

Vancouver Youth Model United Nations 2021



ASEAN

Background Guide



VANCOUVER YOUTH MODEL UNITED NATIONS 2021

Association of Southeast Asian Nations

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Dear delegates,

My name is Fred and it is my absolute honour to serve as your director for the Association of Southeast Asian Nations. Along with my chairs, Rubi and Max, and my Assistant Directors, Noah and Henry, I am excited to work with all of you. As your director, I hope to foster an educational and engaging environment that leads to an unforgettable experience at VYMUN 2022. This year, ASEAN will feature two topics: Rapid urbanization and the Rise of Mega Cities and the South China Sea Disputes

Our first topic, Rapid urbanization and the Rise of Mega Cities is a significant topic that requires meticulous discussions and complex solutions. Over the past few decades, ASEAN nations have rapidly industrialized and transitioned away from an agricultural economy to manufacturing. In particular, climate change has posed a significant threat to many ASEAN states due to their proximity to the sea.

Our second topic, South China Sea Disputes, is one of the most highly contested regions in the world and has highlighted the tensions of the geopolitics between different ASEAN nations. The South China Sea may involve the militarization of the area, which nations should avoid due to the economic and political repercussions. Although ASEAN is a unified economic union, delegates should consider each countries' policies for different situations.

If you have any questions or concerns, please feel free to contact me at asean@vymun.com.

I look forward to meeting everyone and good luck with your preparations

Sincerely,

Fred Yang

Director of ASEAN | VYMUN 2021

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Rapid Urbanization and the Rise of Mega Cities

Questions to Consider

1. How can ASEAN states prevent the creation of urban slums?
2. How can ASEAN nations balance fossil fuel production and environmental protection?
3. To what extent should nations prioritize the economy over the environment?
4. Why does urbanization cause high inequality rates and how can countries resolve this issue?
5. Is the relationship between urbanization and economic development correlation or causation? What may cause this connection to occur?

Overview

Internal migration from rural to urban areas is the largest factor behind Southeast Asia's rapid urbanization. Since 1950, South East Asia's urban population has increased 12-fold from 26 million to 320 million.¹ The populations of the major cities in the region, Bangkok, Jakarta, and Manila, have exceeded 10 million.² Furthermore, the population of Kuala Lumpur in Malaysia is projected to reach roughly 10 million by 2032 and the population of Ho Chi Minh in Vietnam will exceed 10 million by 2036.³ Rural-urban migrants strive to improve household livelihoods and access better resources in urban areas such as education and jobs. As a result, the cities greatly benefit economically from the steady supply of labour. The region is projected to become the world's fourth-largest economy by 2030.⁴ Despite the Asian financial crisis of 1997-1998, and the global economic crisis of 2008, the region has remained economically stable and resilient. Currently, urbanization has provided countless benefits such as better transportation, higher wages, and enhanced education.

Although the region has improved dramatically in recent years, many difficult and profound issues remain unsolved. In the first case, millions of people in South East Asia live in informal settlements called slums facing overcrowding, poor infrastructure, lack of necessities such as food, water, and shelter. Moreover, only 50 percent of the region's urban population have access to safe drinking water and 20 percent lack adequate sanitation facilities.⁵ These statistics are exacerbated by the ongoing Covid-19 pandemic. In the second case, the rapid urbanization and the rise of "megacities" have negatively impacted the environment. For example, the emissions from transportation, factories, power plants, and such have caused high levels of air pollution. In particular, many of these cities are located near the ocean; as a

¹https://www.cairn-int.info/article-E_POPU_901_0007--the-demography-of-east-and-southeast-asi.htm#:~:text=Eac h%20year%20between%201950%20and,Latin%20America%20and%20the%20Caribbean.

²https://www.mitsui.com/mgssi/en/report/detail/_icsFiles/afieldfile/2019/05/07/1903d_suzuki.pdf_e.pdf

³Ibid

⁴<https://theaseanpost.com/article/future-consumption-asean#:~:text=ASEAN%20is%20the%20world's%20third,dou ble%20to%20US%244%20trillion.>

⁵https://www.aseanstats.org/wp-content/uploads/2017/08/ASEAN_social_progress.pdf

result, rising sea levels pose an imminent threat. Overall, delegates must find a way to balance the economic prosperity that urbanization provides while also solving its pressing issues and concerns.

Timeline

1760: Great Britain transitioned from a largely agricultural economy to an industrial one which was known as the Industrial Revolution.⁶

1868: The Meiji Restoration begins in Japan due to western influences, setting the precedent for colonies in Southeast Asia which hinders the region's domestic development.⁷

1880s: The population size of many major cities in Southeast Asia increased as the process of urbanization began.

1939-1945: Second World War significantly impacted Southeast Asian economies and propelled urban-rural migration due to widespread food insecurity.⁸

1960s: Rapid urbanization and population growth. Period is defined by high fertility rates as well as discussion regarding sustainable development.

1969-1998: Kampung Improvement Program was designed to help rapidly urbanizing cities with infrastructure such as roads, bridges, and hospitals.⁹

1997: The Asian Financial Crisis negatively impacted the economies of many ASEAN Nations, which briefly reduced the rural-urban migration rates.¹⁰

2002: Thailand initiated the Universal Health Coverage (UHC) to provide citizens access to essential health services.¹¹ This program is likely to combat the negative effects of urbanization such as poor sanitation and pollution.

2015: The Addis Ababa Action Agenda's mandate is to achieve sustainable development and help with the process of urbanization.¹²

2019: The Inclusive Finance Facility¹³ and the ASEAN Catalytic Green Finance Facility was launched in 2019.¹⁴ The two programs aim to support funding for infrastructure projects in the region.

⁶<https://www.history.com/topics/industrial-revolution/industrial-revolution>

⁷<https://www.britannica.com/event/Meiji-Restoration>

⁸<http://www.cambridgeblog.org/2020/11/world-war-ii-and-southeast-asia/>

⁹<https://www.akdn.org/architecture/project/kampung-improvement-programme>

¹⁰<https://corporatefinanceinstitute.com/resources/knowledge/finance/asian-financial-crisis/>

¹¹<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5104696/>

¹²<https://sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35>

¹³<https://sptf.info/working-groups/responsible-inclusive-finance-rif>

¹⁴<https://www.adb.org/publications/asean-catalytic-green-finance-facility>

Historical Analysis

Urbanization is a fairly recent process for Southeast Asian nations. Beginning in the 1950s, many Southeast Asian states have rapidly urbanized, valuing industrial growth and manufacturing production over the once-popular agricultural sector.¹⁵ Historically, many major ASEAN nations have deurbanized for particular periods in the fifty years due to crisis or wars. The population size of many cities have declined and stayed between 100,000 to 200,000 people. However, many major port cities such as Singapore, Klang, and Tanjung Priok have thrived due to globalization, free trade, and economic development. Unfortunately, the development of these port cities has created mass inequality and imbalance compared to other areas in Southeast Asia. As a result, today, millions of people are living in slums and rural areas with limited access to necessities due to the rise of urbanization in recent decades.

In the first case, WWII significantly altered the urbanization trends of ASEAN countries. Specifically, the Japanese takeover negatively affected the economies of Southeast Asia. As part of its expansionist policies, Japan exploited natural resources in the region such as oil supplies to fuel the ships for war. As a result, between the years 1941 and 1945, GDP dropped drastically in Southeast Asia as raw materials began rapidly depleting.¹⁶ Moreover, the region's economies struggled due to the declining economic output caused by limited access to foreign markets as part of Japan's larger focus on the development of command economies. A second major impact of WWII is wartime destruction and mass displacement. For example, during the Pacific War, Japan refused to provide necessary resources such as food or medicine to Southeast Asia. As a result, widespread famine affected the lives of 4.4 million Southeast Asian civilians who died during Japanese occupation.¹⁷ For example, in 1945, between 1 million and 2 million people died in Vietnam.¹⁸ In fact, the majority of Southeast Asia's population was malnourished due to inadequate resources and hunger. The significant loss in GDP, development, and standard of living caused many citizens to migrate from rural to urban areas after WWII.

