities-urgently-needed-in-east-asia-pacific-world-bank-report>.

<sup>7</sup> ESCAP, publication, Trends in and Impacts of Urbanization in Asia and the Pacific (Bangkok: United Nations, 2022).

<sup>8</sup>Ibid.

<sup>9</sup>Vanessa Boanada Fuchs and Anthony Boanada Fuchs, ““Understanding Informality - Towards a Multi-Dimensional Analysis of the Concept,” Cities Alliance Informality Papers, (2021): 5–17.

informal and slum settlements often coexist with formal places but do not share the same benefits and services. This can lead to large swaths of the population being hidden from public services, statistics and infrastructure.<sup>10</sup>

Not only do urban centers in the Asia-Pacific face infrastructural challenges due to horizontal growth and associated informal settlements which can prevent people and businesses from accessing urban services, there is also a massive infrastructure financing deficit. In 2017 the Asian Development Bank estimated an infrastructure financing gap of roughly 459 billion per year.<sup>11</sup> This number did not include the need for funding in ‘social infrastructure’ sectors like healthcare and public education.<sup>12</sup> Without “a stronger pipeline of infrastructure investments, a reduction in their perceived risks, removal of institutional constraints on investment, clearer definition of infrastructure as an asset class and better capital markets” with which to recruit more domestic investment, a report of the Asian Development Bank predicts that this infrastructure gap will become yet wider.<sup>13</sup>

Although Asia and the Pacific is the world-region which maintains the highest savings rate, those funds tend to be invested abroad much more so than they are invested in the region. In 2015, the Asian Development Bank found that the saving rates in one third of Asian economies were more than 30 percent above savings rates in similar western countries. Several Asian countries also accumulate “unusually high foreign exchange reserves.” In 2016, however, Asia invested 6.2 trillion dollars in other non-Asian countries—a statistic does not proportionate to the outside-investment rates of other world regions. In 2006, World Bank economist and former American politician Lawrence Summers theorized that the simultaneous massive savings and large gap in

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<sup>10</sup>ESCAP, publication, *Trends in and Impacts of Urbanization in Asia and the Pacific* (Bangkok: United Nations, 2022).

<sup>11</sup>Sungsup Ra and Zhigang Li, “Closing the Financing Gap in Asian Infrastructure,” ADB South Asia Working Paper Series, no. 57 (June 2018), <https://doi.org/10.22617/wps189402-2>.

<sup>12</sup> Ra, Sungsup, and Zhigang Li. “Closing the Financing Gap in Asian Infrastructure.” ADB South Asia Working Paper Series, no. 57 (June 2018). <https://doi.org/10.22617/wps189402-2>.

<sup>13</sup> Ibid.

infrastructure investment was due to a “global capital flows paradox” which the Asian Development Bank provides several potential solutions to.<sup>14</sup> Even in countries like Japan and South Korea which have ample funds for investment there are “cross-border investment rules and regulations which often curtail funding infrastructure projects” and create an environment which is not conducive to intra-regional investment.<sup>15</sup>

Furthermore, infrastructure is not well-defined as a distinct asset class for investors in Asia. This hinders private financing in infrastructure projects. In order for an asset-class to be well defined and facilitate private investment there must be information about certain securities available.<sup>16</sup> In Asia, there are “persistent asymmetries” and obstacles in sharing information about infrastructure projects, risks, and demand.<sup>17</sup> This lack of transparency on infrastructure investments prevents investors from “comparing the risk-return profiles of projects” and makes infrastructure investment across legal and regulatory environments more expensive, less efficient, and riskier for investors.<sup>18</sup> These factors prevent the development of an asset class which can be priced and traded.

Areas of need for infrastructure investment include transport, energy, information and communication technology, education, and healthcare, among other sectors. While Asia’s road network has expanded very fast in

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<sup>14</sup>Lawrence Summers, “Building an International Financial Architecture for the 21st Century,” *Cato Journal* 18, no. 3 (1999): 321–29.

<sup>15</sup> Ra, Sungsup, and Zhigang Li. “Closing the Financing Gap in Asian Infrastructure.” ADB South Asia Working Paper Series, no. 57 (June 2018). <https://doi.org/10.22617/wps189402-2>.

<sup>16</sup> Asian Infrastructure Investment Bank, “Market Overview - Asian Infrastructure Finance 2021,” AIIB, 2021, <https://www.aiib.org/en/news-events/asian-infrastructure-finance/2021/market/index.html>.

<sup>17</sup>Ra, Sungsup, and Zhigang Li. “Closing the Financing Gap in Asian Infrastructure.” ADB South Asia Working Paper Series, no. 57 (June 2018). <https://doi.org/10.22617/wps189402-2>.

<sup>18</sup>Ra, Sungsup, and Zhigang Li. “Closing the Financing Gap in Asian Infrastructure.” ADB South Asia Working Paper Series, no. 57 (June 2018). <https://doi.org/10.22617/wps189402-2>.

the last decade, road density in many developing regions in Asia remains low and road quality is often poor.<sup>19</sup> Perceptions of road quality were compared across developing countries in Asia, using a seven point scale where higher scores correlate to better road quality. It was found that the regional average for developing Asia was a score slightly above four, a score higher than the average of other developing countries but lower than the OECD.<sup>20</sup> The ADB observed similar measurements when railroad density and quality across developing countries in Asia was examined.<sup>21</sup>

Electricity generation is also a key infrastructure need. Electricity generation per capita is an indicator used to measure the power infrastructure of an economy. Power infrastructure grew overall in developing Asia in the last decade, however several Southeast Asian, South Asian and Pacific economies have energy generation capacities which are well below regional averages.<sup>22</sup> In Brunei and Mongolia, energy generation per capita decreased as population growth outpaced electricity capacity. Access to electricity is critical for economic growth, poverty alleviation, the provision of services, access to information, and improving living standards.<sup>23</sup> Access to electricity has also been further negatively impacted by the COVID-19 pandemic. Several developing countries in Asia like Bangladesh and Pakistan also experience significant power supply problems. In Bangladesh in 2023, for

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<sup>19</sup>ADB, “MEETING ASIA’S INFRASTRUCTURE NEEDS,” Asian Development Bank, 2017, <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf>.

<sup>20</sup> ADB, “MEETING ASIA’S INFRASTRUCTURE NEEDS,” Asian Development Bank, 2017, <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf>.

<sup>21</sup>Ibid.

<sup>22</sup>Hannah Ritchie, Pablo Rosado, and Max Roser, “Access to Energy,” Our World in Data, January 4, 2024, <https://ourworldindata.org/energy-access#:~:text=Access%20to%20electricity,-What%20share%20of&text=Electricity%20is%20crucial%20for%20poverty,important%20social%20and%20economic%20indicator>.

<sup>23</sup>Ibid.

example, a power outage created a blackout across 99% of the country<sup>24</sup>, causing nearly 70 million in losses to the textile industry.<sup>25</sup>

## Pollution

In 2022, 48 percent of the electricity generated in Asia was generated by coal-powered plants, which has significant negative environmental impacts<sup>26</sup>. When coal-fired plants are used to generate electricity they can emit pollutants into the air, including nitrogen oxides, particulate matter, and a variety of heavy metals which cause ambient air pollution that can damage human health, ecosystems, and agricultural productivity.<sup>27</sup>

The three major sources of air pollution—industry, cars, and construction—are also closely related to urbanization and its associated economic development. As the service sector becomes a larger part of many Asian economies, particularly East Asian economies, heavy industry has been moving out of residential areas and towards peri-urban areas, consequently also shifting the major source of air pollution in Asia from industrial pollution like oxides of sulfur to primarily non-industrial pollution like oxides of nitrogen and smaller particulate

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<sup>24</sup> “List of Major Power Outages,” Wikipedia, August 18, 2024, [https://en.wikipedia.org/wiki/List\\_of\\_major\\_power\\_outages](https://en.wikipedia.org/wiki/List_of_major_power_outages).

<sup>25</sup> Staff Reporter, “Pakistan’s Energy and Economic Woes Intensify as Blackouts Reveal Deep-Rooted Issues,” Asian Power, March 29, 2023, <https://asian-power.com/power-utility/exclusive/pakistans-energy-and-economic-woes-intensify-blackouts-reveal-deep-rooted-issues>.

<sup>26</sup> Ven Venkatachalam, Lennie Kaplan, and Ven Venkatachalam and Lennie Kaplan, “Carbon Emissions and Coal-Fired Power in Asia in 2022,” Canadian Energy Centre, May 10, 2022, <https://www.canadianenergycentre.ca/carbon-emissions-and-coal-fired-power-in-asia-in-2022/#:~:text=With%2048%20per%20cent%20of,electricity%20generation%20in%20the%20region>.

<sup>27</sup> Xu Chen and Denise L. Mauzerall, “The Expanding Coal Power Fleet in Southeast Asia: Implications for Future CO2 Emissions and Electricity Generation,” *Earth’s Future* 9, no. 12 (November 25, 2021), <https://doi.org/10.1029/2021ef002257>.

matter.<sup>28</sup> According to the 2023 World Air Quality Report, four of the five countries with the worst air quality were located in Asia.<sup>29</sup> In Bangladesh, the quantity of small particulate matter in the air was more than fifteen times higher than the World Health Organisation's (WHO) mandated guideline.<sup>30</sup> In Pakistan this metric was fourteen times higher, in India it was ten times higher, and in Tajikistan it was more than nine times higher the WHO guideline.<sup>31</sup> When high levels of nitrogen dioxide, sulfur dioxide, and particulate matter are in the air people are at greater risk of stroke, ischaemic heart disease, chronic obstructive pulmonary disease, lung cancer, and pneumonia.<sup>32</sup>

The urban transport sector is one of the major sources of air pollution. This is an urban issue particularly in need of creative, sustainable transport solutions, since growing urban areas in Asia both *need* more accessible transport infrastructure and are suffering from the quantity and quality of transportation infrastructure which is already available. Transportation is not the only cause of air pollution, however. Industrial emissions like those

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<sup>28</sup> Hidefumi Imura et al., "Urban Environmental Issues and Trends in Asia—An Overview," *International Review for Environmental Strategies* 5, no. 2 (2005): 357–82,

[https://www.iges.or.jp/system/files/publication\\_documents/pub/peer/1177/IRES\\_vol.5-2\\_357.pdf](https://www.iges.or.jp/system/files/publication_documents/pub/peer/1177/IRES_vol.5-2_357.pdf).

