Diplomatic Briefing

Toward a Sustainable and Digital Future of ASEAN?
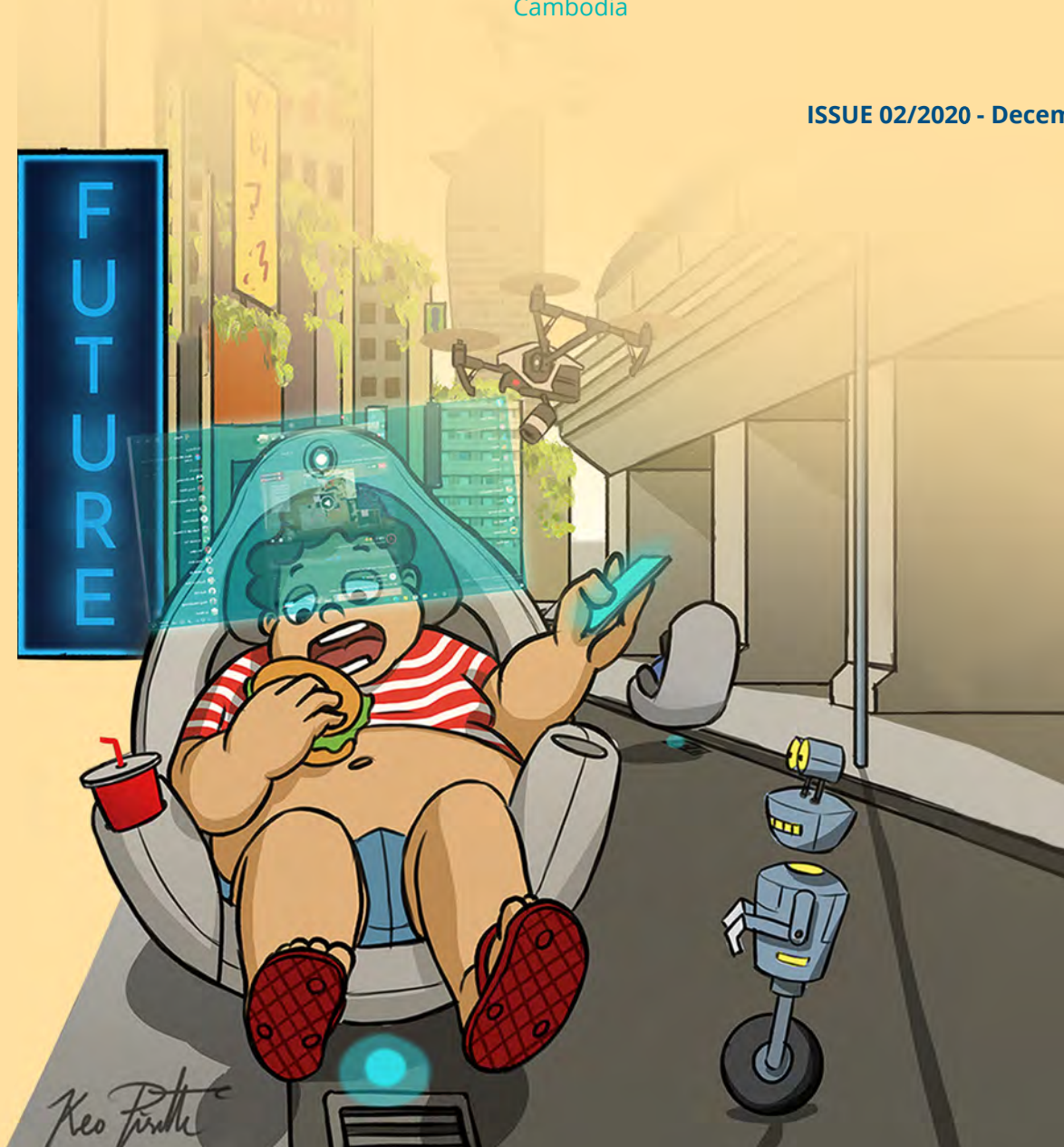
ASEAN Smart Cities Network

The Readiness for a Digital ASEAN

5G and the National Security of Cambodia

Shaping Environmental Law

Gender in Digital Economy

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A BIANNUAL COLLECTION OF CATEGORIZED OPINION
PIECES AND SHORT INTERNATIONAL RELATIONS ARTICLES

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Contents

Editorial Note

The Diplomatic Briefing is a biannual collection of categorized opinion pieces and short articles from an extended network of the scholarly community and regional experts, covering a wide range of issues from international relations, to sub-regional affairs, to foreign policy, to economy and trade, and beyond. Under the new initiative of the Konrad-Adenauer-Stiftung (KAS) Cambodia and the Cambodian Institute for Cooperation and Peace (CICP), the Diplomatic Briefing aspires to serve the diplomatic community, policymakers, and interested stakeholders by providing insightful analysis of the latest trends and challenges in the arenas of regional and international politics and diplomacy. Furthermore, this publication provides a platform for intellectual exchange and grants emerging Cambodian scholars an opportunity to publish their research work.[1]

The United Nations has unanimously adopted the Sustainable Development Goals (SDGs) in 2015 "as a universal call to action to end poverty, to protect the planet and ensure that all people enjoy peace and prosperity by 2030".[2] The 2030 Agenda for Sustainable Development Goals underlines global commitment and hence, serves as a blueprint to achieve a more equitable and sustainable future for all, abiding by the principle that "no one is left behind". The 17 SDGs are fully integrated and the outcomes in one would likely affect the others, aspiring toward several life-changing "zeros", globally including zero poverty, zero hunger, zero AIDS, and zero discrimination against women and girls. We strongly believe, that the achievement of these SDGs is feasible with the right tools of adaptive creativity, know-how, technology, and financial resources from every society in every context.

The Asia-Pacific region has made significant progress toward the attainment of SDGs, especially on the improvement of quality of education and access to affordable and clean energy. However, it has been argued that the region fell short regarding the share of renewable energy and is moving backward on two aspects: responsible consumption and production, and climate action. Although the region has achieved stable high GDP (as well as real GDP) growth rates over the past decade,[3] it is severely lacking in term of human well-being and environmental sustainability. The "Asia and the Pacific SDG Progress Report 2020" released by the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) anticipated that the region is believed to miss the set SDG targets by 2030, given the current rate of improvements, and the lack thereof, in key areas related to poverty, hunger, gender equality and development gap within and between countries.[4] Extra efforts from all concerned would be needed in order to mitigate challenges to effectively implement the 17 SDG targets by 2030 across the region.