Similar to World War II's impact on urbanization, the Asian Financial Crisis in 1997, which was caused by the collapse of the currency exchange rate in many Southeast Asian nations, temporarily slowed down rural-urban migration. The event signified an important turning point for economic development and urbanization in ASEAN. The crisis first started in Thailand in July 1997 after the Thai baht plunged in value.¹⁹ The collapse affected the entire region due to the interdependence of ASEAN nations. The countries that were most severely affected by the Asian Financial Crisis included Indonesia, Thailand, Malaysia, South Korea, and the Philippines. They saw their currency exchange rates, stock markets, and prices of goods drop drastically. In 1996, the nominal GDP per capita dropped by 43.2% to and 12.5% in the Philippines which displays the negative effects of the currency on economic development.²⁰ Moreover, the International Monetary Fund exacerbated the crisis by providing ineffectual loans. In fact, the IMF caused the Indonesian economic collapse because it used bailout money to force president Suharto into IMF reforms that immediately collapsed the Indonesian currency. The alarming statistics and case studies

¹⁵https://link.springer.com/chapter/10.1007/978-94-009-1748-4_6

¹⁶<https://www.history.ox.ac.uk/war-and-economy-southeast-asia#tab-413636>

¹⁷<https://www.cambridge.org/core/books/world-war-ii-and-southeast-asia/introduction/C1199E147497460F281686B94C04DCE5>

¹⁸<https://www.sciencespo.fr/mass-violence-war-massacre-resistance/en/document/great-vietnamese-famine-1944-45-revisited.html>

¹⁹<https://www.federalreservehistory.org/essays/asian-financial-crisis>

²⁰<https://corporatefinanceinstitute.com/resources/knowledge/finance/asian-financial-crisis/>

raised concerns regarding government intervention, which resulted in more support for neoliberalism and free-market capitalism. Despite the IMF's apparent role in the financial crisis, many ASEAN nations have continued to accept IMF loans which require the opening of their trade borders.²¹ As a result, ASEAN countries increased their industrial production and economic development mainly through multinational corporations and foreign direct investment. Thus, major urbanization began to occur in the region. Many civilians migrated into urban areas, seeking better employment opportunities and standards of living.

Past Action

The ASEAN Smart Cities Network (ASCN)

The ASEAN smart cities network was established at the 32nd ASEAN Summit on 28 April 2018²². Its main purpose is to unify smart city development programs throughout Southeast Asia through collaboration between the public and private sector, gain funding and support from foreign actors, and foster sustainable development. It was created to respond to the region's rapid urbanization and population growth; in 2018, Austria pledged \$30 million to support the smart city plan in ASEAN. Moreover, the United Nations and other regional bodies in the Asian Pacific aim to support the program and foster economic cooperation. Overall, the initiative has helped ASEAN countries utilize technological and digital advancements to analyze data trends and improve the lives of its residents.

The UN's New Urban Agenda (NUA)

The UN's New Urban Agenda (NUA) was created in 2016 and attempts to address issues regarding housing. The program promotes affordable homeownership through co-housing and other innovative tenancy options. Furthermore, the NUA supports collaboration between public and private sectors to remove the constraints and challenges residents face when searching for adequate housing. Overall, the agenda is a direct response to rapid urbanization and aims to address social, cultural, and economic inequalities in order to improve urban development. This action taken by the United Nations has encouraged ASEAN cities to reevaluate the sustainability of urbanization and how to address its adverse effects. In 2018, the World Urban Forum (WUF) by UN-Habitat was convened in Kuala Lumpur, Malaysia to discuss tools and initiatives to achieve “inclusive, resilient, and sustainable cities and communities for all.”²³

ASEAN Sustainable Urbanisation Strategy (ASUS)

The ASEAN Sustainable Urbanisation Strategy (ASUS) is the prominent body which held a Socialisation Forum for Cities in Jakarta in February 2020. The major goal was to effectively unite local and national programmes and promote a well-framed structure of sustainable infrastructure based on six key points: “civic and social, health and well-being, security, quality environment, built infrastructures, industry and innovation.”²⁴ Ultimately, the past initiative hopes to enhance the cooperation in the region and maintain the benefits of urbanization while addressing difficulties regarding urban infrastructure development.²⁵

²¹<https://www.forbes.com/sites/stevehanke/2017/07/06/20th-anniversary-asian-financial-crisis-clinton-the-imf-and-wall-street-journal-toppled-suharto/?sh=d2c1bde2882b>

²²<https://asean.org/storage/2019/02/ASCN-Consolidated-SCAPs.pdf>

²³<https://www.worldbank.org/en/events/2018/02/07/world-urban-forum>

²⁴ <http://aadcp2.org/asean-sustainable-urbanisation-strategy/>

²⁵<http://aadcp2.org/asean-sustainable-urbanisation-strategy/>

East Asian Summit (EAS)

In 2010, The East Asian Summit (EAS) Seminar on Sustainable Cities was created to connect different governments, agencies, experts, and other groups to work on cleaner, more environmentally friendly, and sustainable cities.²⁶ More importantly, the initiative aims to tackle socio-economic issues, such as poverty, infrastructure development, and climate change. The program laid the foundation for future green energy initiatives and goals for sustainable urbanization.

Current Situation

Currently, half of ASEAN citizens reside in urban cities and by 2050 nearly 525 million people will live in urban regions.²⁷ Economic growth is present in both developed megacities (such as Bangkok and Jakarta) and smaller urban areas. For example, more than 200 smaller cities will also experience similar trends of urban growth.²⁸ However, ASEAN countries must provide adequate infrastructure to provide for its residents. If not, cities will face a multitude of issues such as urban slums, inequality among rural regions which can lead to income disparity, and environmental damage. These challenges must be solved in order to maintain sustainable urbanization.

Living Conditions

Currently, many developing nations in ASEAN suffer from the urban-rural divide, worsening the development of important infrastructure such as the internet and electricity.²⁹ For example, according to the World Bank, in 2018, nearly all urban Cambodians had access to electricity, whereas in rural areas the number was below 90%.³⁰ Although the gap between electricity access in rural areas and compared to urban areas may seem low, the World Energy Outlook research found that electrification rates in Cambodia's urban region is 97%, while it is only 18% in rural Cambodia.³¹ Furthermore, the living standards in both rural and urban areas have been worsening, with low GDP per capita and access to basic resources. Nonetheless, many ASEAN nations — even developing ones — are improving their conditions. According to the World Bank, in 2016, Bangladesh ranked 145th and Myanmar ranked 146th globally in terms of per capita income.³² However, 91% of Myanmar's population and 95% of Bangladesh's population is predicted to experience improved living standards in the future.³³

Urban Slums

Rapid urbanization and the rise of mega cities have caused prevalent issues surrounding informal settlements and inequality. For example, in Manila, the capital city of the Philippines, 8 million people live in slums.³⁴ Messy urbanization is often referred to as widespread instances of urban slums caused by insufficient resources, expensive housing, and inadequate goods and services. Moreover, the highly dense

²⁶<https://www.iges.or.jp/en/pub/proceedings-8th-east-asia-summit-eas-high/en>

²⁷https://news.cgtn.com/news/7849544d33677a6333566d54/share_p.html

²⁸https://news.cgtn.com/news/7849544d33677a6333566d54/share_p.html

²⁹ <https://www.tandfonline.com/doi/abs/10.1080/00221346508981982?journalCode=rjog20>

³⁰ <https://link.springer.com/article/10.1007/s10668-021-01443-8>

³¹ <https://www.ge.com/news/reports/bridging-cambodias-vast-urban-rural-energy-divide-2>

³² <https://news.gallup.com/poll/220208/asia-better-living-standards-next-generation.aspx>

³³ Ibid

³⁴<https://www.childrenofthemekong.org/sponsor-a-child/priorities/slums-and-informal-settlements/>

populations lead to the spread of disease due to overcrowding. People who live in slums often face worse employment opportunities, experience limited economic upward mobility, and less access to basic services. In particular, crime rates are very prevalent in urban slums. For example, in 2017, Vietnam slums had 4,000 violent crimes.³⁵ As a result, safety is also a high-priority for delegates to discuss when addressing urban slums.