<sup>29</sup> IQAir Staff Writers, "2023 World Air Quality Report: Region and City PM2.5 Ranking," IQAir, March 19, 2024,

<https://www.iqair.com/ca/newsroom/waqr-2023-pr>.

<sup>30</sup> A Singh, "Air Pollution Chokes Asia," *Air pollution chokes Asia | Asian Pacific Post | Chinese newspaper - Vancouver, Richmond, Calgary, Edmonton, Winnipeg, Toronto, North York, Montreal*, March 19, 2024,

[https://asianpacificpost.com/article/9950-air-pollution-chokes-](https://asianpacificpost.com/article/9950-air-pollution-chokes-asia.html#:~:text=Climate%20conditions%20and%20transboundary%20haze,polluted%20metropolitan%20area%20in%202023)

[asia.html#:~:text=Climate%20conditions%20and%20transboundary%20haze,polluted%20metropolitan%20area%20in%202023](https://asianpacificpost.com/article/9950-air-pollution-chokes-asia.html#:~:text=Climate%20conditions%20and%20transboundary%20haze,polluted%20metropolitan%20area%20in%202023).

<sup>31</sup>Ibid.

<sup>32</sup> WHO, "Air Quality, Energy, and Health," World Health Organization, 2024,

[https://www.who.int/teams/environment-climate-change-and-health/air-quality-energy-and-health/health-](https://www.who.int/teams/environment-climate-change-and-health/air-quality-energy-and-health/health-impacts#:~:text=Air%20pollution%20is%20a%20risk,(household%20air%20pollution%20only))

[impacts#:~:text=Air%20pollution%20is%20a%20risk,\(household%20air%20pollution%20only\)](https://www.who.int/teams/environment-climate-change-and-health/air-quality-energy-and-health/health-impacts#:~:text=Air%20pollution%20is%20a%20risk,(household%20air%20pollution%20only)).

from brick kilns and agricultural emissions also release carbon dioxide, methane, oxides of nitrogen, and particulate matter into the atmosphere.<sup>33</sup>

The combination of high population growth and urbanization, as well as accelerated economic growth increases the degree of consumption occurring in Asian cities.<sup>34</sup> Consequent to this, the amount of municipal solid waste (MSW) produced is also increasing and changing in its composition.<sup>35</sup> While there have been several new and effective changes to recycling technologies, many countries in Asia have struggled to deal with MSW, and have had issues regarding dumpsite management, the informal sector, waste collection, open burning, and food waste<sup>36</sup>. When MSW is disposed of in Asian low and middle income countries, it is most often disposed of in open dumps which are typically poorly managed and do not adhere to best practices on the hygienic handling of solid waste. Open dumps take no precautionary measures to mitigate the various environmental and health problems which might be caused by dumping MSW. They rely only on natural linings like clay layers to insulate open dumps. Natural linings like clay layers do not collect or treat toxic leachates. This can be particularly dangerous when open dumps, like Okhla landfill in Delhi, are located on floodplains. When floods occur, leachates released into land and water environments can cause significant environmental damage.

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<sup>33</sup>ADB, “MEETING ASIA’S INFRASTRUCTURE NEEDS,” Asian Development Bank, 2017, <https://www.adb.org/sites/default/files/publication/227496/special-report-infrastructure.pdf>.

<sup>34</sup> Hidefumi Imura et al., “Urban Environmental Issues and Trends in Asia—An Overview,” *International Review for Environmental Strategies* 5, no. 2 (2005): 357–82,

<sup>35</sup> Pariatamby Agamuthu and Sandhya Babel, “Waste Management Developments in the Last Five Decades: Asian Perspective,” *Waste Management & Research: The Journal for a Sustainable Circular Economy* 41, no. 12 (October 12, 2023): 1699–1716, <https://doi.org/10.1177/0734242x231199938>.

<sup>36</sup> Pariatamby Agamuthu and Sandhya Babel, “Waste Management Developments in the Last Five Decades: Asian Perspective,” *Waste Management & Research: The Journal for a Sustainable Circular Economy* 41, no. 12 (October 12, 2023): 1699–1716, <https://doi.org/10.1177/0734242x231199938>.

In some regions, the informal sector collaborates with municipalities to manage waste and collect, transport, and trade recyclable materials. Individuals involved in informal recycling, typically children, women, and elderly populations scavenge recyclables from waste as a part of their livelihood. The proportion of total generated waste informal waste recyclers recycle can be as high as 45 percent.<sup>37</sup> This activity is usually not organised by or acknowledged by waste authorities despite the fact that waste pickers reclaim very large volumes of high-value resources and provide societal benefits through their activities. Since waste pickers are not typically legally recognised they receive very low incomes and few government protections.<sup>38</sup>

## Housing Shortages

As cities across the Asia-Pacific, particularly those in developing countries, urbanise at a rapid rate, the demand for housing to support increased urban populations has also increased rapidly. Many developing countries in the Asia-Pacific have not been able to respond to the rapid increase in demand for housing. In 2014, Dasgupta et al demonstrated that the economic status of countries is closely related to the elasticity of the housing market in accommodating urban growth. They note that in most developing countries, housing investment lags behind urbanisation needs by up to ten years, whereas in OECD countries housing investments typically occur ahead of the increase in housing demand. This lag in housing investment in developing countries can lead to inaccessibly high housing prices, informal settlements and slums. In a 2020 article, WHO economist Matthias Helble speculated as to what might be causing a lag in housing investment in developing countries in the Asia Pacific. One factor he regards as a potential reason for the supply gap is a lack of private construction companies which construct housing types which might be accessible for lower-income groups. There is not only a lack of

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<sup>37</sup> Linzner R, Lange U (2013) Role and size of informal sector in waste management – A review. Proceedings of the Institution of Civil Engineers. Waste and Resource Management 166: 69–83

<sup>38</sup> Ekoue-Kovi, Klutse, and Theresa Mutafungwa. "Waste Management in Africa: Environmental and Socioeconomic Challenges." SAGE Journals, 2023. <https://journals.sagepub.com/doi/10.1177/0734242X231199938>.



these private construction companies in many areas, but also policy-based impediments to the emergence of these companies in the first place, including extensive development approval processes and difficulty in acquiring either credit, land or both. Some developing countries have strict land use regulations which exacerbate supply issues in affordable housing. Indian cities, for example, have been shown to demonstrate among the lowest Floor Area Ratio (FAR) limits in the world. When South Korea was in the developing country stage as well, greenbelts, while environmentally beneficial and protective against urban sprawl, also limited housing supply in Seoul, and are today charged with contributing to high housing prices in the city.

The housing affordability issues faced by people in the Asia-Pacific varies substantially by sub-region. While some regions, like Southern Asia, have high proportions of people living in slums and other informal settlements (35%), countries like Singapore and Hong Kong have achieved near universal access to adequate housing via a variety of policy implementations which have reduced the prevalence of slums. Housing affordability issues are not limited to slums, however. When a sample of 57 cities in 19 developing countries in Asia were surveyed, it was found that most cities show not only very high price-to-income ratios, but also that many cities show high annual mortgage rates. Almaty, a city in Kazakhstan had the highest mortgage rate of all cities surveyed at 17.5 percent, followed by Lahore in Pakistan and Dhaka in Bangladesh which had mortgage rates of 13 percent and 11 percent respectively. High mortgages increase the burden of housing cost for homebuyers and many households without strong financial capacity which might otherwise have formal housing are relegated to the informal housing sector.

Although housing affordability problems are a reflection of urbanisation which is strongly correlated with economic growth, recent empirical literature also suggests that when housing affordability problems become excessive they may severely undermine economic growth. When restrictions to new housing supply in the US were

examined it was found that they lowered aggregate US growth by 36 percent between 1964 and 2009.<sup>39</sup> If this trend is extrapolated to Asian cities, it suggests that high housing prices might have similar negative economic consequences on the other side of the Pacific. Given this, tackling housing affordability issues, particularly as they have been exacerbated by the COVID-19 pandemic, should be a top priority.

## Case Study: Housing in Ho Chi Minh City, Vietnam

Ho Chi Minh City is the largest city in Vietnam, containing roughly 9 million residents and accounting for nearly 9.35 percent of the national population. The city's large population and influx of immigrants from rural areas has caused the cost of housing to increase rapidly, financially burdening residents. This has also caused a change in the housing types which are accessible. In 2019, 88.1 percent of households, a significant majority, owned their own housing units. This statistic had a significant rural-urban disparity, however. While 77.9 percent of urban households owned their housing units, in rural areas this percentage was much higher at 93.6 percent. The rate of rented accommodation in urban areas showed a significant increase of 5% since 2009 and in Ho Chi Minh City specifically the prevalence of rented housing is very high by Vietnam's standards at 32.8 percent.

In the past decade in Ho Chi Minh City, the government has adopted a variety of measures promoting affordable housing and investing in the creation of new housing units. From 2013 to 2016 a loan program was developed to assist low-income households in purchasing houses. While this program has seen some success in facilitating home ownership for lower income Ho Chi Minh City residents, a greater problem in Ho Chi Minh City is not the affordability of home *ownership*, but rather the affordability of ownership of *adequate* housing.