With regards to environment, it was reported that 35 percent of countries in the Asia-Pacific region experienced a drastic loss of forest and it is the only region with a declining share of forest area; namely in Cambodia, Myanmar, Indonesia, and Timor-Leste.[5] Air pollution remains to be a critical concern in the ASEAN region with its unceasing population growth and the concentration of urban density. The volume of hazardous waste generated has increased fivefold between 2000 and 2015, reaching nearly 40 million tons, with very limited efforts toward efficient waste management plans and the lack of capacity to recycle.[6] ASEAN countries should put more emphasis on the sustainability-related goals, ensuring that they are not being sidelined for other interests. Failure to do so will put ASEAN at risk of losing its good record in relation to global sustainable development efforts.

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1. The first inaugural issue featured a discussion on political security concerns over the theme: "New Decade, Old Challenges?" by looking into Cambodia's foreign policy frameworks, its position in various multilateral fora, its bilateral relations with key players, its key challenges on top of an increasing geopolitical tension and an unceasing major power competition. The full publication can be accessible at: https://www.kas.de/en/web/kambodscha/single-title/-/content/diplomatic-briefing-new-decade-old-challenges-3

2. UNDP. Sustainable Development Goals. Available at: https://www.undp.org/content/undp/en/home/sustainable-development-goals.html#:~:text=The%20Sustainable%20Development%20Goals%20(SDGs,peace%20and%20prosperity%20by%202030.

3. International Monetary Fund. 2020. Regional Economic Outlook: Asia and Pacific. Available at: https://data.imf.org/?sk=abff6c02-73a8-475c-89cc-ad515033e662

4. ASIA AND THE PACIFIC SDG PROGRESS REPORT 2019. Available at: https://www.unescap.org/sites/default/files/publications/ESCAP_Asia_and_the_Pacific_SDG_Progress_Report_2019.pdf

5. The ASEAN Post. 26 March 2020. ASEAN falling behind on SDG target. Available at: https://theaseanpost.com/article/asean-falling-behind-sdg-targets

6. Ibid.

Another point of discussion this issue touches upon is the allocation-policy of aid-to-trade funding in the region. It has been argued that the ASEAN countries, whom received around 30 percent of all aid-to-trade funding in the Asia-Pacific over the past five years,[1] should allocate these resources more efficiently to increase their impact on behalf of achieving the SDGs by 2030. The same criticism has been voiced over personal remittances, which accounted for more than US$60 billion, approximately 2.8% of the total GDP in 2017.[2] More inclusive stakeholder engagements, including government officials, regional analysts, and national experts, are needed in order to project appropriate methodologies and revise national and regional approaches. A change of direction is needed to better address the priority areas such that the acceleration to implement effective measures in order to fulfill the 2030 Agenda for Sustainable Development Goals.[3]

We hope this second issue makes for a just as interesting read than the first issue, bringing together fresh perspectives and insights into the futuristic aspects as well as the worrisome development constraints that the SDGs face at the forefront. We welcome debates, thought-provoking dialogue and diverse perspectives, in order to make this Diplomatic Briefing live up to its standard: Fostering concrete and pragmatic ideas that make Cambodia, as well as the ASEAN region as a whole, a better place by forwarding its future development.

Enjoy reading!
Pich Charadine and Robert Hör
The Editorial Team

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1. World Trade Organization. 2019. Aid for Trade in the Asia Pacific. Available at https://www.wto.org/english/tratop_e/devel_e/a4t_e/gr19_e/a4treportasian2019_e.pdf

2. Ibid.

3. The ASEAN Post. 26 March 2020. ASEAN falling behind on SDG target. Available at: https://theaseanpost.com/article/asean-falling-behind-sdg-targets

Graphic 1: Progress in SDGs in the Asia-Pacific Region as of 2019

SDG PROGRESS IN ASIA-PACIFIC (2019)

2000	2019	TARGET 2030

1 NO POVERTY

2 ZERO HUNGER

3 GOOD HEALTH & WELL-BEING

4 QUALITY EDUCATION

5 GENDER EQUALITY

6 CLEAN WATER & SANITATION

7 AFFORDABLE & CLEAN ENERGY

8 DECENT WORK & ECONOMIC GROWTH

9 INDUSTRY, INNOVATION & INFRASTRUCTURE

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES & COMMUNITIES

12 RESPONSIBLE CONSUMPTION & PRODUCTION

13 CLIMATE ACTION

14 LIFE BELOW WATER

15 LIFE ON LAND

16 PEACE, JUSTICE & STROND INSTITUTIONS

17 PARTNERSHIP FOR THE GOALS

REGRESS   PROGRESS   INSUFFICIENT INDICATORS   EVIDENCE STRENGTH

Source: United Nations Economic and Social Commission for Asia and the Pacific (2020), https://www.unescap.org/publications/asia-and-pacific-sdg-progress-report-2020

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Your KAS and CICP team

THE READINESS FOR A DIGITAL ASEAN: FROM THE PERSPECTIVE OF A VETERAN DIPLOMAT

Ambassador Dr. Sun Suon

Reading Time: 4 Minutes

Ambassador Dr. Sun Suon is formerly Ambassador and Permanent Representative of Cambodia to the UN Office, the WTO and other International Organizations in Geneva (2007-2013). He was concurrently accredited as Ambassador of Cambodia to Switzerland and as the country's Permanent Representative to the UNIDO in Vienna. His previous posting was in New York where he served as Ambassador and Deputy Permanent Representative of Cambodia to the United Nations (1999-2003). Ambassador Soun is currently Adjunct Professor at Paragon International University as well as Visiting Senior Fellow of the Cambodian Institute for Cooperation and Peace (CICP).
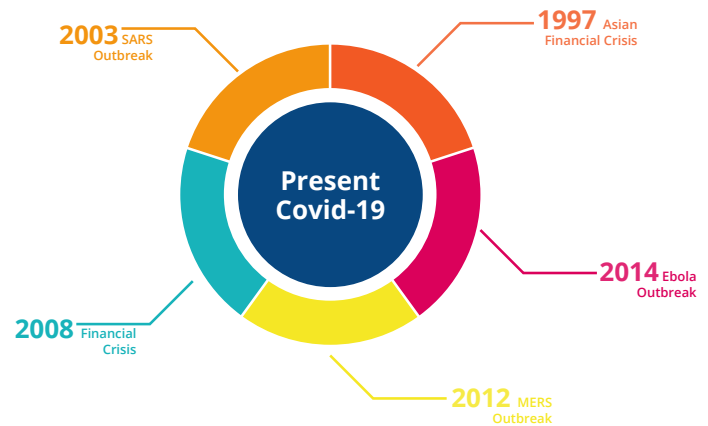
In light of the remarkable shift toward digitalization and the recent outbreak of COVID-19 pandemic, how did the process of digitalization and the conduct of diplomacy change?