Environment

Rapid urbanization often leads to disastrous environmental concerns. Due to the exchange of services, people, food, and goods, waste management has been a major concern for many urban areas. Moreover, urban areas have drastically high air pollution due to limited renewable energy sources and high-densities. For instance, 120 million residents in ASEAN don't have access to electricity and 280 million don't have adequate cleaning fuels.³⁶ As a result, countries without access to electricity and cleaning fuels turn to coal for their energy production. This is an issue for the environment because the enormous waste burning from coal exacerbates the air pollution and harms the environment. Due to the rise in population size, consumption and production of coal will likely increase significantly.³⁷ The dangerous air in these urban cities have caused countless health concerns such as poisoning and long-term heart and lung diseases. Water pollution, especially in rural villages, has an adverse effect on its residents since they lack the technology and resources for clean water. Overall, delegates must consider balancing between profit and environmental sustainability.

Case Study: Bangkok, Thailand

In the late-20th century, Bangkok's economy prospered; as a result, the city's urban regions developed infrastructure projects such as housing and recreational services.³⁸ Recently, Bangkok's urban development has been growing rapidly. For example, the megacity has the fifth largest land size and ninth-largest population in East Asia.³⁹ Bangkok has roughly 10.7 billion people which is significantly larger than other urban areas in Thailand.⁴⁰ Although the city's rapid urbanization provides countless economic opportunities, transportation costs and air quality are among top concerns for the residents.⁴¹ Moreover, the increasing density has caused numerous issues such as informal settlements, lack of public utilities, and waste management.⁴² Similar to Jakarta, Bangkok must address concerns regarding environmental damage and traffic congestion while maintaining the benefits of urban growth.

Case Study: Jakarta, Indonesia

Jakarta in Indonesia is the biggest metropolitan region in Southeast Asia and a very unique case since the city experiences both the urban benefits and problems. In 1950, Jakarta's population was roughly 1.5 million and now it is over 10.9 million.⁴³ Although the megacity makes up a large percentage of Indonesia's total population at approximately 12 percent, the city's area is less than 0.3 percent of

³⁵<https://www.childrenofthemekong.org/sponsor-a-child/priorities/slums-and-informal-settlements/>

³⁶https://news.cgtn.com/news/7849544d33677a6333566d54/share_p.html

³⁷Ibid

³⁸<https://archive.unu.edu/unupress/unupbooks/uul1ee/uul1ee0z.htm>

³⁹<https://www.worldbank.org/en/news/feature/2015/01/26/urbanization-in-thailand-is-dominated-by-the-bangkok-urban-area>

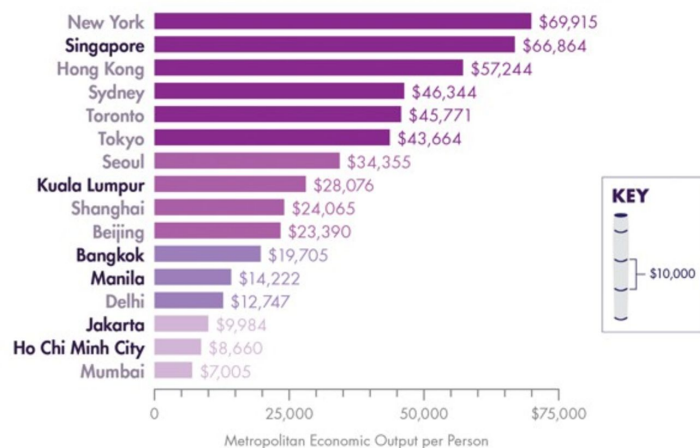
⁴⁰<https://worldpopulationreview.com/world-cities/bangkok-population>

⁴¹<https://archive.unu.edu/unupress/unupbooks/uul1ee/uul1ee0z.htm>

⁴²<https://www.gef.or.jp/20club/E/bangkok.htm>

⁴³<https://worldpopulationreview.com/world-cities/jakarta-population>

Indonesia's total area.⁴⁴ This statistic is very alarming since it displays the high-density and lack of space residents experience in urban areas. As a result, the spread of disease is likely high in these crowded regions. The major issues Jakarta has faced due to rapid urbanization are flooding and traffic congestions. First, traffic congestion costs nearly \$3 billion a year due to increasing rates of people owning vehicles.⁴⁵ Transportation has significantly impacted many of the city's residents due to high costs and limited access. Surprisingly, Jakarta is the largest city in the world without a metro.⁴⁶ In particular, many of the essential services in Jakarta such as office buildings, schools, and hospitals are located in the center of the city; as a result, many residents living in the outskirts struggle to find affordable transportation modes. Delegates who are representing countries with mega cities such as Thailand and the Philippines are encouraged to invest more money into transportation infrastructure. Second, many industrial areas in Jakarta are vulnerable to severe floods. For example, in 2007, a flood killed more than 29 people and displaced 340,000 residents.⁴⁷ Due to the destructive and expensive nature of floods, Jakarta lost roughly \$234 million due to floods.⁴⁸ The many instances of flooding indicate that the megacity must be cautious of rapid urbanization because the city does not have adequate resources or infrastructure to withstand massive floods. Nonetheless, economic growth is strongly associated with rapid urbanization in Jakarta as it provides better employment opportunities, education, and services. However, Jakarta must resolve the alarming effects of urbanization such as lack of transportation and sustainable infrastructure development.



Economic output per person of major urbanized cities in Southeast Asia.⁴⁹

Possible Solutions

Environment

One potential solution to environmental concerns is the development of initiatives focused on sustainability. For example, ASEAN created the ASEAN initiative on Environmentally Sustainable Cities

⁴⁴Ibid

⁴⁵Ibid

⁴⁶Ibid

⁴⁷<https://www.theguardian.com/world/2007/feb/05/weather.indonesia>

⁴⁸<https://worldpopulationreview.com/world-cities/jakarta-population>

⁴⁹ <https://www.bloomberg.com/news/articles/2017-01-18/how-urbanization-is-driving-southeast-asia-s-economies>

(ESC), which encourages cities to utilize clean, renewable, and green energy sources such as wind and solar power. It also promotes a carbon-neutral economy and responsible use of natural resources. Nations must also remain transparent with their energy production and follow the standards of the community such as reducing CO₂ emissions. The developed nations bloc will likely support these solutions as they are more focused on investing in clean energy rather than industrialization. In terms of short term solutions, ASEAN nations can construct sea walls or other infrastructure to prevent flooding and rising sea levels.

Infrastructure Development

Due to the immense population increases, countries may struggle to find the necessary funds to support their urban centers. Thus, one potential solution is Foreign Direct Investment (FDI) from developed nations or international institutions such as the IMF or World Bank. Nations that are still in the process of industrialization, such as Cambodia, will benefit from the investments as the capital inflow will enhance economic activity in the region. A third issue is the cost of infrastructure development. For example, Jakarta's Sustainable Development Plan is projected to cost 52 billion USD.⁵⁰ This plan is aimed at reducing traffic jams and enhancing the transportation systems in the city. By doing so, Jakarta is limiting the amount of pollution caused by urbanization. One solution is the adoption of ridesharing as a way to save money and decrease energy consumption.

Improving Slums Conditions

Eliminating slums has always been a major concern due to the enormous costs, lengthy timeline, and overall impact on the citizens. A second economic issue is housing and slums. Nations can address this by promoting homeownership and other tenancy options, such as cohousing. Moreover, the government should provide adequate housing through programs that focus on affordability and access. Although nations have attempted to create affordable housing by destroying slum areas, they are actually displacing the residents in the process and are only addressing the short-term effects. Upgrading these informal settlements, which consists of razing and reconstructing without the residents' consent or participation, has often failed in the past. As such, one solution proposed by the city of Surabaya in Indonesia outlined a series of projects as part of the Kampung Improvement Program⁵¹. The initiative has impacted over 1.2 million of its residents and 500 other cities and towns are replicating it. Surabaya solves the root issues of slum formation by working closely with local communities, governments, nongovernmental organizations (NGOs), as well as international financial institutions such as the World Bank. In particular, residents in the city are able to voice their opinions on housing developments and many of them upgrade their own housing situation. Overall, the program has significantly improved the urban slum's quality of life by increasing access to services that benefit the environment, economy, health, education, and employment.