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<sup>39</sup> Hsieh, C. T., & Moretti, E. (2019). Housing constraints and spatial misallocation. *American Economic Journal: Macroeconomics*, 11(2), 1-39.

<sup>40</sup>According to the 2019 census, roughly 3.2 million individuals reside in substandard housing conditions where the average living area per person is less than six square metres. In Ho Chi Minh City, housing expenditure, spent on rent, maintenance, utilities, and repairs, takes up an average of 41% of citizens' incomes. According to Barrett, when this metric exceeds 30% it indicates that citizens are facing extreme housing difficulties.

## Public Health Outcomes and Emergencies

The combination of urbanisation related issues including pollution, poor public housing and infrastructure, and food insecurity can increase the risk of both communicable and noncommunicable diseases and other public health emergencies for urban populations.<sup>41</sup> Along with other public services and infrastructure projects, urban health systems in the Asia-Pacific have, on the whole, not expanded in capacity at the same rate as urbanisation. There are particular deficits in the provision of healthcare to people living in informal settlements. These deficits are just one manifestation of urban health systems which are often rife with socioeconomic inequalities. As is true in many areas of the world, a UNHabitat report found that in Asia generally, wealthier neighbourhoods tend to have better-equipped hospitals and medical facilities compared to lower-income areas which often face limited access to health care services. The COVID-19 pandemic has exposed several of these inequalities. Overcrowding and poor access to housing, healthcare and other public services in cities was a factor which contributed not only to a more rapid spread of COVID-19 in lower-income areas, but also poorer health outcomes for residents of lower income areas. Residents of lower income areas were shown to have had more limited access to protective equipment during the pandemic and a higher likelihood of having jobs which did not allow remote work, increasing residents' vulnerability to COVID-19. In the vaccine rollout, areas with better

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<sup>40</sup> Nguyen, Quang. "Economic Growth and Environmental Sustainability in Southeast Asia: An Analysis." *Cogent Economics & Finance*, 2023. <https://www.tandfonline.com/doi/full/10.1080/23322039.2023.2297604>.

<sup>41</sup> United Nations Human Settlements Programme (UN-Habitat). *Future of Asia-Pacific Cities Report 2023*. Nairobi: UN-Habitat, 2023. [https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities\\_2.pdf](https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities_2.pdf)

infrastructure and public services were often prioritised, leaving those living in informal-housing types at risk for much longer, despite being more vulnerable populations.<sup>42</sup>

Urbanisation is not necessarily harmful to public health outcomes. While rapid urbanisation is often associated with an increased prevalence of communicable diseases due to overcrowding, poor infrastructure, and poor provision of healthcare services, as well as socioeconomic inequalities in the provision of health services, it has been shown that when urbanisation is well-managed, sustainable, and planned, it can mitigate the spread of communicable diseases and improve access to healthcare. Required for this, however, is significant investment in improving sanitation, disease surveillance systems, and other healthcare infrastructure. Urban planning which prioritises pedestrians and greenspace, as well as affordable housing can also increase public health outcomes. While some areas in the Asia-Pacific have achieved these positive health outcomes, the greater trend in the region, particularly in Southeast Asia, is one towards the negative public health outcomes associated with rapid urbanisation. In 2018 Tran conducted an investigation on the impacts of urbanisation on the transmission dynamics of waterborne diseases like Dengue fever within urban regions of Southeast Asia. It was found that there was a statistically significant association between urbanisation indicators like population density and land-use changes and incidence of dengue fever outbreaks. Furthermore, urbanisation also increases the prevalence of and risk factors of non-communicable diseases amongst people living in urban areas. The prevalence rates of non-communicable diseases were measured via health surveys and clinical assessments and it was found that in urban areas, non-communicable diseases like hypertension, diabetes, and chronic obesity had higher incidence rates which could be attributed to urbanisation-related lifestyle changes.

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<sup>42</sup> United Nations Human Settlements Programme (UN-Habitat). Future of Asia-Pacific Cities Report 2023. Nairobi: UN-Habitat, 2023. [https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities\\_2.pdf](https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities_2.pdf).

## Case Study: the Impact of Rapid Urbanisation On Mental Health in South Asia

Urbanisation not only impacts public health with respect to physical health outcomes and disease control, but also with respect to mental health outcomes. In 2008, Trivedi, Sareen, and Dhyani conducted a study on the effect of rapid urbanisation on the mental health of urban residents in South Asia, finding that urban populations there are heavily influenced by changing cultural dynamics, leading to psychiatric problems.<sup>43</sup>

Urbanisation is often associated with multiculturalism. As urban centres grow, people living in rural areas which may be geographically and culturally different from urban centres participate in rural-urban migration towards metropolises. People from different countries, attracted by expanded economic opportunities, also move to cities. While multiculturalism can contribute to increased tolerance, better quality of life, and sociocultural simulation, it may also contribute to cultural conflicts between residents of the same urban centre and heightened social tensions associated with changing family and societal dynamics which may, according to Trivedi, carry mental health ramifications.<sup>44</sup>

As a result of rural-urban migration and high fertility rates, Trivedi estimates that roughly 50% of the urban population in developing countries is younger than 25 years old. Children and women in cities, particularly those which have developed rapidly where poverty, unemployment, and cultural conflict may lead to interpersonal violence, are particularly vulnerable. Trivedi speculates that Children in these areas may be drawn towards antisocial behaviour and psychological conditions like depression and anxiety.<sup>45</sup>

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<sup>43</sup> Platon, Alexandra, I. Martinez, and Richard Walker. "Climate Change Impacts on Public Health." *Journal of Public Health*, 2009. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738359/>.

<sup>44</sup> Platon, Alexandra, I. Martinez, and Richard Walker. "Climate Change Impacts on Public Health." *Journal of Public Health*, 2009. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2738359/>.

<sup>45</sup> Ibid.

Women often disproportionately bear the majority of the burden of urbanisation-related changes, acting not only as wives and mothers but also often as a part of the labour force. <sup>46</sup>Gender-based discrimination, malnutrition, overwork, and domestic violence are all prevalent in urban centres where rapid urbanisation occurs and are associated with higher incidence of mental disorders. <sup>47</sup>In India, a meta-analysis of 13 different epidemiological studies in various regions showed an overall prevalence rate of mental disorder in women of 64.8 per 1000, a metric which is significantly higher than that of men. <sup>48</sup>

## Challenges Produced By Climate Change

While there are a variety of urban challenges associated with rapid urbanisation alone, climate change also causes several important challenges to cities in the Asia-Pacific. Cities in the Asia-Pacific are particularly vulnerable to climate change and natural disasters. This can not only damage infrastructure, economies, and public health, and climate-change related issues can exacerbate urban issues which already exist and intensify urbanisation by causing climate migration.

Climate change refers to long-term shifts in temperature and weather patterns. Shifts in temperature and weather patterns may be due to natural factors, like volcanic eruptions, or due to human activities. <sup>49</sup> Since the Industrial Revolution, human activities, particularly the burning of fossil fuels and consequent release of greenhouse gas emissions, have been the primary driver of climate change. When humans are the cause of climate changes, this is called **anthropogenic climate change**. Since 1850, Earth's average temperature has warmed by

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<sup>46</sup>Ibid

<sup>47</sup> Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB. Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry*. 1995;52:1048–60

<sup>48</sup> Reddy MV, Chandrasekhar CR. Prevalence of mental and behavioural disorders in India: A metanalysis. *Indian J Psychiatry*. 1998;40:149–57.

<sup>49</sup> United Nations. "What Is Climate Change?" United Nations, 2023. <https://www.un.org/en/climatechange/what-is-climate-change>.

roughly two degrees Fahrenheit. When air and water temperatures increase to such a significant degree, ice sheets melt leading to rising sea levels. Increased air and water temperatures also lead to supercharged storms and higher wind speeds, as well as longer, more intense droughts and wildfires, heavy precipitation and flooding.

Climate change-related natural disasters and weather events are prevalent in the Asia-Pacific and are intensifying. Since the 20th century observed surface air temperature in Asia has increased significantly causing heat waves and droughts in the arid and semiarid areas of West, Central and South Asia, as well as increasing the risk of floods in monsoon regions in South, Southeast and East Asia, and the melting of glaciers in the Hindu Kush Himalayan region.<sup>50</sup> Island nations like Tuvalu and the Solomon Islands are also under threat of disappearing due to sea level rise.<sup>51</sup>

Cities in the Asia-Pacific are particularly vulnerable to the impacts of climate change and climate disasters, since a large number of people live in low lying coastal areas where flooding and other disasters are most likely to occur. Asian cities are not only located in vulnerable areas geographically, their urban makeup also makes them particularly vulnerable since many people live in slums and informal settlements where houses and other buildings are unable to withstand flooding and extreme weather events. This is expected to cause huge economic losses and impede freshwater availability, food security, and industrial output. Urban adaptations to climate change are growing across Asia. Countries are increasingly instituting flood protection measures, climate-resilient highways and power infrastructure, sustainable land use regulations, urban farming, and technological solutions

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<sup>50</sup> Intergovernmental Panel on Climate Change (IPCC). IPCC Sixth Assessment Report: Climate Change 2022 – Impacts, Adaptation and Vulnerability. Geneva: IPCC, 2022.  
[https://report.ipcc.ch/ar6/wg2/IPCC\\_AR6\\_WGII\\_FullReport.pdf](https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf).