We are in challenging and lively times of COVID-19 crisis. Dr. Sun Suon, you have been an ambassador and now a scholar. Have you ever experienced something like that in your previous posting? Are these old challenges or are we talking about a completely new dimension? What does this situation unveil with regards to the international relations of Cambodia?

First of all, I would say that like most of the Cambodian people, (in particular those of my compatriots over the age of 50s), we went through many internal hardships like genocide and civil unrests. We also witnessed many other international crises over the course of time — such as the Asian economic crisis, the global financial crisis, and the health crises resulting from SARS and MERS outbreaks. However, unlike the past crises, COVID-19 is truly an unprecedented challenge for humankind. As the UN Secretary General noted in one of his statements, saying that "COVID-19 is the worst crisis since World War II as deaths surge...."[1] would say that the COVID-19 pandemic has far-reaching and multidimensional consequences for the world. First of all, our lifestyle has completely changed. For example, we gradually shift to videoconference and virtual meetings instead of face to face interactions. Second, from the economic perspective, countries are facing the tightening of financing systems, such as the disruptions of economic activities, trade, global supply chains, investment flows, job loss, and the effects on human well-being. The IMF made a projection of a deeper recession in 2020 than they had previously anticipated in an April forecast, saying that "the fallout will cause the worst recession since the Great Depression". Third, some analysts predict that there will be a new dimension in the context of new geopolitical developmeInt in the post COVID-19 crisis –

Graphic 1: *Past and Present Challenges for Cambodia*

2003 SARS Outbreak
1997 Asian Financial Crisis
Present Covid-19
2014 Ebola Outbreak
2008 Financial Crisis
2012 MERS Outbreak

Source: *Author's Graphic*

i.e. the existing tensions and the competitions among regional and major powers, especially the US-China rivalry, may get more complex in the aftermath of the pandemic. Overall, I believe multilateral cooperation is imperative for all nations to contain the pandemic and to mitigate its health, social, economic and environmental consequences.

Concerning the international relations of Cambodia in the COVID-19 context, it should be noted that Cambodia is adhering to the multilateral approach of international cooperation. That is, the Cambodian Government has worked closely with the ASEAN fellow members to pursue discussion on the issues of common interest and concerns at different levels. Moreover, the Kingdom has seamlessly cooperated with all UN related agencies as well as many other important countries and partners – such as the WHO office, the US Centre for Disease Control and Prevention and the Pasteur Institute in Cambodia – to address the pandemic through joint management of the COVID-19 outbreak in the country. Likewise, Cambodia has received much support through cooperation with many other partners as well. Besides these, the country also took decisions on humanitarian

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1. At this stage, given the situation is uncertain, Analyst from OECD predicted that there are two scenarios which are probable: either a second outbreak is avoided, with global GDP almost regaining its pre-crisis level by end 2021, or a second COVID-19 outbreak occurs in most economies before the end of the year with global GDP almost regaining its pre-crisis level by end 2021, or a second COVID-19 outbreak occurs in most economies before the end of the year 2020.

ground to allow the MS Westerdam ship to dock at its sea port, rescued people from the shipboard and ensure their safe return to their home countries.

Besides the economic and political implications of COVID-19, the world has seen the dynamics in which countries extensively utilize technology to ensure the continuity and normality in governing their domestic and external affairs. While this is the trend, what do you regard as the opportunity for Cambodia to strengthen her digital capacity in order to embrace a digital ASEAN?

To my observation, the RGC has recognized the importance of the digital economy as a key driver of growth which contributes to job creations and business innovations. With this, Cambodia set out a plan that aims toward a digital economic transformation by 2023, and the Kingdom is striving to develop its ICT development agenda which is mainly embodied in the Rectangular Strategy Phase IV and the past National Strategic Development Plan 2014–2018 (NSDP).

Despite a lot of progress, analysts believe that Cambodia needs to further address some shortcomings – such as technological infrastructure, digital ecosystem, human capital, and regulatory framework[2] – in order for the country to reap full benefits from digitalization that gets in line with ASEAN's digital integration agenda objective.

In light of the impact of the COVID-19 pandemic at this stage, the digital transformation policy shall be further prioritized through an accelerated implementation of the government's policy reform. And these efforts will thus be a positive response to the regional trend for the fulfillment of ASEAN's digital integration agenda toward common goals of the Community building process.

It is fair to say that COVID-19 fires the first shot of digital diplomacy. That is, the state-to-state relations and communications have been extensively conducted through digital means (e.g. ASEAN Virtual Summit, among others). Can you share with us your view on how technology contributes to sustaining diplomatic relations among states in both the contemporary and post-COVID-19 settings?

Modern diplomacy is indeed currently undergoing fundamental changes at an unprecedented

rate, through the use of technology as means to communicate for the sake of sustaining and promoting cooperation and partnership at different levels and forums. It is done so without losing its very character of diplomacy; and this is mainly attributed to the process of the Fourth Industrial Revolution (4IR).

To elaborate, we note that all leaders of ASEAN and their relevant ministers including the senior officials (together <u>with</u> relevant think tanks and other institutions) -- continue to sustain their work through connection with their counterparts via convening virtual meetings/conferences or through webinars, as a usual online mode of interaction. And we can see the virtual mode of international conferences being adapted regularly in many parts of the world, including at the United Nations forums. It is fair to say that the new digital society has already come to life during the COVID-19 crisis; thereby making universal digital access and cooperation essential toward the achievement of many global programs. For example, digital technology plays a critical role for the United Nations in achieving the Sustainable Development Goals (especially Goal 9 on Industry, Innovation, and Infrastructure; Goal 11 on Sustainable Cities and Communities; and Goal 12 on Responsible Consumption and Production) which directly relate to the specific issues we are now discussing.

Given the importance of digitalization, ASEAN has embarked on its digital transformation in the pursuit of its digital future. From your observation, what is the status and do you regard COVID-19 as the catalyst or hurdle to the progress?

Obviously, the health crisis of COVID-19 hampered the process of digital transformation in ASEAN. And since then (2020) – as like the rest of the world, – ASEAN is now facing the challenges associated with economic recession. For ASEAN, this would derail the implementation of its development and economic agenda, especially, with regard to the outcome status of relevant ASEAN blueprints including, the ASEAN Agenda on Connectivity and other related regional digital work plans.

However, the region should regard this impediment as an opportunity for member states to further reinvigorate their joint engagement to accelerate the digital transformation programs both at regional and

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2. According to the 2018 Global Competitiveness Report, the country is ranked as one of the least competitive countries in ASEAN.

national levels. Given the fact that ASEAN members have different levels of digital policy and potentials, among others, – this situation should be seen as a crucial point for member states to make greater efforts in bridging the gap in the area of digital technology. In this sense, I would stress that ASEAN's digitalization policy is now more important than ever for its prioritization.