Mix-Used Spaces

City planners and government policy makers can invest in better quality public urban spaces to promote walking and using less automobiles that emit carbon emissions. Moreover, the public green spaces can remedy the adverse health effects caused by the pollution.⁵² The solution can help increase the residents'

⁵⁰<https://www.weforum.org/agenda/2017/04/can-southeast-asia-sustain-its-rapid-rate-of-urbanization>

⁵¹<https://world-habitat.org/world-habitat-awards/winners-and-finalists/the-kampung-improvement-programme-surabaya/>

⁵²<https://www.nationalgeographic.com/environment/article/green-urban-landscape-cities-Singapore>

standard of living by increasing the opportunities for leisure time and reducing stress levels. The major issue with this solution is the enormous cost and lack of space. Countries can overcome the cost by encouraging private-public collaboration in which government projects are funded by private capital. Nonetheless, green spaces are a viable option to combat climate change and help improve the quality of life for cities. Furthermore, ASEAN nations can develop mix-use spaces, which connects residential, commercial, entertainment, and institutional all into one space. For example, residents in these urban areas can access stores, office buildings, restaurants while reducing transportation costs and finding affordable housing.⁵³

Bloc Positions

Developed Nations

The developed bloc has previously undergone significant urbanization in recent decades. The developed countries include Singapore, Indonesia, Thailand, and Malaysia. However, only Singapore has reached an advanced level of industrialization in which the country is a prominent economic hub for trade and development. Nevertheless, these nations have implemented long-term sustainability goals and are currently addressing the concerns regarding rapid urbanization. The developed nations have a very high percentage of their population living in urban areas. Moreover, this bloc has a very well-developed economy due to export markets and industrialization. As a result, urban slums are less prevalent as citizens have a better standard of living. The urban-rural cleavage is fairly insignificant as inequality remains fairly low. Although urbanization leads to economic growth in developed ASEAN countries, many nations face economic challenges. For example, due to the rapid population growth, many cities face challenges regarding housing costs. To provide affordable housing, these nations support multi-unit homes and vacant home taxes to lower the prices. Furthermore, developed nations in this bloc are more incentivized to combat climate change and are willing to value environmental sustainability over economic growth. Some of these countries have already implemented carbon emissions reduction targets and green energy initiatives. For example, Indonesia is working alongside governmental agencies such as USAID which seeks to provide aid for foreign countries. The country has implemented various programs to support environmental sustainability and efficiently utilize natural resources. In fact, USAID invested roughly \$1.6 billion dollars to develop green renewable energy sources for over 5.3 Indonesian residents.⁵⁴ Overall, developed nations are likely to support the slowing down of urbanization and the protection of the environment because of their increased economic development compared to developing nations in ASEAN.

Developing Nations

The nations within this bloc include Cambodia, Myanmar, Brunei, and Laos. These nations are attempting to industrialize and urbanize due to the economic benefits. However, the opportunities and effects of urbanization have been distributed unequally among different regions. Many of the rural areas have a shortage of basic resources, whereas urban areas benefit more. As a result, the rising inequality in these countries has led to a sharp divide and animosity between urban and rural groups. Moreover, the developing nations suffer from many urban slums in which poverty and famine are very prevalent. The informal settlements suffer from poorly constructed buildings and services such as sanitation, waste management, and technology. This phenomenon is due to limited investment and resources for

⁵³ <https://www.bluezones.com/2020/07/what-is-a-mixed-use-neighborhood/>

⁵⁴ <https://www.usaid.gov/indonesia/environment>

infrastructure development and public services. Furthermore, many of these developing nations in the bloc lack access to renewable resources such as water and electricity. Thus, these nations are still heavily reliant on fossil fuels, oil, natural gas, and coal. Although non-renewable resources are very harmful to the environment, they remain the cheapest and most accessible option for developing nations. As such, nations in the bloc prioritize economic growth over environmental sustainability. Overall, this bloc supports rapid urbanization and increased foreign direct investment (FDI) to increase infrastructure and other governmental services.

Sources Cited

AKND. "Kampung Improvement Programme: Aga Khan Development Network." *AKDN*,

www.akdn.org/architecture/project/kampung-improvement-programme.

Asian Development Bank. "ASEAN Catalytic Green Finance Facility." *Asian Development Bank*, Asian

Development Bank, 3 Mar. 2020, www.adb.org/publications/asean-catalytic-green-finance-facility.

Children of the Mekong. "Slums and Informal Settlements in Southeast Asia." *Children of the Mekong*, 15 Apr.

2021,

www.childrenofthemekong.org/sponsor-a-child/priorities/slums-and-informal-settlements/.

Corporate Finance Institute. "Asian Financial Crisis - Overview, Causes, and Impact." *Corporate Finance Institute*,

corporatefinanceinstitute.com/resources/knowledge/finance/asian-financial-crisis/.

Devteam. "Rapid Urbanisation in Southeast Asia: Insights and Opportunities." *SJconnects*, SJconnects, 24 June

2021, surbanajurong.com/sjconnects/rapid-urbanisation-in-southeast-asia-insights-and-opportunities/.

Geoffrey, Gunn. "The Great Vietnamese Famine of 1944-45 Revisited." *Sciences Po Portal*, 12 May

2011, www.sciencespo.fr/mass-violence-war-massacre-resistance/en/document/great-vietnamese-famine-1944-45-revisited.html.

Gupta, Alok. "ASEAN's Rapid Urbanization Faces Sustainability Woes." *CGTN*, Feb. 13, 2018

news.cgtn.com/news/7849544d33677a6333566d54/share_p.html.

Hanke, Steve. "20th Anniversary, Asian Financial Crisis: Clinton, The IMF And Wall Street Journal Toppled

Suharto." *Forbes*, Forbes Magazine, 6 July 2017,

www.forbes.com/sites/stevehanke/2017/07/06/20th-anniversary-asian-financial-crisis-clinton-the-imf-and-wall-street-journal-toppled-suharto/?sh=d2c1bde2882b.

History.com Editors. "Industrial Revolution." *History.com*, A&E Television Networks, 29 Oct. 2009,

www.history.com/topics/industrial-revolution/industrial-revolution.

Huff, Gregg. "Introduction - World War II and Southeast Asia." *Cambridge Core*, Cambridge University Press, www.cambridge.org/core/books/world-war-ii-and-southeast-asia/introduction/C1199E147497460F281686B94C04DCE5.

Huff, Greg. "World War II and Southeast Asia: FifteenEightyFour: Cambridge University Press." *FifteenEightyFour* | *Cambridge University Press*, 11 Nov. 2020, www.cambridgeblog.org/2020/11/world-war-ii-and-southeast-asia/.

Hoi J. Lim. "ASEAN Sustainable Urbanisation Strategy." *AADCP II*, aadcp2.org/asean-sustainable-urbanisation-strategy/.

MacKinnon, Ian. "Four-Metre Floodwaters Displace 340,000 in Jakarta." *The Guardian*, Guardian News and Media, 5 Feb. 2007, www.theguardian.com/world/2007/feb/05/weather.indonesia.

World Habitat Awards. "The Kampung Improvement Programme, Surabaya." *World Habitat*, 27 Mar. 2018, world-habitat.org/world-habitat-awards/winners-and-finalists/the-kampung-improvement-programme-surabaya/.

Kolczak, Amy. "Singapore Aims to Be the World's Greenest City." *Environment*, National Geographic, 3 May 2021, www.nationalgeographic.com/environment/article/green-urban-landscape-cities-Singapore.

Michael Carson and John Clark. "Asian Financial Crisis." *Federal Reserve History*, www.federalreservehistory.org/essays/asian-financial-crisis.

Millar, Paul. "Southeast Asia's Megacities Have a Choice: Shangri-La or Slum." *Southeast Asia Globe*, 1 July 2020, southeastasiaglobe.com/southeast-asias-megacities-have-a-choice-shangri-la-or-slum/.

Paek, Seung Chun, et al. "Thailand's Universal Coverage Scheme and Its Impact on Health-Seeking Behavior." *SpringerPlus*, Springer International Publishing, 10 Nov. 2016, www.ncbi.nlm.nih.gov/pmc/articles/PMC5104696/.

World Bank. "The Ninth Session of the World Urban Forum (WUF9) - World Bank Participation." *World Bank*, www.worldbank.org/en/events/2018/02/07/world-urban-forum.

United Nations "Addis Ababa Action Agenda ... Sustainable Development Knowledge Platform." *United Nations*, United Nations, 2015. sustainabledevelopment.un.org/index.php?page=view&type=400&nr=2051&menu=35.