<sup>51</sup> Oxfam International. "5 Natural Disasters That Beg for Climate Action." Oxfam, 2023.  
<https://www.oxfam.org/en/5-natural-disasters-beg-climate-action#:~:text=Increases%20of%20air%20and%20water,seasons%20C%20heavier%20precipitation%20and%20flooding.>

like ‘Smart Cities’ and early warning systems for climate-change related natural disasters. Currently, however, adaptation actions are primarily reactive rather than preventative, in the early stages of development and implemented primarily in larger, richer cities as opposed to smaller and medium sized cities.<sup>52</sup>

Climate change also threatens agricultural production, and thus food security in Asia. Monsoon rain, drought, and oceanic oscillations will change ecosystems across Asia, meaning that certain areas will become more agriculturally productive and certain areas, particularly those which currently have a high agricultural output, will be less productive. This may lead to a decline in crop production in South and Southeast Asia, a reduction in livestock populations in Mongolia and significant changes to farming systems and crop areas across nearly all regions, with negative implications for food security. Rice production in Cambodia, for example, is expected to decrease by 45 percent by 2080 if current emissions projections are accurate.<sup>53</sup>

Climate change is already causing both internal and international migration across Asia, since events like cyclones, floods and typhoons can cause massive displacements of people and destruction of housing and infrastructure. Managing climate migration is particularly difficult since there is no clear definition of a ‘climate refugee’ accepted by international institutions, making it difficult for those who have been forced to leave their homes due to climate change and natural disaster to access aid infrastructure.<sup>54</sup>

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<sup>52</sup> Intergovernmental Panel on Climate Change (IPCC). IPCC Sixth Assessment Report: Climate Change 2022 – Impacts, Adaptation and Vulnerability. Geneva: IPCC, 2022.  
[https://report.ipcc.ch/ar6/wg2/IPCC\\_AR6\\_WGII\\_FullReport.pdf](https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf).

<sup>53</sup> Intergovernmental Panel on Climate Change (IPCC). IPCC Sixth Assessment Report: Climate Change 2022 – Impacts, Adaptation and Vulnerability. Geneva: IPCC, 2022.  
[https://report.ipcc.ch/ar6/wg2/IPCC\\_AR6\\_WGII\\_FullReport.pdf](https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf).

<sup>54</sup> European Parliamentary Research Service. Climate Change: Impact on European Regions. European Parliament, 2021. [https://www.europarl.europa.eu/thinktank/en/document/EPRS\\_BRI\(2021\)698753](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2021)698753).



## History of the Problem

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### Factors Causing Urbanisation in Asia

As of 2024, seven of the world's ten largest megacities are located in the Asia-Pacific, and in the next 27 years it is projected that an additional 970 million new urban residents will inhabit Asian cities.<sup>55</sup> This rapid urbanisation has been driven by a variety of factors including natural population increase, displacement due to conflict and climate change, administrative reclassification, and both internal and cross-border migration.<sup>56</sup> According to a 2013 report, ESCAP considers internal migration to be the main factor influencing urban growth in the Asia-Pacific. Migrants often choose to leave rural communities in order to pursue real or perceived economic opportunities and benefit from better services in urban areas. As a result of the increased industrialisation of agriculture which has occurred since the Industrial Revolution, the quantity of farming-related jobs in rural areas has decreased.<sup>57</sup> Furthermore, rural areas are associated with consistently higher fertility rates than urban areas. In China for example, fertility rates were charted for the period 1954 to 1980 in a variety of cities and rural counties. It was found that significantly higher fertility rates occurred in rural areas.<sup>58</sup> Decrease in agriculture jobs in rural communities, in tandem with high birth-rates, is a major factor influencing rural-urban internal migration streams. Once such streams are established, **chain migration** wherein prospective migrants are provided with transportation, accommodation, and employment via pre-existing social relationships with previous migrants, increases rural-urban migration, since it makes rural-urban migration easier and more

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<sup>55</sup> Geographical. "The World's 10 Biggest Megacities and Their Changing Populations." Geographical, 2023. <https://geographical.co.uk/science-environment/the-worlds-10-biggest-megacities-and-their-changing-populations>.

<sup>56</sup> UN-Habitat. Future of Asia-Pacific Cities Report 2023. Nairobi: UN-Habitat, 2023. [https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities\\_2.pdf](https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities_2.pdf).

<sup>57</sup> Land Journal Editors. "Land Use and Urban Development." MDPI Land 12, no. 8 (2023): 1478. <https://www.mdpi.com/2073-445X/12/8/1478>.

<sup>58</sup> World Health Organization (WHO). "Urbanization and Health." PubMed Central, 2002. <https://pubmed.ncbi.nlm.nih.gov/12288643/>.

accessible.<sup>59</sup> Increasing rates of rural-urban migration have been particularly significant in the last half century. Between 1960 and 2021, for example, World Bank statistics show that the proportion of the population in India living in rural areas decreased by 20% while the proportion of the population living in urban centres has increased by roughly 17%.<sup>60</sup>

Displacement is also a major cause of the creation and expansion of urban centres. The quantity of urban refugees in Asia and the Pacific displaced either by political events like war and ethnic conflict or as a result of climate-change related natural disasters or weather events was roughly 2.8 million in 2019.<sup>61</sup> In addition to this number, millions more are internally displaced each year.<sup>62</sup> Of those considered to be internally displaced persons by the UNHCR, roughly 80% are settled in urban or peri-urban areas, and of those considered to be refugees roughly 60% are settled in such areas.

## History of Urbanisation and Urbanisation Patterns in the Asia-Pacific

While there are certain patterns of economic and social development which have occurred across many countries in the Asia-Pacific as they have urbanised, the factors influencing urban development and its results vary significantly by country. This section of the background guide will give a brief account of urbanisation in several countries which exemplify some general trends in urbanisation across different sub-regions in the Asia Pacific.

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<sup>59</sup> Logan, John R., and Harvey L. Molotch. "Urban Fortunes: The Political Economy of Place." *American Sociological Review* 50, no. 1 (1985): 25–42. <https://www.jstor.org/stable/3348581>.

<sup>60</sup> **UN-Habitat**. *Future of Asia-Pacific Cities Report 2023*. Nairobi: UN-Habitat, 2023.

[https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities\\_2.pdf](https://unhabitat.org/sites/default/files/2023/10/escap-2023-fs-future-asia-pacific-cities_2.pdf).

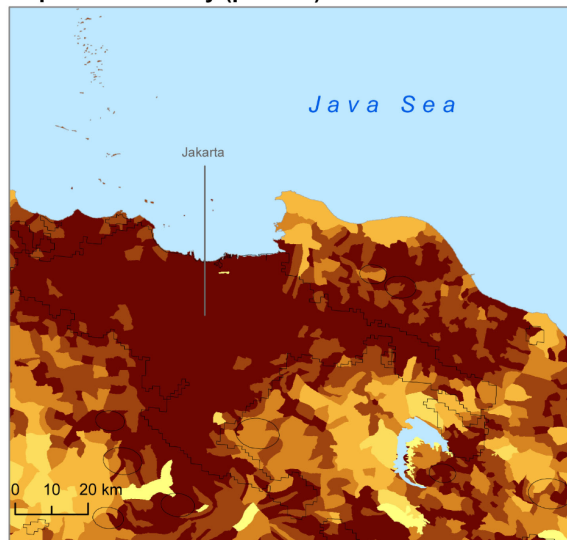
<sup>61</sup> IBID.

<sup>62</sup> IBID.

## Urban-Rural Population and Land Area Estimates, Version 2, 2010: Jakarta, Indonesia

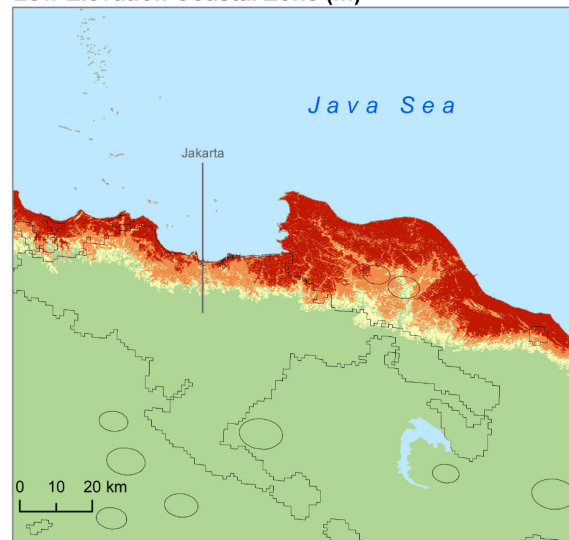
### Low Elevation Coastal Zone

#### Population Density (per km<sup>2</sup>)

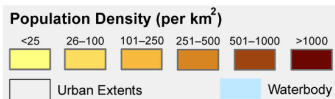


Lambert Azimuthal Equal Area Projection

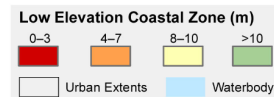
#### Low Elevation Coastal Zone (m)



Map Credit: CIESIN Columbia University, November 2013



Center for International Earth Science Information Network  
EARTH INSTITUTE | COLUMBIA UNIVERSITY



The Low Elevation Coastal Zone (LECZ) Urban-Rural Population and Land Area Estimates Version 2 data set provides continent-level and country-level estimates of land area and urban, rural, and total population for 202 statistical areas (countries and other UN recognized territories). Population inputs were derived from Gridded Rural-Urban Mapping Project, version 1 (GRUMPv1). Elevation data were derived from the Shuttle Radar Topographic Mission (SRTM) 90 meter data set.

© 2013. The Trustees of Columbia University in the City of New York.  
Data Source: Center for International Earth Science Information Network (CIESIN) /Columbia University. 2013. Low Elevation Coastal Zone (LECZ) Urban-Rural Population and Land Area Estimates, Version 2. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). <http://sedac.ciesin.columbia.edu/data/set/lec2-urban-rural-population-land-area-estimates-v2>.