What are the challenges that hinder the quest for digital ASEAN? What are the key suggestions for the association to jointly overcome such challenges and brace for a vibrant digital future of ASEAN?

ASEAN is known as one of the key global economies but its digital integration is still critical for the region to compete with other major economies. The region faces a number of constraints that need to be overcome in order to fully benefit from the digital transformation, particularly with regard to the integration of SMEs in the digital economy. On the supply side, for example, the main challenge concerns connectivity. So far, it was reported that broadband deployment has not been a priority in most countries of Southeast Asia. To maximize the benefits of the digital transformation, it is crucial to equally promote the use of digital services and tools through an inclusive digital transformation which is imperative for the region. And this is one of the remaining challenges the region is facing at present __ namely over the digital gap between urban and rural areas in each country as well as between its members __ between the more developed and the less developed ASEAN countries.

It is fair to say that ASEAN has already laid out important policy measures and frameworks, including the AEC Blueprint 2025, Master Plan on ASEAN Connectivity (MPAC-2025), and the e-ASEAN Framework Agreement, to address these roadblocks. However, these ambitious goals will demand detailed research, visionary policy-making, and substantial buy-in from regional stakeholders.

May I conclude by saying that humankind has learned throughout its history that all crises have been essential in helping people to experience endurance and adaptation to all painful situations; and despite all those challenges humanity has overcome and made progress. For example, past experiences indicated that pandemics have helped advance health-care

systems through innovation and research findings of new treatments or other solutions. We hope that the current novel coronavirus pandemic will not be an exception. For ASEAN, the pandemic should be regarded as an opportune time for its member countries to galvanize efforts and strength for the sake of unity so that to accelerate the process of integration that could contribute significantly to the realization of their common aspirations.

On ASEAN Digital process: It is high time for ASEAN countries to cooperatively address the digital gap within people within the countries and between member states, in order to ensure an inclusive Digital ASEAN by 2040 toward its common objective of building an ASEAN Economic Community. As the UN Secretary-General, Antonio Guterres, took note of its reservation at the closing of the 2018 High-level Political Forum on Sustainable Development saying that "we need to harness the benefits of advanced technologies for all".

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ASEAN SMART CITIES NETWORK: OPPORTUNITIES AND CHALLENGES

Lim Menghour

Reading Time: 3 Minutes

Lim Menghour is the Deputy Director of Asian Vision Institute, an independent think tank based in Phnom Penh. The think tank aims at promoting sustainable and innovative development in Asia.

Over the past decades, cities have become an essential element in the national administration system, shaping the future appearance of the world. In 2020, almost 50 percent of Southeast Asia's total population is living in cities.[1] Most of ASEAN's growth has been, and will continue to be, driven by urban centres, with 90 million more people expected to urbanise by 2030 and 'middleweight' cities of between 200,000 and 2 million residents estimated to drive 40% of regional growth.[2]

This rapid urbanisation, however, has inevitably provided negative implications on several challenging issues such as city congestion, resource consumption, water/air quality, environment, poverty, rising inequalities, urban-rural divide, citizen security and safety, among others. Upon this development, smart cities are one approach to address the above-mentioned problems in order to foster sustainable urban development.

By definition, a smart city is a sustainable urban development that uses technology and social engineering to address problems arising from rapid urbanisation, such as traffic congestion, pollution, housing shortage and even income disparity. It is considered as an approach for cities to increase efficiencies and improve the quality of services and life for their inhabitants and businesses. Simply put, the idea is to use data and technology to make everyday life easier and better for the people who live and work in the city, while efficiently maximizing the use of resources and minimizing environmental degradation. For example, smart cities can use sensors to collect information on traffic and available parking spaces. This data is made available on public websites and apps that show traffic jams and free parking spaces. In this case, specific recommended traffic routes will be predicted while people could make a prompt decision on their parking spaces.

Smart Cities and ASEAN

Recognising this trend, ASEAN member states have already designated certain areas as smart cities or launched smart city development projects. In this context, Singapore proposed to establish an ASEAN Smart Cities Network (ASCN) in order to synergise collective efforts and bring the smart cities in ASEAN countries together, thereby contributing to ASEAN Community-building.

According to a concept note released by ASEAN leaders at the 32nd ASEAN Summit on 28 April 2018, ASCN is envisioned as a collaborative platform where up to three cities per ASEAN country work towards a common goal of smart and sustainable urban development. An ASEAN Smart Cities Framework will be jointly crafted by member cities articulating the regional definition of a smart city, outlining key principles and identifying core outcomes. As part of the framework, member cities can each pair up with one of ASEAN's external partners to cooperate on smart city development.

The note further mentioned that ASCN's primary goal will be to improve the lives of ASEAN citizens, using technology as an enabler. By focusing on people, it will adopt an inclusive approach to smart city development that is respectful of human rights and fundamental freedoms, as inscribed in the ASEAN Charter, by increasing transparency and enhancing government performance. The networking of Smart Cities across ASEAN would also contribute to facilitating better mutual understanding across cultures.

Graphic 1: Pilot Project Participant Cities

Source: ASEAN, Concept Note of the ASEAN Smart Cities Network (2018), https://asean.org/concept-note-of-the-asean-smart-cities-network/

1. Yap Kioe Sheng 'Urbanisation Wave and ASEAN Regional Agenda' in Global Megatrends: Implications for the ASEAN Economic Community, ed. Simon S. C. Tay & Julia Puspadewi Tijaja(ASEAN: Singapore Institute of International Affairs, 2017), 123, https://asean.org/storage/2017/09/Ch.5_Urbanisation-Wave-and-ASEAN-Regional-Agenda.pdf

2. ASEAN, "ASEAN Smart Cities Framework," accessed July 17, 2020, https://asean.org/asean-smart-cities-framework/

Currently, 26 cities from the 10 ASEAN countries have been named pilot cities for ASCN. The member cities will develop action plans containing specific projects and actions that they will undertake from 2018 to 2025 in bid to cooperate and share best practices on smart city development. The main focus will be on six developmental areas, including civic and social, health and well-being, safety and security, quality environment, infrastructure, as well as industry and innovation. These developmental focuses are designed to align with the Master Plan on ASEAN Connectivity (MPAC) 2025, promoting sustainable urbanisation within the ASEAN region.

ASCN - Opportunities

The ASEAN Smart Cities Network will give benefits to ASEAN cities in various ways. First and foremost, the creation of smart cities is a strategy to alleviate the problems caused by the growth of urban population and accelerated urbanisation. With smart cities, ASEAN member countries will be able to manage the growing environmental, societal and economic challenges in the region. A report suggests that smart city technology can improve key quality of life indicators, such as the daily commute, health issues or crime rates by 10 to 30 percent.[3] By making cities smarter, we can make ASEAN cities better places to live.