University of Oxford "War and Economy in Southeast Asia." *Faculty of History*,

www.history.ox.ac.uk/war-and-economy-southeast-asia#tab-413636.

World Health Organization. "Addressing Health of the Urban Poor in South-East Asia Region: Challenges and Opportunities." *World Health Organization*, World Health Organization, 2011

apps.who.int/iris/handle/10665/204753.

Yoon, Anum. "City Living: ASEAN Is Urbanizing Rapidly, but Is It Sustainable?" *World Economic Forum*, www.weforum.org/agenda/2017/04/can-southeast-asia-sustain-its-rapid-rate-of-urbanization.

Rising Sea Levels

Questions to Consider

1. What are the effects of global warming on your nation's economy?
2. How are countries in ASEAN currently responding to rising sea levels?
How does rising sea levels impact migration movements?
3. What are the major causes of rising sea levels and coastal flooding in your country?
4. How has rising sea levels impacted your country?

Overview

Since the Industrial Period, humans have been the major culprit for global warming. The COVID-19 pandemic seemingly decreased the levels of carbon emissions due to the lockdowns and transport restrictions; however, the pandemic has barely slowed down the overall rise in concentrations. The adverse effects of global warming are displayed by rising sea levels, extreme weather conditions such as wildfires and droughts, ice caps melting, and the destruction of biodiversity. The carbon dioxide concentration in the atmosphere is the highest it has been in 3 million years, while 1 million hectares of land and ecosystem have been lost.⁵⁵ Moreover, 800 million people live in cities at risk from climate change, with entire coastal cities in Southeast Asia projected to suffer from rising sea levels.⁵⁶ In particular, millions of residents in Indonesia, Thailand, Vietnam, and the Philippines are vulnerable to rising sea levels.⁵⁷

Climate change also directly links to and exacerbates the pre-existing social, racial, and economic injustices that less fortunate communities face. According to the Intergovernmental Panel on Climate Change (IPCC) report in 2018, global carbon emissions must be cut in half by 2030 to prevent the irreversible and dangerous consequences of climate change.⁵⁸ The average global sea level has risen 8.9 inches between 1880 and 2015.⁵⁹ Furthermore, a scientific consensus confirmed the strong connection between rising CO₂ emissions and sea levels: a 1.5°C increase in global temperature will raise global sea

⁵⁵<https://www.climatecentral.org/news/the-last-time-co2-was-this-high-humans-didnt-exist-15938>

⁵⁶<https://www.brookings.edu/research/the-climate-crisis-migration-and-refugees/>

⁵⁷<https://www.channelnewsasia.com/news/sustainability/sea-level-rise-southeast-asia-satellite-imagery-climate-change-15140606>

⁵⁸<https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

⁵⁹<https://www.climate.gov/news-features/understanding-climate/climate-change-global-sea-level#:~:text=Global%20mean%20sea%20level%20has,of%20seawater%20as%20it%20warms.>

levels by between 1.7 and 3.2 feet by 2100.⁶⁰ Virtually all ASEAN countries will experience severe weather impacts.⁶¹ According to the World Economic Forum, roughly 20 million people have been displaced from their homes due to extreme weather conditions.⁶² The major factors for rising sea levels in ASEAN are greenhouse gas emissions, rainfall, and ice caps melting in Antarctica.⁶³

Timeline

1970: The First Earth Day is an environmental movement that attained strong influence, spreading concern about global degradation.

1971: SMIC conference of leading scientists reports a danger of rapid and serious global change caused by humans, and calls for an organized research effort.⁶⁴

1985: The first international conference regarding the effects of greenhouse emissions was held in Austria, which discussed the rise of temperatures as well as its implications such as rising sea levels.

1990: Second World Climate Conference states that climate change is a global issue that requires immediate action.⁶⁵

1992: 154 nations sign the The Climate Change Convention in Rio, Brazil, which aims at addressing greenhouse gases and setting strict CO₂ reduction.⁶⁶

1997: The Kyoto Protocol establishes a set of guidelines that requires industrialized and developed nations to cut emission productions.⁶⁷

2014: On June 5, the United Nations Environment Programme (UNEP) focuses its World Environment Day campaign around “Raise Your Voice, Not the Sea Level” to draw attention to the issue of rising oceans worldwide.

2015: The Paris Agreement establishes a global framework to prevent the adverse effects of global warming. In particular, the agreement states that global temperatures should be limited to 1.5°C.⁶⁸

Historical Analysis

⁶⁰<https://ocean.si.edu/through-time/ancient-seas/sea-level-rise#:~:text=Scientists%20with%20the%20Intergovernmental%20Project,by%201%C2%B0C%20already.>

⁶¹<https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

⁶²<https://theaseanpost.com/article/rising-sea-levels-put-asean-cities-risk>

⁶³<https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/>

⁶⁴<https://history.aip.org/climate/xKeeling71.htm>

⁶⁵<https://unfccc.int/resource/ccsites/senegal/fact/fs221.htm>

⁶⁶<https://unfccc.int/resource/docs/convkp/conveng.pdf>

⁶⁷https://unfccc.int/kyoto_protocol

⁶⁸<https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

Dating back to the first Industrial Revolution roughly between the mid-1700s and the mid-1800s, carbon emissions have been polluting the environment. Burning coal had extremely harmful effects as industrial towns were choked by toxic air pollution produced by coal-burning factories. During the Industrial Revolution, coal and petroleum fueled industrialization, which led to more human waste being dumped in rivers. Coal was boiled in water to produce pressurized steam in an engine which pushed a piston to turn a wheel. This type of technological innovation and many others developed the factory system which largely prohibited increased pollution and emissions. For example, in 1850, there were 250,000 factories in Great Britain.⁶⁹ During the second Industrial Revolution, many nations around the globe produced mass amounts of steel. In particular, the Bessemer Process was introduced to refine steel (blast air at hot iron to remove impurities). By the mid-1800s, oil wells were widespread due to increased maritime travel and the development of steamships. Moreover, oil was refined and separated into kerosene and gasoline. Gasoline would take over as the main benefit of oil extraction. Developed in the late-1800s, the internal combustion engine would rely on burning gasoline to push its pistons. Overall, the world saw a major increase in population, which, along with an increase in living standards, led to the depletion of natural resources. The use of chemicals and fuel in factories resulted in increased air and water pollution and an increased use of fossil fuels. Industrial emissions have skyrocketed CO₂ levels from 280 parts per million in 1850 to nearly 420 parts per million in 2021.⁷⁰

According to the International Monetary Fund, average temperatures in Southeast Asia have increased each decade since 1960.⁷¹ Moreover, in the past two decades, ASEAN nations such as Vietnam, Myanmar, the Philippines, and Thailand are one the most affected countries in the world by climate change due to their energy production and geographic location.⁷² Due to the late industrialization of ASEAN nations in the mid-19th century, the region is now experiencing a climate transformation. For instance, between 1951 to 1980, the warmest summer months had lower temperatures compared to the coldest summer months.⁷³ This variation and unprecedented levels in temperatures has caused numerous environmental effects. For example, according to a report done by the IMF, rice yields in four ASEAN nations may drop by 50 percent from 1990 to 2100.⁷⁴ As a result, many nations in the region may face crop shortages as well as tropical diseases due to increased temperatures.