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Figure 2: Urban Rural Population in Jakarta, Indonesia <sup>63</sup>

## East and North-East Asia

In a recent paper on the urban development of East Asian cities, economist Shahid Yusuf divides East Asian economies into three ‘urbanisation groups’: “the early mover Japan, ... the fast followers South Korea, Taiwan, Hong Kong, and later China; and those bringing up the rear, North Korea and Mongolia.”<sup>64</sup> Although

<sup>63</sup> Wikipedia, s.v. "Climate Change in Indonesia," [https://en.wikipedia.org/wiki/Climate\\_change\\_in\\_Indonesia](https://en.wikipedia.org/wiki/Climate_change_in_Indonesia).

<sup>64</sup> Glaeser, Edward, and Jose Antonio Mejia. *East Asian Cities: Past Development and Onrushing Challenges*. Washington, DC: Center for Global Development, 2017. <https://www.cgdev.org/sites/default/files/east-asian-cities-past-development-and-onrushing-challenges.pdf>.

urban infrastructure and industry in Japan was severely damaged during the Second World War, according to Yusuf, a significant amount of “human capital” survived, making economic recovery possible. In the postwar decades rapid urbanisation occurred in Japan and the recovery of this urban population facilitated industrialization and an increase in exports. Between the years 1945 and 1960 Tokyo’s population increased from 3.5 million to 10 million.<sup>65</sup> The combination of a highly concentrated urban population and industry created **urban agglomerations** in the Kanto, Kansai, and Tohoku regions. Urban agglomeration is a phenomenon which occurs when relationships amongst cities in roughly the same region shift from mainly competition to both competition and cooperation. Cities in urban agglomerations are highly integrated and are one of the most important carriers for global economic development.<sup>66</sup> Agglomeration in these regions in the second half of the 20th century, in tandem with the development of the Shinkansen—a high-speed rail network which connected Japanese cities in key regions—led to increased productivity and manufacturing growth. The rail network in particular not only reinforced the economic benefits of urbanisation in cities, but also radiated their benefits to suburban areas and edge-cities further from core areas but from which core cities were easily accessible.<sup>67</sup> While this rapid industrialization and urban growth resulted in economic growth, it also caused urban crowding, congestion, pollution and high land prices. As Japan’s urban growth slowed in the 1990s, and the population began ageing, cities began adjusting to the new urban environment and improving it.

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<sup>65</sup>PricewaterhouseCoopers (PwC). From Urbanization to an Aging Society: Japan’s Demographic Challenges. Tokyo: PwC Japan, 2020. <https://www.pwc.com/jp/en/japan-knowledge/archive/assets/pdf/from-urbanization-to-aging-society.pdf>.

<sup>66</sup> ScienceDirect Editors. "Urbanization and Sustainability." ScienceDirect, 2017. <https://www.sciencedirect.com/science/article/pii/S0169204617300439>.

<sup>67</sup> Glaeser, Edward, and Jose Antonio Mejia. East Asian Cities: Past Development and Onrushing Challenges. Washington, DC: Center for Global Development, 2017. <https://www.cgdev.org/sites/default/files/east-asian-cities-past-development-and-onrushing-challenges.pdf>.

While South Korea and Taiwan began urbanising due to Japanese colonial influence, like in Japan, the effects of war in the 1940s and 1950s put a pause to urbanisation. Taking cues from Japan in the mid to late 1960s, however, South Korea and Taiwan both introduced policies promoting industrialisation.<sup>68</sup> These policies resulted in large-scale rural-urban migration and the growth of urban centres as well as rapid, export-led growth.<sup>69</sup> While South Korea centred its industrial investment in the Seoul metro-area rather than other urban areas, patterns of urban development differed in Taiwan, which focused not just on large cities, but also smaller towns. Different types of industrial investment not only created different types of urban landscapes in South Korea and Taiwan, it also favoured different industries and business models. While South Korea is now a haven for large, privately owned industrial conglomerates, Taiwan's industrial policy has created an environment where **Small to Midsize Enterprises (SMEs)** thrive. Despite substantial differences in the distribution of population and city size in South Korea and Taiwan, in each rapid, export-led growth facilitated by industrialization policies encouraged and sustained urbanisation.

In both Mongolia and North Korea, urbanisation has proceeded more slowly. Mongolia, like South Korea, has prioritised the industrialisation of one **Primate City**<sup>70</sup>, Ulaanbaatar, which is home to nearly half of

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<sup>68</sup>Levy, Brian. "Industrial Policies in East Asia." HAL Archives, 2023. <https://hal.science/hal-03470146/document#:~:text=Industrial%20policies%20in%20the%201960s,on%20the%20import%20substitution%20strategy.>

<sup>69</sup>Ibid.

<sup>70</sup> The concept of the 'Primate City' was introduced in 1939 by the Geographer Mark Jefferson. Jefferson considers primate cities as cities which are the largest in their region. In order to be a primate city a city must be at least twice as large as the next largest city and more than twice as significant. Due to their primacy not only in size and population but also in economic activity, politics, and educational opportunities, primate cities are often targets for much of a region's internal migration. In South Korea Seoul is a primate city. **McGee, T. G.** "The Urbanization Process in Southeast Asia." *American Journal of Sociology* 70, no. 3 (1964): 237–245. [https://www.jstor.org/stable/209944.](https://www.jstor.org/stable/209944)

Mongolia's population.<sup>71</sup> Changes to urban planning regulations, as well as a series of harsh winters and drought-ridden summers which were detrimental to Mongolia's rural and nomadic populations in the late 1990s resulted in significant urban growth.<sup>72</sup> In tandem with urbanisation in Ulaanbaatar, levels of air pollution and informal settlements have increased significantly. Mongolia's economic growth has been due to the production and export of natural resources, rather than manufactured goods. There is little reliable data available on North Korea's urban industrial strategy, since it is pursuing what Yusuf terms "a self-imposed, autonomous developmental path." Based on this, and on its negligible exports (only 308 million to China in 2019), it is clear that neither Mongolia or North Korea, Yusuf's 'late-movers,' pursued the manufacturing export oriented growth model favoured by not only Japan, South Korea, and Taiwan, but also Hong Kong and Singapore.

Yusuf places urbanisation in China "in a class of its own," due to the size and singularity of China's urban industrial policy over the past few decades. Until Deng Xiaoping's market reforms in the late 1970s, the Chinese population, restricted by residency requirements and hiring policies which prevented rural-urban migration, remained the most rural in all of East Asia. Xiaoping's economic reform policies began with the Decollectivization of Agriculture. Under Mao, rather than farming individually, a system of agricultural 'cooperatives' was introduced whereby land was pooled into larger single units. Under Deng Xiaoping, the "Household Responsibility System" replaced collective agriculture. In this system, while land was still owned by the public and households were still required to contribute to quotas determined by the state, households were granted autonomy over what to plant, how to run farms, and a new system of pricing which reduced the number of products subject to state monopolies. Throughout the 80s, 90s and 00s, foreign investment was allowed,

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<sup>71</sup>Asian Disaster Reduction Center (ADRC). Mongolia Country Report FY2021. Tokyo: ADRC, 2021.

[https://www.adrc.asia/countryreport/MNG/2021/Mongolia\\_CR\\_FY2021.pdf](https://www.adrc.asia/countryreport/MNG/2021/Mongolia_CR_FY2021.pdf).

<sup>72</sup>Rojas, Ricardo. "The Political Economy of Asian Cities." RRojas Databank, 2011.

<https://www.rrojasdatabank.info/citiesasian1011-02.pdf>.

protectionist policies were reduced, and restrictions on rural-urban migration were lifted. This led to increased urbanisation, particularly from the 1990s onward. Unlike South Korea, and Mongolia, China does not have a primate city. It has a range of megacities like Shanghai and Beijing, 'anchor cities' like Tianin, Shenzhen, and Guangzhou, as well as 'rust-belt metros,' 'service cities,' and 'industrial cities.' Urban growth seems to favour cities in coastal provinces, and nearly half of cities which have undergone population growth of over 10% in the last decade are located in the Yangtze River Delta and the Greater Bay Area. While the main source of economic growth and employment in the majority of Chinese cities is industry, in large cities this is transitioning away from industry and more towards the provision of services.

## South-East Asia

In the sixteenth and seventeenth centuries, Southeast Asian cities were highly urbanised for the period. According to Reid's arguments, maritime cities like Aceh, Banten, Surabaya and Makassar reached populations of over 50,000 people, sizes similar to or larger than major European cities in the same period. States formed and commerce flowed around these maritime cities<sup>73</sup>. By 1870 however, Southeast Asia had experienced roughly two centuries of de-urbanisation. Reports from the period consider low-population density and large swaths of jungle to be characteristic of the region. Between the 1870s and the Second World War, however, falling international shipping costs due to the invention of steamships and the construction of the Suez Canal "drastically cut the physical, and even more the economic distance between Southeast Asia and Europe."<sup>74</sup> In the second half of the

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<sup>73</sup> Friedmann, John. "Urbanization and Development." *Journal of Development Studies* 10, no. 3 (1974): 184–203. <https://www.jstor.org/stable/312501>.