Next, traffic flow will be improved and traffic jams will be reduced. For instance, public transportation routes can be adjusted in real-time when facing constraints, and intelligent traffic light systems can be used to avoid congestion. From a practical experience, an AI-based smart city has helped the Chinese city of Hangzhou to reduce its traffic jams by 15 percent.[4]

Moreover, city resources and energy will be used more efficiently. Smart cities will use technology to help monitor and manage real-time energy and resource usage. Homes could be equipped with smart energy meters or sensory technology designed to manage the energy usage and reduce unnecessary energy

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consumption. In another case, the street lights in the cities could be upgraded to LED and smart technology which allow the lights to be adjusted or dimmed based on real-time data. With sensory technology, electronic devices and the street lights will automatically turn themselves off when there are no people around or no longer in use. In this case, it will help minimize the resource usage, reduce consumption and save costs, while the government could distribute and keep track of the energy and resources efficiently. In this connection, smart cities enable smarter decision making for people as well as the government. For instance, the sensor technology that is installed into the

3. Jonathan Woetzel, Jaana Remes, Brodie Boland, Katrina Lv, Suveer Sinha, Gernot Strube, John Means, Joanathan Law, Andres Cadena, and Valerie von der Tann, "Smart Cities: Digital Solutions for A More Livable Future", McKinsey Global Institute, June 5, 2018, https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/smart-cities-digital-solutions-for-a-more-livable-future

4. Bernard Marr, "The Smart Cities of the Future: 5 Ways Technology is Transforming our Cities", Forbes,July 2, 2020, 12:27am EDT, https://www.forbes.com/sites/bernardmarr/2020/07/02/the-smart-cities-of-the-future-5-ways-technology-is-transforming-our-cities/#71a96fc273f8

This Graphic shows the Elements networked in a Smart City.

parking lot can monitor and send real-time updates to the users about whether there is an available parking space for their selected area. Thus, drivers can make better and more prompt decisions. The government, at the same time, can collect data on the street from the smart cameras to facilitate the parking lots.

Also, a smart city is committed to monitoring and protecting the environment. With sensor technology, ASEAN cities could measure air quality, ozone and noise levels. By collecting these environmental data, early warning can be given on pollution and other environmental problems. With a smart sensor

network, companies can provide more insight into their emissions, monitor the effect of changes, optimize business processes and minimise the risk of disasters. In this case, the general well-being of the citizens will be highly upgraded to enjoy a more environmentally friendly living standard in the cities.

In addition, smart cities will make ASEAN cities safer. Cities are able to harness technology to improve resident safety and boost incident response times. For example, real-time video data from CCTV cameras connected with Wi-Fi and IoT (Internet of Things)

Graphic 3: *The objectives and benefits that Smart Cities have on the ASEAN level.*

01 Alleviating the problems caused by the growth of urban populations and accelerated urbanization

02 Improving the traffic flow reducing the traffic jams

03 Using city resources and energy more efficiently

04 Monitoring and protecting environment

05 Improving the public safety in ASEAN cities

06 Strengthening greater collaboration among ASEAN citizens
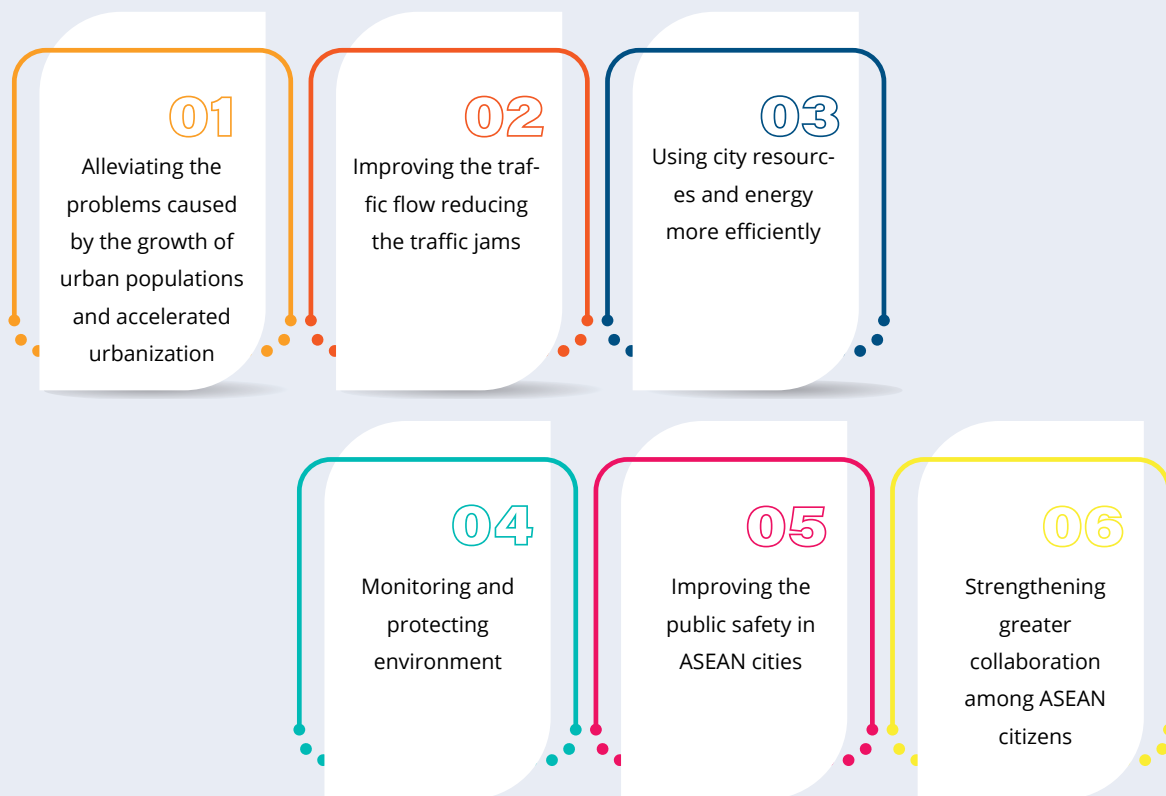
Source: Author's Graphic

technologies, could be used to analyse, track, allocate resources on the ground, and improve public safety.