Deforestation is another major factor in rising sea levels. Southeast Asia is known for an abundance of natural resources such as timber and biodiverse rainforests. However, many countries including Indonesia and Malaysia have cut down their forests for agriculture. In fact, the region has the highest rates of deforestation in the world.⁷⁵ Moreover, rising populations and economic development has forced many farmers to increase their supplies. In Indonesia, deforestation makes up roughly 50 percent of all CO₂

⁶⁹<https://www.historylearningsite.co.uk/britain-1700-to-1900/industrial-revolution/factories-in-the-industrial-revolution/#:~:text=In%201813%2C%20there%20were%20only,Factories%20were%20run%20for%20profit.>

⁷⁰<https://time.com/5680432/climate-change-history-carbon/#:~:text=Agriculture%2C%20civilizations%20and%20states%20emerged,now%20surging%20toward%20eight%20billion.>

⁷¹<https://www.imf.org/external/pubs/ft/fandd/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash.htm>

⁷²Ibid

⁷³Ibid

⁷⁴Ibid

⁷⁵<https://theaseanpost.com/article/deforestation-modern-day-plague-southeast-asia>

emissions.⁷⁶ The process in which farmers clear forests releases gas and smoke. According to the IMF, since 1997, the smoke produced by cutting down trees has polluted the air and “choked” ASEAN countries like Singapore and Malaysia.⁷⁷

Past Action

ASEAN Working Group on Climate Change (AWGCC)

The organization was established in 2009 to oversee and enact several actions in response to climate change.⁷⁸ This proposal included limiting deforestation to preserve wildlife and biodiversity in the region. Moreover, the plan emphasized the importance of a low-carbon economy as well as public awareness of the effects of climate change. In particular, one policy focused on balancing both environmental sustainability and economic development, not sacrificing one for the other but rather mutually benefitting one another. Furthermore, the member states seek to invest in research and development (R&D) in order to deploy advanced research. As part of this program, the US invested \$15 million USD into a project called “Rehabilitation and Sustainable Use of Peatland Forests in Southeast Asia,” to reduce air pollution and smoke hazards in the region.⁷⁹ Moreover, in 2010, several workshops in Thailand and Indonesia were held to improve anti-flooding measures and drought management.⁸⁰ Overall, the AWGCC establishes a framework of cooperation and engagement to combat climate change.

ASEAN Environmental Education Plan (AEEAP)

In 2010, the ASEAN Plus Three Youth Environment Forum established the AEEAP, aimed at fostering youth involvement and protecting the environment. In particular, the program was created to promote sustainable development through public involvement and education on the environment. Moreover, the initiative seeks to strengthen communication, collaboration, and networking to reduce carbon emissions and produce more efficient and green technology.⁸¹ Overall, the AEEP provides a regional framework that enhances environmental awareness and promotes cooperation among ASEAN nations.

Paris Agreement

In 2015, 195 countries signed the Paris Agreement, a deal that gave new hope for progress against global warming. The policy binded countries to no more than 2% increase in global temperatures. Although ASEAN has limited responsibility for the rising temperatures, the region suffers the effects of climate change more than other countries. Thus, ASEAN nations have promised to reduce their emissions by 2030 by implementing multiple environmental policies to aid this process.⁸² These policies include the

⁷⁶<https://www.imf.org/external/pubs/ft/fandd/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash.htm>

⁷⁷<https://www.imf.org/external/pubs/ft/fandd/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash.htm>

⁷⁸[https://environment.asean.org/awgcc/#:~:text=ASEAN%20Working%20Group%20on%20Climate%20Change%20\(AWGCC\)%20was%20established%20in,consultative%20and%20collaborative%20platform%20to%3A&text=For%20mulate%20the%20regions%20interests%2C%20concerns,annual%20UNFCCC%20COP%20sessions%3B%20and](https://environment.asean.org/awgcc/#:~:text=ASEAN%20Working%20Group%20on%20Climate%20Change%20(AWGCC)%20was%20established%20in,consultative%20and%20collaborative%20platform%20to%3A&text=For%20mulate%20the%20regions%20interests%2C%20concerns,annual%20UNFCCC%20COP%20sessions%3B%20and)

⁷⁹<http://www.aseanpeat.net/index.cfm?&menuid=38>

⁸⁰<https://environment.asean.org/files/RIEE-Droughts-OnWeb-rev.pdf>

⁸¹<https://datacenter.deqp.go.th/media/images/9/D2/ASEAN-Environmental-Education-Action-Plan-2014-2018.pdf>

⁸²<https://www.un.org/en/climatechange/paris-agreement>

development of green and renewable technologies. Countless industrializing ASEAN nations have already begun emission reduction efforts. For example, countries like Indonesia have sought to achieve 23% renewable energy by 2025 and Singapore has invested heavily in solar energy.⁸³ The Paris Agreement has required nations to formulate and send long-term strategies for responding to global warming; however, the rising sea levels in ASEAN forces many nations to enact short term policies such as the construction of sea walls. Thus, delegates must find a balance between short and long term solutions.

Current Situation

Southeast Asia is very vulnerable to global warming, especially rising sea levels, due to their geographic location which is concentrated along coastlines. Recently, sea levels have risen 1 to 3 millimeters annually as floods and tsunamis have been increasingly prevalent.⁸⁴ Amidst the pandemic, natural disasters spread quickly throughout Southeast Asia, displacing some 500,000 people.⁸⁵ For example, Typhoon Vongfong hit the Philippines in 2020 which cost over \$50 million in economic damage and killed 5 people.⁸⁶ Similarly, Jakarta in Indonesia has experienced two nation-wide floodings.⁸⁷ According to a comprehensive study that monitored weather patterns in the region, roughly 54 million people were displaced by natural disasters between 2008 – 2018.⁸⁸ If ASEAN nations fail to adequately address global warming, over 79 million residents may face severe flooding that displaces their homes caused by rising sea levels. In particular, many ASEAN nations along the Mekong River including Myanmar, Laos, Thailand, Cambodia, and Vietnam experience the negative climate effects of rising sea levels. Over 60 million people access necessities such as food and transportation on the river; as a result, the rising sea levels may displace millions of residents who are dependent on the resources in the area.⁸⁹

More importantly, these environmental impacts negatively impact less fortunate and marginalized communities due to inadequate resources and political instability. This is an important area of discussion that delegates can address since many rural towns and villages are extremely vulnerable to rising sea levels. Vital infrastructure such as roads, housing, and hospitals will likely be destroyed in the case of a flood. As a result, ASEAN countries must respond adequately to prevent further damage to their economies. Overall, ASEAN nations must respond accordingly by reducing carbon emissions, developing green energy resources, and improving infrastructure.

Case Study: Thailand

Rising sea levels in Thailand has disproportionately affected certain groups of people. Developed urban centers are well protected, whereas rural areas with farmers and fishermen are more vulnerable to economic loss.⁹⁰ Many of the 10.7 million residents of Thailand's capital Bangkok experience constant

⁸³<https://www.irena.org/publications/2017/Mar/Renewable-Energy-Prospects-Indonesia#:~:text=While%20reliance%20on%20domestic%20coal,%2C%20and%2031%25%20by%202050.>

⁸⁴<https://www.ipcc.ch/srocc/chapter/chapter-4-sea-level-rise-and-implications-for-low-lying-islands-coasts-and-communities/>

⁸⁵ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3529313/>

⁸⁶[https://en.wikipedia.org/wiki/Typhoon_Vongfong_\(2020\)](https://en.wikipedia.org/wiki/Typhoon_Vongfong_(2020))

⁸⁷<https://www.usatoday.com/story/news/world/2020/02/25/jakarta-floods-2020-indonesia-capital/4865913002/>

⁸⁸<https://www.csis.org/blogs/new-perspectives-asia/southeast-asias-coming-climate-crisis>

⁸⁹<https://www.britannica.com/place/Mekong-River>

⁹⁰<https://theaseanpost.com/article/rising-sea-levels-southeast-asia>

flooding due to the city's location in the Chao Phraya River Basin.⁹¹ The combination of climate change and land subsidence threatens the city with unprecedented rising sea levels. For example, the 2011 floods in Bangkok cost the government roughly \$46 billion in reparations and infrastructure damage.⁹² Moreover, the flood killed 800 people and devastated the lives of 13 million people.⁹³ These statistics show the alarming effects of global warming in Thailand and how immediate action must be taken. Moreover, the reduction in greenery from 40 percent to 1 percent may increase the number of floods due to less absorption by plants.⁹⁴

Case Study: Jakarta

Unfortunately, the capital of Indonesia, Jakarta, is located on the Pacific Ring of Fire which experiences flooding, tsunamis, and earthquakes, all of which are further exacerbated by global warming.⁹⁵ As a result, Jakarta is at high risk of sinking in the near future.⁹⁶ Specifically, roughly 17 percent of Jakarta's total land area is below minimal sea level, costing the government approximately \$68 billion and putting 1.8 million people at risk of displacement.⁹⁷ Moreover, recently in 2020, 100,000 people were displaced from their homes and 66 died due to rising sea levels and massive floods in Jakarta.⁹⁸ Land-subsidence — which is the process of extracting huge volumes of groundwater beneath the city — poses a large issue to local communities due to its impact on flooding and waste production.⁹⁹