<sup>74</sup> Henderson, Vernon, and Arup Mitra. "Urbanization and Economic Growth in India." *Journal of Development Studies* 48, no. 3 (2012): 675–697. <https://www.tandfonline.com/doi/full/10.1080/00220388.2012.693171#d1e275>.

nineteenth century, Southeast Asia was also rapidly colonised, primarily by Britain in Burma<sup>75</sup>, Malaya<sup>76</sup>, and to a certain extent Thailand, the Netherlands in Indonesia, France in Indochina<sup>77</sup>, and the United States in the Philippines. Colonial administrations enforced property rights and free-trade agreements. Colonial policy, in tandem with new industrial technology led Southeast Asia to respond to Western industrial demands via large-scale exports. The majority of Southeast Asian states developed large, dominant cities and doubled as well-placed port cities. In Burma, this was Rangoon, in Malaysia, this was Singapore, in Thailand, this was Bangkok, and in the Philippines, this was Manila. Indonesia developed two, Jakarta and Surabaya. These port-cities were used for colonial exports and helped to facilitate the extreme economic specialisation that would prove critical to this export-led urban growth. Only four products, all natural resources, dominated the region's exports—rubber, sugar, rice and tin. Commerce surrounding these cities sparked urban agglomeration, which mostly continued throughout the 20th century. Between 1950 and 2014 the urban population in Southeast Asia increased from 26 million to 294 million.<sup>78</sup> From 1990 to 2014 alone this increase was 154 million people. This urbanisation occurred and is occurring in lock-step with economic growth, not only due to exports but also due to increased foreign direct investment and participation in global value chains.<sup>79</sup> While the region moved from an agriculture-based economy to an industry-based economy throughout the 20th and early 21st centuries, like East Asia, Southeast Asia shifted towards a service-based economy. Like many East Asian cities, rapid urbanisation in Southeast Asia has, in many cases, outpaced the investment in infrastructure and services and environmental

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<sup>75</sup> Now called Myanmar

<sup>76</sup> Now called Malaysia

<sup>77</sup> Consisted of what is now considered Vietnam, Cambodia, and Laos

<sup>78</sup> Dahiya, Bharat. "Southeast Asia and Sustainable Urbanization." *Global Asia* 9, no. 3 (2014).

[https://www.globalasia.org/v9no3/feature/southeast-asia-and-sustainable-urbanization\\_bharat-dahiya](https://www.globalasia.org/v9no3/feature/southeast-asia-and-sustainable-urbanization_bharat-dahiya).

<sup>79</sup> Association of Southeast Asian Nations (ASEAN). "Urbanisation Wave and ASEAN Regional Agenda." In *ASEAN Integration Report 2017*, 215–230. Jakarta: ASEAN Secretariat, 2017. [https://asean.org/wp-content/uploads/2017/09/Ch.5\\_Urbanisation-Wave-and-ASEAN-Regional-Agenda.pdf](https://asean.org/wp-content/uploads/2017/09/Ch.5_Urbanisation-Wave-and-ASEAN-Regional-Agenda.pdf).



management in order to support the cities. Urban poverty and slums are a prevalent issue in many Southeast Asian cities. In Indonesia in 2024, roughly 25.22 million people live below the national poverty line. Many urban areas also lack safe water supply and sanitation, or are unable to meet increased demands due to migration. Many local governments lack resources to build water treatment plants, causing surface and groundwater pollution. General trends towards higher income have led to an increase in motorcycle and automobile use in urban centres, causing significant air pollution and traffic congestion.

### South and South-West Asia



Figure 3: Population and Urbanisation in Asia<sup>80</sup>

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<sup>80</sup>United Nations Photo. "Secretary-General Meets with President of Rwanda." *Flickr*. February 9, 2011. [https://www.flickr.com/photos/un\\_photo/5436319025](https://www.flickr.com/photos/un_photo/5436319025).

According to a 2018 World Bank report, by 2030, the urban population in South Asia can be expected to grow by roughly 250 million people. From 2000 to 2011, the region's urban population expanded by 130 million. While this has been linked to an increase in average GDP per capita in the region and a decline in poverty, like many other regions in Asia, this transition has been marked with inadequate urban infrastructure and services. Recent estimates show that at least 130 million people living in South Asian urban centres live in slums with poor access to basic infrastructure and services. As other regions like East Asia and some parts of Southeast Asia transition from industry-based economies towards service-based economies, South Asia is filling the industry-gap these transitions are leaving. At present, industry and manufacturing services account for more than 80 percent of the region's GDP. While GDP per capita seems to have increased amidst urban population booms, the World Bank statistics show that, "South Asia's share of the global economy remains strikingly low relative to its share of the world's urban population." While South Asia produced eight percent of the global GDP in 2018, its share of the global urban population was fourteen percent. The same 2018 World Bank report, which is aimed at "leveraging urbanisation in South Asia" to improve its economic productivity identifies two trends in urbanisation in the region, "messy urbanisation" and "hidden urbanisation." In 'messy urbanisation,' cities grow outwards rather than upwards, spilling over administrative boundaries. As such, this urbanisation can be hidden from official statistics, administrative regulations, and service-providers. Satellite imagery of the largest twelve Indian cities shows large built-up areas with relatively low population density outside of municipal boundaries. Tracking urban population growth and urban area growth between 1999 and 2010, the World Bank found that, on average, between these twelve cities, urban areas grew about twice as fast as urban population. 'Hidden urbanisation' is the result of national statistics which understate the share of the population living in urban areas. Much of the urban growth recorded in India in the past few decades is the result of the reclassification of rural settlements into towns and cities in census data. If similar reclassifications were made in other South Asian countries, statistics regarding rates of urban population growth in the region might be different.

## The Definition of Urban

There is no universal definition of urbanisation or what the word 'urban' means, which has made international cooperation of combating issues related to urbanisation particularly difficult. Thresholds for what is considered 'urban' varies not only by country but also by what metrics are used to construct the thresholds in the first place. Some countries use population density as a metric, others have minimum population requirements, or measure infrastructure development levels and employment time to determine what areas are urban. Some countries do not have their own metrics at all. In India, for example, the definition of urban is an area which meets three criteria: "(1) 5,000 inhabitants or more; (2) at least 75 percent of the male working population engaged in non-agricultural pursuits; and (3) at least 400 inhabitants per square kilometre." In contrast, in Japan, areas are defined as urban if they include 50,000 inhabitants and have 60 percent or more of the population engaged in manufacturing, trade, or other urban types of business.<sup>81</sup>

These semantic challenges prompted a variety of international organisations including UN-Habitat, the Food and Agriculture Organisation of the United Nations (FAO), The Organisation for Economic Co-operation and Development (OECD), the World Bank, and the European Commission to adopt a classification system which defines the relative degree of urbanisation of a particular area. This classification system, called DEGURBA, which stands for Degree of Urbanisation, was adopted by the UN statistical commission in 2020 and classifies Local Administrative Units (LAUs) into three classes: densely, intermediate, and thinly populated areas. These are based on a combination of population size and density and are applied in a grid format to classify the entire area of countries along the urban-rural continuum.

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<sup>81</sup> Roser, Max, and Hannah Ritchie. "Urbanization." Our World in Data, 2023.  
<https://ourworldindata.org/urbanization>.

## Past Actions

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Solutions to both urbanisation related challenges and climate change related challenges, as well as solutions which address both simultaneously, may be administered at a variety of governmental levels. Municipal governments, federal governments, international institutions, and Non-Governmental Organisations all have a role to play in ensuring sustainable urbanisation for Asian cities, particularly during climate crises. Since ESCAP, as a regional subsidiary body of the United Nations Economic and Social Council (ECOSOC), is an international institution which works towards the overall economic and social development of the Asia Pacific and your solutions will occur on the international level, this section of the background guide will focus primarily on past solutions which have been proposed at the international level. While the solutions you propose must, by virtue of the nature of the committee, be primarily focused at the international level, sustainable urban futures require effort at and cooperation between all levels of government, as well as interaction and cooperation with local communities. You should take this into account when you are writing resolutions.

## ASEAN Sustainable Urbanisation Strategy

The Association of Southeast Asian Nations (ASEAN) is a union of ten member states and two observer states in Southeast Asia: Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam. Established in 1967, their mandate is to accelerate economic, social, and cultural development in Southeast Asia, promote regional peace, and collaborate on solutions to shared problems, in cooperation with other international institutions.<sup>82</sup> One of ASEAN's more recent initiatives is the Master Plan on ASEAN Connectivity 2025, abbreviated as MPAC 2025. As a part of the MPAC plan, the ASEAN Sustainable Urbanisation Strategy, known as ASUS was created with three major aims. Promoting the implementation of sustainable urbanisation projects in member states within the ASUS framework, expanding

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<sup>82</sup> Association of Southeast Asian Nations (ASEAN). "Official Website." ASEAN, 2023. <https://asean.org/>.

the existing knowledge base on sustainable urbanisation in ASEAN, and sharing the knowledge and lessons about sustainable urbanisation learned from the project with other cities in order to encourage them to adopt ASUS frameworks in their urban development plans.<sup>83</sup> In order to promote these aims, ASUS not only created a sustainable urbanisation framework for cities to adopt, for eight participating cities, it also created specific technical proposals (CTPs) on how to best implement that framework. In addition to this, ASEAN also hosted the ASEAN Sustainable Urbanisation Forum, a platform for stakeholders in their urban development efforts, and a variety of reports and proposals.<sup>84</sup>

As a part of ASUS' efforts, before creating a general sustainable urbanisation framework or specific technical proposals, a review of existing actions supporting urbanisation across ASEAN was conducted, and it was found that a majority of actions supporting urbanisation which have been taken have a strong focus on built infrastructure, as well as civic and social concerns, and tend to neglect supporting health and wellbeing and security in their actions. It was also found that the most common barriers to implementing actions supporting sustainable urban development were a lack of coordination at a variety of governmental levels. At the city level, there was often a lack of communication between government departments, and at all levels there were information failures, gaps in strategic planning capacity, and barriers in accessing financing. Based on these gaps, and a variety of other criteria, in developing its sustainable urbanisation framework ASUS identified seven priority sub areas for sustainable urbanisation and eight respective priority actions for ASEAN. These are identified in the table below, and were the basis for specific action frameworks, called 'toolkits'. In order to help participating cities meet needs in these sub areas, as a part of their sustainable urbanisation frameworks, two types of 'toolkits' were

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<sup>83</sup> UN-Habitat. Final Evaluation of the Project: Accelerating the Implementation of the ASEAN Sustainable Urbanisation Strategy (ASUS). Nairobi: UN-Habitat, 2023. <https://unhabitat.org/final-evaluation-of-the-project-accelerating-the-implementation-of-the-asean-sustainable>.