Finally, ASEAN smart cities will encourage greater collaboration with their citizens. Smart city technology will encourage residents to get more involved in connecting and sharing resources, while it also allows them to report any local issue more easily. Indeed, there are certain services that citizens can access online, such as filing and resolving complaints, which are much easier, faster and cheaper compared with the offline methods. This is what people usually refer to as 'e-governance'. In this spirit, the government can seize this opportunity to better monitor the system within, and deliver the services to citizens, resulting in increased transparency and better performance. That is to say, smart cities will contribute to the reduction of red tape and other administrative efforts for citizens. For example, smart traffic cameras will send tickets directly to the smartphone of the driver, who could pay their tickets via online platforms. This will help reduce any unnecessary administrative process for the citizens.

Smart cities will entail positive social changes for ASEAN cities to further develop their infrastructure, expand the widespread use of ICT, as well as promote the involvement of citizens in the development of the city. Aiming at ensuring a higher quality of life, competitive economy and sustainable development, ASCN could eventually transform ASEAN cities into the richest cities as well as into financial and commercial centres in the region.

ASCN - Challenges

ASEAN cities will also face challenges in achieving their desired goals for ASCN. First of all, they need to take into consideration numerous operations and regulations in order to define where to start and which action needs to be done first. The process also involves various parties, including governments, the private sector and the public. Hence, a rigorous action plan needs to be established with a clear vision that could convince relevant policy makers and other stakeholders in realising a true smart city. In connection to this, the creation of smart cities requires ASEAN cities to

invest huge resources, technically and financially, into building them. While a big amount of money is allocated to the building of a smart city, other areas desperate for funding to promote development will have to wait. This could generate uneven development in the cities when compared to the countryside.

Secondly, the creation of smart cities is related to the attitudes and willingness for ASEAN citizens to change things for the better. For some developing countries in the region, the main challenge to smart cities is how to help their people understand their place in the city and how they can be a part of its development. In this sense, ASEAN governments have a vital role to play in formulating initiatives from local, national to regional level in order to foster involvement from their citizens.

Finally, technology no doubt can improve the quality of life for people, but it could also generate cyber security risks to ASEAN member states. One of the challenging issues is security and privacy protection. Because smart cities require open and transparent data, protecting such immense and complex data from attacks or malicious activities is an inevitable challenge. Smart technology does not only store the users' data but also other sensitive government data. If the attackers obtain the information and use them in an offensive way, it would lead to an unimaginable catastrophe. Another challenge is the breach of users' privacy. Users may no longer feel secure because their every action could be monitored, including where they are, what they eat or buy and even what they text others. The concern is that the information gathered for improving the quality of municipal services could be made public or used for unrelated, unregulated purposes.

Conclusion

With fast-growing populations and rapid urbanisation, ASEAN cities need to initiate a new approach to deliver a better quality of life for the population, promote economic prosperity and foster sustainable development in the region. The idea of creating the ASEAN Smart Cities Network could be a practical framework to achieve the above-mentioned strategic vision for ASEAN member states. The deployment of data and technology could bring huge benefits to ASEAN cities by solving problems arising from rapid urbanisation and entailing positive social changes to

ASEAN populations in various ways. However, ASEAN member states need to come up with a concrete action plan in order to tackle the challenges arising from ASCN.

Against all odds, there has been increased interest in and proliferation of the implementation of smart city programs in ASEAN to ensure future sustainability and efficiency of cities. The construction for smart cities in ASEAN requires joint effort from all relevant stakeholders, including not only the government but also private enterprises, scientists and the public. As the government develops policies focusing on the smart city programs and pours resources into policy implementation, enterprises and scientists must build up their efforts to invent and update technologies to match up with government efforts. The public need to play a vital role in participating in the governance and management of smart cities.

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RIVER VS DEVELOPMENT? WAYS TOWARDS A "SUSTAINABLE" FUTURE OF THE MEKONG

Chhay Sochea

Reading Time: 5 Minutes

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Introduction

The Mekong River (or in China known as the Lancang River) is an essential river in Southeast Asia as it is the main source of water, food and economic opportunity, sustaining more than 60 million people living on its shores. It is also a geo-strategic hotspot, featuring conflicting interests among the six regional riparian states, including China, Vietnam, Thailand, Myanmar, Laos and Cambodia.[1] Concerns have cranked up regarding China and Laos use of the river for damming and other diversion projects in the Mekong river, resulting in negative impact on most of downstream countries.[2]

In recent years, water insecurity has exacerbated along the lower Mekong River as upper dams disrupt and limit the water flow, leading to downstream devastating droughts and irreversible depletion of food security throughout 2019. Notwithstanding the impacts, Laos continues to carry on the path to become "the battery of Southeast Asia" which provokes concerns and tensions from neighboring countries. In fact, earlier this year, Vietnam declared a state of emergency in five different provinces in the Southern Mekong Delta due to prolonged drought and extensive accumulation of salinity. It produced half of the country's rice production on just 12% of the land field,[3] as 33,000 hectares of rice fields were damaged and approximately 70,000 households suffered from water scarcity.[4]

As water insecurity heightens in most of the Lower Mekong Region, improving drought management capacity, seeking renewable energy solutions and strengthening sub-regional cooperation are crucial strategies to cope with undoing the Mekong's ecology. This short research paper aims to i) examine how dam construction imperils the Mekong River, ii) discuss potential concerns on Mekong sustainability from Lower Mekong Countries, and iii) suggest alternative solutions for a sustainable development of the Mekong region.

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1. Nadia Dhia Shkara, "Water conflict on the Mekong River", International Journal of Contemporary Research and Review: Volume 9, Issue 6, June 2018

2. Huileng Tan, "China could have choked off the Mekong and aggravated a drought, threatening the lifeline of millions in Asia", CNBC News, April 27, 2020

3. Elliot Waldman, "Choked by dams and climate change, the Mekong River is on 'life support' ", The New York Times, March 27, 2020.

4. Mai Ngoc Chau, "Vietnam's Mekong Delta Declares Emergency on Devastating Drought", Bloomberg Green, March 6, 2020.

Graphic 1: Mainstream Mekong Dams

Source: Stimson, Mekong Mainstream Dams (2020), https://www.stimson.org/2020/mekong-mainstream-dams/

Controversies of Negative Impacts of Dams Construction on the LMB

The disruptive changes along the Mekong River have become even more evident as the natural ebb and flow cycle is increasingly obstructed by the effect of hydropower dams and climate change. The inland fishery has gradually diminished and the livelihood of the local communities has been harshly impacted

by the developments. As reported by the Stockholm Environment Institute 2018, 96% percent of the nutrient-rich sediment of the Mekong will never reach the delta if all dams mapped out for the Lower Mekong are built.[5]