Case Study: Vietnam

Many major cities in ASEAN are experiencing the adverse effects of rising sea levels. In particular, Ho Chi Minh in Vietnam — one of the most rapidly urbanizing and industrializing cities in Southeast Asia — is very vulnerable to increased flooding in the city. The McKinsey Global Institute found that major cities in Vietnam are 10 times more likely to experience flooding by 2050; as a result, the economic cost would amount to roughly \$9.4 billion dollars over the span of 30 years.¹⁰⁰ Moreover, the city experiences constant flooding due to heavy storms, rainfall, and fossil fuels.¹⁰¹ Similarly, a study by Climate Central reported that the majority of the Mekong Delta in Vietnam will be underwater by 2050.¹⁰² In fact, roughly 20 million residents in Vietnam are at risk of severe flooding that will displace their homes.¹⁰³

Case Study: Philippines

⁹¹<https://theaseanpost.com/article/bangkok-sinking-fast>

⁹² Ibid

⁹³<https://theaseanpost.com/article/bangkok-sinking-fast>

⁹⁴<https://theaseanpost.com/article/rising-sea-levels-put-asean-cities-risk>

⁹⁵<https://earth.org/deep-dive-rising-sea-levels-force-relocation-of-indonesian-capital/>

⁹⁶ Ibid

⁹⁷<https://www.downtoearth.org.in/news/climate-change/15-million-in-asia-s-cities-can-be-affected-by-sea-level-rise-by-2030-greenpeace-77684>

⁹⁸<https://theaseanpost.com/article/rising-sea-levels-put-asean-cities-risk>

⁹⁹<https://earth.org/deep-dive-rising-sea-levels-force-relocation-of-indonesian-capital/>

¹⁰⁰ <https://theaseanpost.com/article/rising-sea-levels-southeast-asia>

¹⁰¹<https://www.rfa.org/english/commentaries/mekong-levels-11122019164415.html>

¹⁰²<https://asiatimes.com/2020/01/se-asia-slowly-but-surely-sinking-into-the-sea/>

¹⁰³<https://www.nytimes.com/interactive/2019/10/29/climate/coastal-cities-underwater.html>

Among the major countries in ASEAN at risk of rising sea levels, the Philippines is one the most vulnerable countries in regards to coastal flooding. In Manila Bay, for instance, the average sea level is increasing at 13.24mm annually.¹⁰⁴ As a result, up to 6.8 million people, roughly 50% of Manila's population, are at risk of rising sea levels according to Climate Central.¹⁰⁵ Moreover, nearly 90 percent of Manila's land area is below the sea levels predicted to rise in 2030, impacting roughly 1.5 million people and costing the government nearly \$40 billion USD in the long term.¹⁰⁶ The major cause for rising sea levels in the Philippines is the country's over dependence on fossil fuels such as coal.¹⁰⁷

Possible Solutions

Improving Infrastructure

Many cities in ASEAN are experiencing the detrimental effects of rising sea levels including massive floods. One short-term solution is the construction of more stable and effective infrastructure to combat natural disasters. For instance, nations are exploring the option of seawalls as a viable option to prevent flooding. A seawall is a coastal defense system that protects civilizations from dangerous waves, tsunamis and allows residents to relocate. For example, Jakarta is currently depicted as "one the world's fastest sinking cities."¹⁰⁸ As a result, the city has implemented a \$40 billion dollars project called the "Great Sea Wall" to strengthen their coastal dams and artificial islands.¹⁰⁹ By constructing temporary sea walls, the plan is predicted to relocate 400,000 people into safe areas.¹¹⁰ However, the implementation of sea walls is only a short term solution as cities fail to adequately address groundwater issues which further exacerbate the effects of rising sea levels. As a result, the second form of infrastructure is the development of enhanced drainage systems. For example, Bangkok has constructed a central park that can drain 4 million litres of waste into underground containers.¹¹¹ Moreover, building stormwater pumps and upgrading sewage systems can effectively combat rising sea levels as well as floods. Overall, a combination of different infrastructure projects can help at-risk cities with short-term solutions.

Cleaner Energy Sources

In order to tackle the root cause of rising sea levels, ASEAN nations must transition into more sustainable energy sources other than fossil fuels. In fact, fossil fuels have made up roughly 80% of the region's generation mix.¹¹² A potential solution is the implementation of carbon pricing, which works by charging huge polluters for the amounts of carbon emissions they produce. The system encourages businesses to invest in efficient and renewable energy sources to reduce greenhouse gas emissions. By doing so, the economy will be boosted and millions of residents will be able to work in the green job sector instead of

¹⁰⁴<https://www.greenqueen.com.hk/rising-sea-levels-asia-climate-change/>

¹⁰⁵<https://www.climatecentral.org/news/report-flooded-future-global-vulnerability-to-sea-level-rise-worse-than-previously-understood>

¹⁰⁶<https://www.downtoearth.org.in/news/climate-change/15-million-in-asia-s-cities-can-be-affected-by-sea-level-rise-by-2030-greenpeace-77684>

¹⁰⁷<https://arstechnica.com/science/2016/02/ocean-levels-in-the-philippines-rising-at-five-times-the-global-average/#:~:text=First%2C%20climate%20change%20has%20led,contribute%20to%20rising%20ocean%20levels.>

¹⁰⁸<https://thediplomat.com/2019/07/will-a-giant-sea-wall-save-indonesias-capital-from-sinking/>

¹⁰⁹Ibid

¹¹⁰<https://www.weforum.org/agenda/2019/01/the-world-s-coastal-cities-are-going-under-here-is-how-some-are-fighting-back/>

¹¹¹Ibid

¹¹²<https://www.agora-energiewende.de/en/global/southeast-asia/#:~:text=In%20Southeast%20Asia%2C%20however%2C%20fossil,in%20the%202025%20energy%20mix.>

the fossil fuel industry. More importantly, the carbon tax strives to reduce economic injustice faced by vulnerable communities by ensuring fair compensation for increases in energy costs. Carbon pricing gives economic power into the hands of frontline workers through job security and fair wages while increasing investment into renewable energy. However, is a carbon tax enough to combat carbon emissions?

According to the IPCC, a carbon tax “could have a significant impact on emissions” and the International Monetary Fund argues that it is the most “powerful” method.¹¹³

Smart Cities

Many developed ASEAN countries have attempted to reduce their carbon footprints by developing smart cities, which include environmentally friendly features such as smart energy management, green energy, and a more efficient use of resources. For example Thailand’s smart city plan aims to transition towards renewable energy away from fossil fuel use.¹¹⁴ Other systems such as smart grids and waste management are key components of smart cities. Moreover, ASEAN nations can develop the Internet of Things (IoT) which includes software programs, artificial intelligence, and other advanced technologies.¹¹⁵ By doing so, nations can prevent environmental damage while stimulating the economy.

Bloc Positions

Environment

Many developed nations in ASEAN have focused their efforts in combating global warming and the rising sea levels. Countries in this bloc include Singapore, Indonesia, Vietnam, and Philippines. These nations have infrastructure projects to combat flooding and rising sea levels. For instance, in response to concerns regarding rising sea levels, Ho Chi Minh City has invested in infrastructure and technology to combat flooding and global warming. However, these projects are challenging for governments to implement due to their high costs. For example, the city spent \$345 million on anti-flood projects in 2019 alone.¹¹⁶ Moreover, the United Nations Environmental Programme (UNEP) predicts that developing nations, such as Vietnam, must pay up to \$350 billion dollars per year to tackle the issue of rising sea levels.¹¹⁷ In fact, the economic cost is projected to double by 2050.¹¹⁸ Similarly, the Philippines has proposed initiatives that resolve flooding issues in the short term. The nation is attempting to mitigate the effects of climate change by implementing over 6,000 anti-flooding projects across certain at-risk cities such as the Manila Bay.¹¹⁹ In Thailand, the National Water Resource Commission provided a comprehensive \$412 million project that plans to improve drainage systems and water quality. Although Bangkok has attempted to construct huge infrastructure projects such as sea walls, the expensive costs

¹¹³<https://www.cnn.com/2019/10/10/carbon-tax-most-powerful-way-to-combat-climate-change-imf.html>