<sup>84</sup>Ibid.

created as practical guides for cities to improve urban sustainability and quality of life. These types are prioritisation toolkits and action plan toolkits which are specific to cities where their implementation is recommended. Along with creating these toolkits, ASEAN also developed monitoring mechanisms to oversee the implementation of their recommendations and hold cities accountable for urban improvements. This was particularly important, since information failures and lack of communication were key areas observed to have impeded sustainable urbanisation initiatives in the past. This oversight was done primarily through a combination of clear, calculable outcome metrics and collaboration with city networks like the ASEAN Smart Cities Network (ASCN), the Frontrunner cities programme, and the ASEAN Mayors forum, among many others.

The project involved long-term changes, the impacts of which cannot be properly measured and evaluated within a time frame of two years. The evaluation report of the initial stages released by ASEAN.<sup>85</sup> However, deems the initial phase of the project to have been efficiently and effectively executed, particularly in cities where CTPs were developed.<sup>86</sup> This project is a good example of how an international institution which, like ESCAP, primarily only commands the power to make recommendations, can develop effective oversight and accountability mechanisms to ensure that action is being taken. It is also a good example of how international institutions can collaborate with local governments to ensure that large-scale, international solutions can also account for the specific contexts of individual cities and municipal governments.

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<sup>85</sup> Association of Southeast Asian Nations (ASEAN). ASEAN Sustainable Urbanisation Strategy (ASUS). Jakarta: ASEAN Secretariat, 2018. <https://asean.org/wp-content/uploads/2018/11/ASEAN-Sustainable-Urbanisation-Strategy-ASUS-1.pdf>.

<sup>86</sup> UN-Habitat. Evaluation Report: ASEAN Sustainable Urbanisation Strategy (ASUS). Nairobi: UN-Habitat, 2023. [https://unhabitat.org/sites/default/files/2023/05/asus\\_evaluation\\_report\\_revised.pdf](https://unhabitat.org/sites/default/files/2023/05/asus_evaluation_report_revised.pdf).

## The Paris Agreement

In order to combat climate change and mitigate its negative effects in 2015, world leaders met at the UN Climate Change Conference COP21 in Paris in order to create the Paris Agreement. The Paris agreement is a legally binding international treaty which includes commitments from countries to reduce emissions and adapt to the impacts of climate change. It also sets long term goals for nations to accomplish, including reducing global greenhouse gas emissions to hold global temperature increase below two degrees celsius above pre-industrial levels, assess collective progress towards these goals, and providing financing to developing countries to mitigate climate change and strengthen resilience to its effects.<sup>87</sup> As a part of the agreement, every five years countries are expected to submit a plan called an NDC. NDC stands for nationally determined contribution to combating climate change. In order to follow through on their agreements in the Paris Accords, countries, including those in the Asia-Pacific must continually evaluate and adapt their urban centres and urban infrastructure to produce fewer pollutants and be more resilient.

## Air Pollution

In addition to international regulation at the macro-level like ASUS and the Paris Accords which tackle large-scale problems like rapid urbanisation and climate change, it is important that there are also solutions being proposed which tackle some of the specific problems cities face, even though they may be symptoms or components of larger problems. This section of the background guide will cover past actions which have been taken to combat air pollution in Asia to give you an example of specific solutions you might propose to urban sustainability issues in your resolutions.

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<sup>87</sup>United Nations. "The Paris Agreement." United Nations, 2023. <https://www.un.org/en/climatechange/paris-agreement>.

One of the primary institutions which works to mitigate air pollution in the Asia-Pacific is the United Nations Environment Program (UNEP). In 2015, UNEP established the Asia-Pacific Clean Air Partnership, a platform where policy makers and urban stakeholders across countries can share knowledge, tools, and solutions with which to tackle air pollution in the region.<sup>88</sup> UNEP also collaborates with the World Health Organization on hosting the Regional Forum on Environment and Health, which aims to strengthen environmental health management in the Southeast and East Asian countries through facilitating cooperative initiatives within and between countries.<sup>89</sup> Beyond the UNEP, the Climate and Clean Air Coalition works with a group of over 160 governments and organisations in both the private and public sectors to reduce the presence of short-lived climate pollutants which have rapid and negative impacts on global warming, air quality, food security, and human health.<sup>90</sup>

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<sup>88</sup> United Nations Environment Programme (UNEP). "Restoring Clean Air in Asia-Pacific." UNEP, 2023. <https://www.unep.org/regions/asia-and-pacific/regional-initiatives/restoring-clean-air>.

<sup>89</sup> Ibid.

<sup>90</sup> Climate and Clean Air Coalition (CCAC). "Official Website." CCAC, 2023. <https://www.ccacoalition.org/>.





Figure 4: UNEP <sup>91</sup>

## Possible Solutions

As has been demonstrated, rapid urbanisation, particularly within the context of climate change creates a complex, multi-crisis environment. Informality, public health emergencies, natural hazard threats, pollution, and other urban issues may exist simultaneously, requiring high levels of intergovernmental collaboration and policy environments which facilitate clear responsibilities for stakeholders, synchronised actions, place-based approaches, flexibility, and adaptability. In ESCAP's 2023 report on crisis resilient urban futures in the Asia-Pacific, it recommends that capacity-building programs and knowledge exchange platforms can be effective ways

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<sup>91</sup> United Nations Environment Programme. "UNEP Air Pollution." *Flickr*. October 1, 2019.

<https://www.flickr.com/photos/unep/48805000623/>.

of enhancing the skills of city officials and planners in dealing with multi-crisis situations and promoting sustainable development. Capacity-building is when capacity—which can be understood as the ability of people, organisations, and society as a whole to successfully manage their affairs—is created and improved. This is often done in cooperation with international institutions and NGOs.

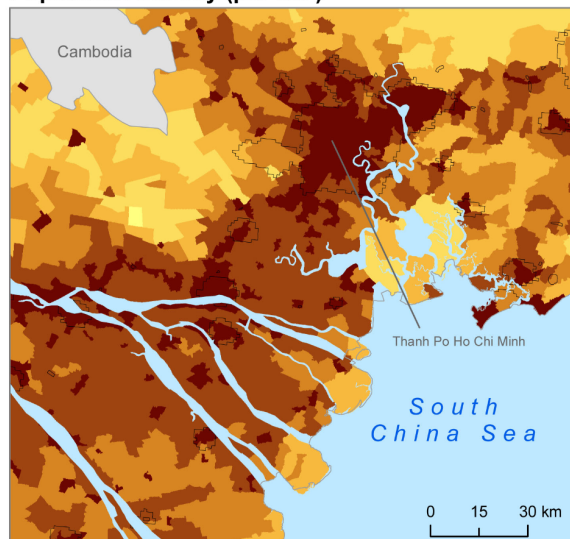
In countries where urbanisation is occurring at a rapid pace and consequently levels of informality are high, embracing participatory planning and community engagement approaches will enable the residents of informal settlements who are often overlooked by or hidden from policymakers to actively participate in shaping the decisions which impact their living environments. Participatory planning is a process wherein a community attempts to reach a particular socioeconomic goal by consciously diagnosing its own problems and creating a course of action to work towards resolving those problems. Experts are primarily facilitators of participatory planning processes, rather than leaders. Participatory planning and community engagement processes can create a sense of shared ownership amongst community members and create the kind of sustainable solutions which are most likely to meet the specific needs residents of informal communities have. In some cities in India and Thailand, participatory planning initiatives have already been enacted in informal communities with great success, indicating that expanding such programs in scope could be a good step towards mitigating the problems associated with high levels of informality and a lack of adequate and affordable housing. In Thailand, the Baan Mankong programme was launched in 2003 to address the housing problems of those living in slums across Thailand. The programme supports a development process which, though facilitated by the Community Organisations Development Institute (CODI), is primarily driven by Thailand's urban poor and rural communities. The programme channels government funds in the form of infrastructure subsidies and housing loans directly to informal communities which form housing cooperatives then budget, plan, and carry out improvements to their environments, housing, and other urban infrastructure. In addition to limited access to funding for financing

infrastructure development and housing improvements in informal communities, which participatory planning approaches can work to solve, there are other challenges associated with upgrading informal settlements which participatory planning cannot mitigate. Informal settlements often lack legal recognition and land tenure, and unclear property rights and ownership disputes can hinder the formalisation process, lead to resistance from residents, or conflicting interests amongst stakeholders. Furthermore, engaging residents of informal communities in participatory planning initiatives can often be difficult due to distrust in institutions and differing priorities and conflicts within informal communities. This is evidence that to each urbanisation or climate-related problem you attempt to devise solutions for in your resolutions there cannot only be one, catchall solution, since urban issues are complex and multifaceted.