The impact of the current drought has been adversely severe for the Lower Mekong Countries. With numerous dams being constructed on the upper and lower Mekong, the vital ecosystem, abundant resources and riparian communities suffer from perpetual catastrophe. American biologist Peter Moyle explains how dams on the upper Mekong are wrecking the entire ecology, as dams collect sediment, block fish migrations, and create reservoirs that support a small fragment of the fisheries that the equivalent reach of flowing water would support.[6] Given the propensity for the risk of water scarcity, It was believed that China itself is trying to impound much more water in their dam reservoirs which causes rampant change and uncertainty in the downstream regions. A study by Eyes on Earth revealed that, chinese dams held back large amounts of water on the upstream Mekong, which aggravated a severe drought in the downstream Mekong in 2019.[7]

This pace of dam development, which has no sign of slowdown, puts not only a greater strain on the riverine ecosystem, but it also intensifies negative economic consequences. A study on the impacts of hydropower dams on fishery and agriculture in the LMB by Yuichiro et. al (2020) claims that the hydropower development in the Lower Mekong Basin could lead to a decrease of 2.3% in rice production in Vietnam and 3.7% in Cambodia. The decrease in production in both countries was mainly due to the changes in sediment loading.[8] The reduction has proven to have greater impacts on socio-economic conditions on the downstream floodplains of Cambodia and Vietnam, as agriculture is a large source of livelihood and employment for both countries. Agriculture contributes to 25% to the GDP in Cambodia and 15% in Vietnam respectively,

and it employed more than 40% of the workforce in Cambodia.[9]

In addition to rice production, aquaculture and fisheries will also dramatically decline, as upstream dams block fish's migration routes and decrease freshwater flow due to saline intrusion during the dry season impacting the yield of aquaculture production. It was calculated that if all 11 mainstream dams in Laos and Cambodia are finally built, the total loss in fish resources might be as high as 88,000t, and the fish catch will be reduced from 2.1million t to 580,000t. The losses in the fishery sector alone amounts to between 6%-9% in Vietnam, whereas in Cambodia, it resulted in a 30% loss or >3% GDP of the country. Even though the losses in Cambodia are much smaller than in Vietnam; however, the vulnerable volume of fish species in Cambodia is higher than in Vietnam.[10] The gradual degradation in the Mekong river has made Mekong observers assume that, "If China's 11 dams were not there, much more water would have been available along the Mekong mainstream and in the areas that take water from the mainstream."[11]

Critical Concern from LMB on China and Laos' Dam Ambitions

China plays an essential role of an unrivalled "transboundary water provider" around its entire periphery. Since 1986, China has launched at least 86,000 dam construction on the middle reach of the Lancang.[12] Moreover, China had already built 10 dams on the Mekong river and planned to complete another nine more dams by 2030.[13] However, China's hydropolitical interest remains highly ambivalent and contentious. It has withheld to partake in various international water sharing treaties, leaving downstream countries no other alternatives but just relying on China's "good will" for the flow of water.[14] The unilateral dam construction of China has sparked

5. Tom Fawthop, "Something is very wrong with the Mekong River", The Diplomat, August 26, 2019.

6. Stefan Lovgren, "Mekong River at its lowest 100 years, threatening food supply", National Geographic, July 31, 2019.

7. Brian Eyler, "How China turned off the tap on the Mekong River", Southeast Asia: Stimson Center, April 13, 2020

8. Yuichiro Yoshida., et.al, "Impacts of mainstream hydropower dams on fisheries and agriculture in Lower Mekong Basin",, Science Direct, 19 March 2020.

9. Ibid.

10. Yuichiro Yoshida., et.al, "Impacts of mainstream hydropower dams on fisheries and agriculture in Lower Mekong Basin",, Science Direct, 19 March 2020.

11. Brain Eyle, "Science shows Chinese dams are devastating the Mekong", The Foreign Policy, April 22,2020.

12. Sebastian Biba, "China's Continuous Dam-building on the Mekong River," Journal of Contemporary Asia, 42:4, 603-628, 2012.

13. Benjamin Zawacki, "Are we seeing the Mekong river's 'last day'?", The Diplomat, March 06, 2019.

14. Andrew Haffner, "'Us' vs 'them': The politics dictating the rise and fall of the Mekong", Southeast Asia Globe, April 23, 2020

major backlashes from the Mekong neighbor states. It revolved around their massive diversion projects construction without engaging in constructive dialogue and transparent data sharing, which unpredictably impacted the downstream populations.

Likewise, the landlocked Laos has sought to become the "Battery of Asia" with the assistance from China, Thailand and Vietnam constructing hundreds of new hydropower.[15] Laos has already built 60 dams on the Mekong tributaries, and further dams are under construction.[16] Laos has reaped substantial earnings from hydropower, and it sought to expand electricity exported to the neighboring countries. For instance, Laos currently supplies over 5,620 MW of electricity to Thailand, over 570MW to Vietnam, 100MW to Malaysia, and 10MW to Myanmar.[17] Laos intended to scale electricity capacity up to 6457MW for the export market, which represents an increase of 145 percent over the past five years.[18] However, each of these dams constructed is believed to have incremental effects on the subversion of the Mekong's ecology and imperil the food security of Lower Mekong populations.[19]

This development increasingly triggers concern from Vietnam, with its delta being highly vulnerable to dam construction policies. Vietnam already urged Laos to reconsider its plans for more dams.[20] Tran Hong Da, Minister of Natural Resources and Environment and the Chairman of the Vietnam Mekong River Commission, stated that Vietnam is seriously worried about the escalating exploitation of hydropower in the Mekong river by upper nations which made Vietnam suffer from serious drought, saline intrusion and land sinking.[21] Last year, the government passed resolution 120 to heighten Hanio's sustainable development plan for the delta. This resolution particularly targets overcoming the threats of upstream hydropower and climate change.[22]

15. Hannah Beech, "Our river was like a God: How dams and China's might imperil the Mekong", The New York Times, October 12, 2019

16. Ibid

17. Huaxia, "Lao electricity exports increase 145 percent in 2016-2020 period", Xinhua Net, February 05, 2020

18. Ibid

19. Elliot Waldman, "Choked by Dams and Climate Change, the Mekong River Is on 'Life Support'", World Politics Review, , March 27, 2020.

20. Jorge Soutullo, "The Mekong River: Geopolitics over the development, hydropower and the environment", European Parliament, November, 2019

21. The Nation Thailand, "Vietnam urges Laos to rethink Mekong river dams", May 16, 2017

22. Tom Fawthrop, "Did Vietnam just doom the Mekong?", The Diplomat, November 26, 2019.

As the overwhelming effect of dam construction increasingly threatened the Mekong population, Cambodia decided to halt the dam plans for the next decades, allaying fears for fragile biodiversity and communities that could be ravaged by the development projects. This plan has been seen by many experts as a potential prospect for a sustainable Mekong river. Marc Goicht, a World Wide Fund for Nature's work on freshwater in the Asia Pacific region, stated the approach is the possible way for the sustainable future of the tens of millions of people living alongside it and for the biodiversity that rely on it, particularly Irrawaddy river dolphins.[23]

This move of Cambodia is seen as a focal point for reducing the devastation of the Mekong river; however, it cannot be an anticipation that the future Mekong will be "sustainable". As China and Laos are pushing for hydropower development, they are threatening the water security and livelihood of people along the banks. Despite the crisis mounting, the Lower Mekong governments have not yet taken any effective actions to mitigate the risks and safeguard the Mekong under siege.[24] Thus, the relentless development along the Mekong River may very well result in long-term decay and destory ecological viability.