¹¹⁴<https://theaseanpost.com/article/developing-thailands-smart-cities#:~:text=In%20accordance%20with%20Thailand%204.0,100%20smart%20cities%20by%202024.&text=The%20focus%20on%20smart%20cities,of%20life%20in%20urban%20centres.>

¹¹⁵<https://www.zdnet.com/article/what-is-the-internet-of-things-everything-you-need-to-know-about-the-iot-right-now/>

¹¹⁶<https://e.vnexpress.net/news/news/hcmc-to-spend-345-million-on-anti-flooding-projects-this-year-3906479.html>

¹¹⁷<https://www.unep.org/news-and-stories/press-release/ahead-un-environment-assembly-unep-says-cost-adapting-climate-change>

¹¹⁸<https://www.un.org/sustainabledevelopment/blog/2016/05/unep-report-cost-of-adapting-to-climate-change-could-hit-500b-per-year-by-2050/>

¹¹⁹<https://www.channelnewsasia.com/cnainsider/why-manila-risks-becoming-underwater-city-climate-change-772141>

leave the country with limited options.¹²⁰ As a result, the nation must address energy use and cut their dependency on fossil fuels. This bloc has mainly focused on achieving carbon neutrality through the carbon tax¹²¹ Only developed nations in ASEAN have begun experimentation with this mechanism: Singapore installed a nation-wide carbon tax and Vietnam passed the “Law on Environmental Protection” that will enact a carbon market. Similarly, Indonesia has begun proposals for a carbon tax.¹²² Moreover, ASEAN nations in this bloc have focused on solar power as a viable alternative to fossil fuels. Furthermore, rooftop solar power meets many of the energy demands brought forth by urban and rural areas.

Industrializing

Many developing nations in ASEAN have not been actively involved in fighting climate change and rising sea levels due to their focus on industrialization and economic growth. Countries in this bloc include Myanmar, Laos, and Cambodia. These nations are heavy polluters since they rely heavily on fossil fuels for their energy production and demands. Many developing countries in ASEAN rely on agriculture for their economic production, which is very risky since these countries often experience droughts and floods that negatively affect their economies. Specifically, 57.6% of Cambodia’s rural labour force is in agriculture.¹²³ However, flooding and rising sea levels have destroyed many crops and the farmers’ lands. As a result, Cambodia has enacted the Climate Smart Agriculture plan which hopes to strengthen the country’s resilience against flooding by developing tarpaulin lined ponds and raised bed gardens.¹²⁴ By doing so, developing countries such as Cambodia are able to respond to droughts and floods in an effective and cheap method. More importantly, nations in this bloc strive to increase climate awareness to receive more funding for infrastructure and resources. For example, the Myanmar Climate Change Alliance raises awareness about climate change impacts to work with government officials and develop local projects to address imminent issues such as flooding and rising sea levels.¹²⁵ Overall, nations in this bloc hope to transition into a cleaner future; however, its current economic situation may provide challenges that delegates must address.

¹²⁰<https://www.bangkokpost.com/opinion/opinion/1921552/latest-seawall-project-another-potential-debacle>

¹²¹<https://www.pv-magazine.com/2021/06/21/carbon-neutrality-and-solars-role-in-asean-nations/>

¹²²Ibid

¹²³https://snv.org/cms/sites/default/files/explore/download/csa_technology_case_study_eng_final.pdf

¹²⁴https://snv.org/cms/sites/default/files/explore/download/csa_technology_case_study_eng_final.pdf

¹²⁵<https://www.unep.org/news-and-stories/story/myanmar-gears-action-climate-change>

Sources Cited

- “15 Million in Asia's Cities Can Be Affected by Sea-Level Rise by 2030: Greenpeace.” *Down To Earth*,
www.downtoearth.org.in/news/climate-change/15-million-in-asia-s-cities-can-be-affected-by-sea-level-rise-by-2030-greenpeace-77684.
- “Deep Dive: Rising Sea Levels Force Relocation of Indonesian Capital: Earth.Org - Past: Present: Future.”
Earth.Org - Past | Present | Future, 14 Aug. 2020,
earth.org/deep-dive-rising-sea-levels-force-relocation-of-indonesian-capital/.
- “The Discovery of Global Warming.” *Niels Bohr Library & Archives*, history.aip.org/climate/xKeeling71.htm.
- “F&D Article.” *The Impact of Climate Change in Southeast Asia – IMF Finance & Development Magazine* |
September 2018,
www.imf.org/external/pubs/ft/fandd/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash.htm.
- “F&D Article.” *The Impact of Climate Change in Southeast Asia – IMF Finance & Development Magazine* |
September 2018,
www.imf.org/external/pubs/ft/fandd/2018/09/southeast-asia-climate-change-and-greenhouse-gas-emissions-prakash.htm.
- Freedman, Andrew. “The Last Time CO2 Was This High, Humans Didn't Exist.” *Climate Central*, 3 May 2013,
www.climatecentral.org/news/the-last-time-co2-was-this-high-humans-didnt-exist-15938.
- Jack Board
@JackBoardCNA, et al. “Millions More in Southeast Asia Face Sea Level Rise Risks than Previously
Thought: Satellite Imagery Study.” *CNA*,
www.channelnewsasia.com/news/sustainability/sea-level-rise-southeast-asia-satellite-imagery-climate-change-15140606.

Karmini, Niniek. "Thousands Caught in Floods in Jakarta, Indonesia's Sinking Capital." *USA Today*, Gannett Satellite Information Network, 25 Feb. 2020,
www.usatoday.com/story/news/world/2020/02/25/jakarta-floods-2020-indonesia-capital/4865913002/.

Limited, Bangkok Post Public Company. "Latest Seawall Project Another Potential Debacle." *https://www.bangkokpost.com*,
www.bangkokpost.com/opinion/opinion/1921552/latest-seawall-project-another-potential-debacle.

"The Paris Agreement." *United Nations*, United Nations, www.un.org/en/climatechange/paris-agreement.

Press, Associated. "Will a Giant Sea Wall Save Indonesia's Capital From Sinking?" – *The Diplomat*, For The Diplomat, 29 July 2019,
thediplomat.com/2019/07/will-a-giant-sea-wall-save-indonesias-capital-from-sinking/.

"Southeast Asia's Coming Climate Crisis." *Southeast Asia's Coming Climate Crisis | Center for Strategic and International Studies*, 20 Aug. 2021,
www.csis.org/blogs/new-perspectives-asia/southeast-asias-coming-climate-crisis.

Southerland, A commentary by Dan. "Rising Coastal Sea Levels Pose Threat to Cities in Vietnam and Thailand." *Radio Free Asia*, 11 Oct. 2020, www.rfa.org/english/commentaries/mekong-levels-11122019164415.html.

Southerland, Dan. "SE Asia Slowly but Surely Sinking into the Sea." *Asia Times*, 18 Feb. 2020,
asiatimes.com/2020/01/se-asia-slowly-but-surely-sinking-into-the-sea/.

"Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C Approved by Governments." *IPCC Summary for Policymakers of IPCC Special Report on Global Warming of 1.5°C Approved by Governments Comments*,
www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/.

Team, The ASEAN Post. "Bangkok Is Sinking Fast." *The ASEAN Post*, 31 Dec. 2019,
theaseanpost.com/article/bangkok-sinking-fast.

Team, The ASEAN Post. "Deforestation – a Modern-Day Plague in Southeast Asia." *The ASEAN Post*, 23 Sept. 2017, theaseanpost.com/article/deforestation-modern-day-plague-southeast-asia.

Team, The ASEAN Post. "Rising Sea Levels In Southeast Asia." *The ASEAN Post*, 13 Dec. 2020,
theaseanpost.com/article/rising-sea-levels-southeast-asia.

Team, The ASEAN Post. "Rising Sea Levels Put ASEAN Cities at Risk." *The ASEAN Post*, 18 Jan. 2020,
theaseanpost.com/article/rising-sea-levels-put-asean-cities-risk.

emma_newburger. "A Carbon Tax Is 'Single Most Powerful' Way to Combat Climate Change, IMF Says." *CNBC*,
CNBC, 10 Oct. 2019,
www.cnbc.com/2019/10/10/carbon-tax-most-powerful-way-to-combat-climate-change-imf.html.