### Urban-Rural Population and Land Area Estimates, Version 2, 2010: Thanh Po Ho Chi Minh, Vietnam

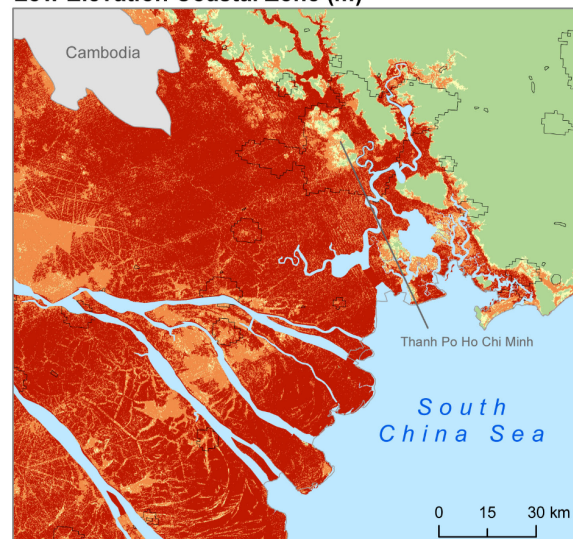
#### Low Elevation Coastal Zone

#### Population Density (per km<sup>2</sup>)

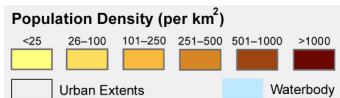


Lambert Azimuthal Equal Area Projection

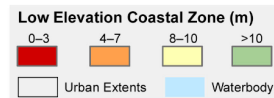
#### Low Elevation Coastal Zone (m)



Map Credit: CIESIN Columbia University, November 2013



Center for International Earth  
Science Information Network  
EARTH INSTITUTE | COLUMBIA UNIVERSITY



© 2013, The Trustees of Columbia University in the City of New York.  
Data Source: Center for International Earth Science Information Network (CIESIN) /Columbia University. 2013. Low Elevation Coastal Zone (LECZ) Urban-Rural Population and Land Area Estimates, Version 2. Palisades, NY: NASA Socioeconomic Data and Applications Center (SEDAC). <http://sedac.ciesin.columbia.edu/data/set/lec2z-urban-rural-population-land-area-estimates-v2>.

The Low Elevation Coastal Zone (LECZ) Urban-Rural Population and Land Area Estimates Version 2 data set provides continent-level and country-level estimates of land area and urban, rural, and total population for 202 statistical areas (countries and other UN recognized territories). Population inputs were derived from Gridded Rural-Urban Mapping Project, version 1 (GRUMPv1). Elevation data were derived from the Shuttle Radar Topographic Mission (SRTM) 90 meter data set.

*Figure 5: Vietnam's Lower Elevation Coastal Area Affected By Warm Temperatures and Climate Hazards*<sup>92</sup>

In order to build resilience to climate and weather related hazards, cities first need to understand the specific emerging and intensifying risks, like drought, floods, storms, and heatwaves. In order to understand these risks and when they will occur, a 2023 ESCAP report on building Sustainable Urban Futures in the Asia-Pacific's recommends multi-hazard early warning services as one of the most cost-effective climate adaptation methods which will be able to save lives and livelihoods in the event of risks like drought, floods, storms, and heatwaves. The Sendai Framework for Disaster Risk Reduction was established during the Paris Climate Accords as a process for understanding disaster risk, strengthening disaster risk governance, and investing in disaster risk reduction and preparedness. As a part of this framework the availability and access to early warning systems are measured and given a 'G score.' According to the most recent measurement of G scores in North and Central Asia, no country has met the target G score and has thus been found to have a comprehensive amount of multi-hazard early warning systems in place. Indeed, the majority of evaluated countries, both in North and Central Asia and the rest of the Asia-Pacific, are scored as having a moderate to limited level of early warnings coverage. A possible solution for cities in North and Central Asia specifically, and the wider region, to build resilience to climate change and natural hazards is sharing knowledge related to climate risk management, improving early warning systems, and best practices in terms of risk prevention. In addition to early warning systems and risk management protocols, there are a variety of types of innovative actions cities can undertake to mitigate the effects of global warming. In East Asia particularly, concerns about the health impacts of air pollution coupled with the COVID-19 pandemic has

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<sup>92</sup>Wikipedia contributors, "Climate Change in Vietnam," *Wikipedia, The Free Encyclopedia*, [https://en.wikipedia.org/wiki/Climate\\_change\\_in\\_Vietnam](https://en.wikipedia.org/wiki/Climate_change_in_Vietnam).

triggered national decarbonization efforts as well as accelerated uptake of e-mobility and hydrogen vehicles, as well as increased investment in electric public transport vehicles. In emerging markets and developing economies

Across the Asia-Pacific, demand for electric vehicles (EVs) is increasing rapidly. In India, Thailand, and Indonesia, electric car sales tripled between 2021 and 2022. The Asia-Pacific region is also an important global exporter of EVs and lithium ion batteries, making EVs a climate mitigation strategy which is also economically beneficial to the region.

Another productive potential solution might be to enhance data collection to accelerate evidence-based climate actions in cities. Policies which seek to mitigate greenhouse gas emissions and reduce vulnerability to climate shocks must be informed by high-quality data in order to be effective. Many countries lack reliable information on their own emissions, impeding the efficacy of their greenhouse gas mitigation policies. Strengthening cooperation on emissions measuring technologies and facilitating open access to and use of monitoring data could help promote effective climate action throughout the region.

## **Bloc Positions**

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### **Countries Undergoing Rapid Urbanisation**

Countries across the Asia-Pacific have urbanised at vastly different rates. While some countries, particularly some of those in East Asia, began urbanising earlier and have already reached high degrees of urbanisation, and in some cases complete urbanisation, a large bloc of countries is currently undergoing urbanisation at a rapid rate. Countries currently undergoing rapid urbanisation include Laos, Bhutan, Mongolia, and other countries in South-East and Central Asia. The type of rapid urbanisation which is occurring has particular consequences which countries in this bloc must contend with. As has been demonstrated, as urbanisation outpaces funding for infrastructure like transportation, energy supply, water supply and sanitation,

and communications technologies, cities can become overcrowded, unsafe, develop high levels of informality, and at risk of public health emergencies. These countries will be faced not only with devising greater, regional solutions to combat climate change and greenhouse gas emissions, as well as climate-change related natural disasters, they will also have to cooperate with other countries and organisations to increase investment in urban infrastructure to improve the safety and health of their urban residents. Investment in urban infrastructure, however, requires urban development to not only be sustainable and effective, but also a phenomenon which fosters economic growth. Balancing these aims: economic growth, resilience to climate crises, and quality of life in urban centres, will be a key factor countries in this bloc must consider in order to create successful resolutions.

## **Countries Which Have Already Reached High Levels of Urbanisation**

In countries and regions which already have high levels of urbanisation, like Japan, Singapore, and Hong Kong, promoting sustainable urbanisation is less so about meeting the demands of a growing population and more so about adapting existing technologies and infrastructure in cities to be more green and more efficient. In Singapore for example, large swaths of land have been classed as nature reserves and cannot be developed. The emission of carbon has been taxed, the growth of the vehicle population has been capped, and the water loop has been closed.<sup>93</sup> Countries in this bloc will be tasked with improving the sustainability of their own urban infrastructure and improving their resilience to climate crises, as well as cooperating with other countries in the Asia-Pacific on greater regional climate solutions. Like rapidly urbanising countries, countries which have already reached high levels of urbanisation, and the associated high levels of economic output, countries in this bloc will

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<sup>93</sup> Singapore Green Plan 2030. "Our Vision." Singapore Government, 2023.

<https://www.greenplan.gov.sg/vision/#:~:text=Sustainable%20development%20is%20not%20new,our%20island%20covered%20by%20trees.>

have to balance their efforts towards making their urban centres more sustainable with maintaining sufficiently high economic outputs.

## Glossary

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**Informality:** The informal economy is the part of countries' economies which are not taxed or regulated. This can include workers who are home-based, subcontracted, unpaid workers in family businesses, street vendors, and waste-pickers. Informality can also refer to informal settlements. Informal settlements are settlements where housing units have been constructed on land which occupants do not have a formal, legal claim to occupy. Because of this, residents are often not protected, recognized, or provided for by local governments.

**Municipal Solid Waste (MSW):** Municipal solid waste is hazardous or non-hazardous material discarded by the public, and public institutions. Municipal solid waste is not waste which is generated by corporations.

**OECD:** The Organisation for Economic Co-operation and Development is an intergovernmental organisation of 38 member countries. Its mandate is to stimulate economic progress and world trade.

**Greenbelts:** Natural, rural, or underdeveloped areas surrounding urban areas which are protected from development by governments.

**Climate Migration:** Climate migration is the movement of people or groups from their habitual place of residence, either permanently or temporarily due to climate change.

**Anthropogenic Climate Change:** While climate change refers to any change to the Earth's climate over time, anthropogenic climate change is climate change due to human activity, primarily the burning of fossil fuels.

**Smart Cities:** Urban areas which use technology and data collection to improve the quality of life of residents and the efficiency and sustainability of municipal services.

**Chain Migration:** When migrants from a particular area follow others from that area to a particular migration destination.



Urban Agglomeration: A phenomenon which occurs when relationships amongst cities in roughly the same region shift from mainly competition to both competition and cooperation, and become highly interconnected.

Primate City: The concept of the 'Primate City' was introduced in 1939 by the Geographer Mark Jefferson. Jefferson considers primate cities as cities which are the largest in their region. In order to be a primate city a city must be at least twice as large as the next largest city and more than twice as significant. Due to their primacy not only in size and population but also in economic activity, politics, and educational opportunities, primate cities are often targets for much of a region's internal migration. In South Korea Seoul is a primate city.

ASEAN: The Association of Southeast Asian Nations, an intergovernmental organisation of Southeast Asian Countries

NDC: A nationally determined contribution (NDC) is a climate action plan each country must establish and renew every five years as a part of the Paris Climate Accords.

Capacity Building: Capacity-building is when capacity—which can be understood as the ability of people, organisations, and society as a whole to successfully manage their affairs—is created and improved. This is often done in cooperation with international institutions and NGOs.

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