Ways Towards Sustainable Future of the Mekong

The unprecedented yet irreversible changes of the Mekong river make it become socially and ecologically vulnerable. Transnational tensions between riparian states also popped up as Chinese dams held back large amounts of water upstream which aggravated a severe drought in most downstream countries. Lower Mekong Countries such as Vietnam, Thailand and Cambodia will need to brace for a dreadful water shortage in the future. Facing water scarcity in the Lower Mekong region, proactive and concrete mechanisms are feasible to strengthen environmental management and improve Mekong resilience to dam constructions.

Increasing capacity of drought management to secure crop yield and loss of fish catches: Countries in the Lower

23. Prak Chan Tul, "Cambodia halts Mekong River plans 'for 10 years'", The Bangkok Post, 18 March 2020

24. Stefan Lovgren, "Southeast Asia's most critical river is entering uncharted waters", National Geography, January 31, 2020.

Mekong regions have experienced the worst drought which took a heavy toll on agricultural production and fish resources. The severe drought in the Lower Mekong is indeed requiring each riparian state to improve its capacity for immediate and long-term drought management. Firstly, effective drought management systems to monitor and anticipate the possibility of drought in the Mekong region need to be implemented. As a fact, the government of Vietnam uses Regional Drought and Crop Yield Information System (RDCYIS), which provides support to local governments on seasonal drought monitoring and in implementing long- and short-term mitigation measures.[25] Secondly, the situation requires improving the efficiency of water governance and carrying out irrigation operations such as dredging irrigation intake, canal systems and installing more mobile pumping stations to respond to immediate drought. Thirdly, the long-term forecast of drought management is underlying to support the agriculture production planning, including proactive crop restructuring, rescheduling the cropping season, adjusting water supply and storage planning. To improve the drought forecast and warning system in the Mekong region, the quality of meteorological and hydrological forecasts needs to be improved in the future.

Enhancing energy diversification and expanding the use of renewable sources and green technology: Reducing the dependence on large-scale hydropower generation and shifting toward renewable sources are salient to cope with the surging demand for energy in the Mekong Region. Demand for energy in the Lower Mekong countries will rapidly increase from 157.8 Mtoe (million tons of oil equivalent) to 319.6 Mtoe between 2010 and 2035, particularly in Vietnam and Thailand.[26] (See Figure 1)

In recent decades, Lower Mekong governments are making their huge progress toward developing inexhaustible energy practices and now clean energy cost competitive. As can be seen in the figure 2 below, renewable energy such as wind, solar, water and biomass power generation have grown expeditiously in the Mekong region since 2010, and are estimated to reach approximately 1.2 million GWh in 2050.[27]

The government of Vietnam plans to accelerate renewable energy sources up to 30% by 2030.[28] Vietnam and Thailand recently launched a joint venture, the V1-2 wind power plant which consists of 12

Figure 1: *Energy Demand Forecast Southeast Asia*
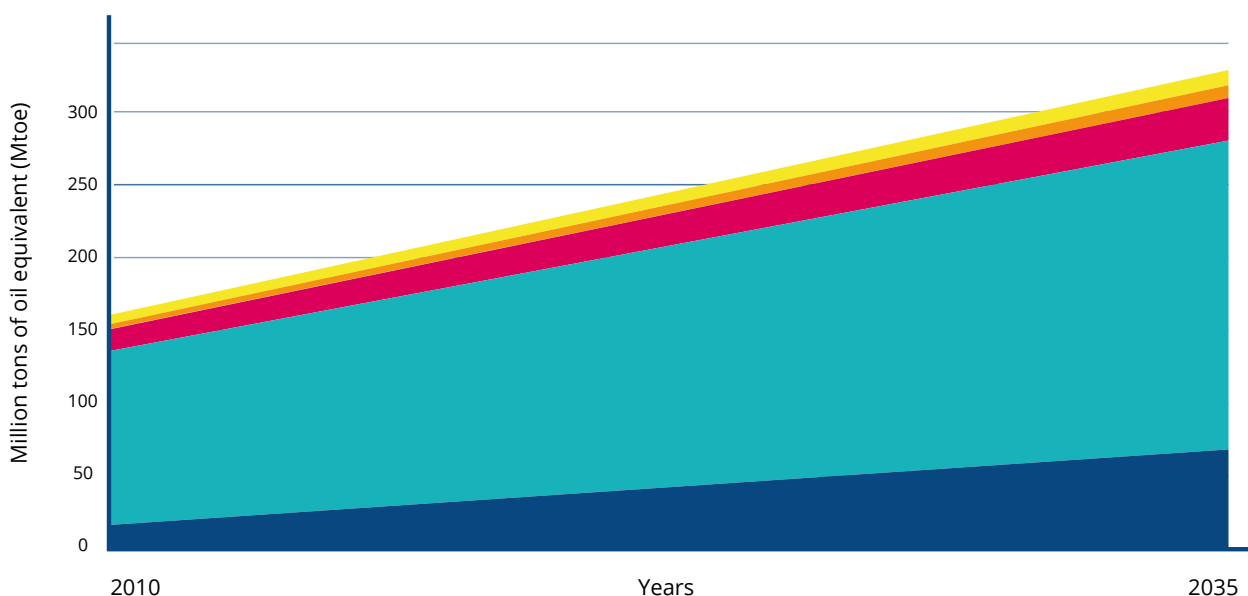
Source: ADB (2013)

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25. Dr. Farrukh Chishtie, "Using Geospatial Technology and Earth Observations to Monitor and Forecast Drought in Vietnam and Address Agricultural Productivity Impacts", Climatelink, June 24, 2019.

26. Asian Development Bank. 2013. Energy Outlook for Asia and the Pacific. Manila, Philippines: ADB. Accessed 10 June 2015.

27. World Wildlife Fund, "Power Sector 2050: Toward 100% Renewable Energy by 2050", Greater Mekong Panda, May 2016

28. Vietnam Business Forum, "Made in Vietnam Energy Plan 2.0", Asia Foundation, December 1, 2019.

Figure 2: *Electricity Generation Mix Forecast Greater Mekong Region*
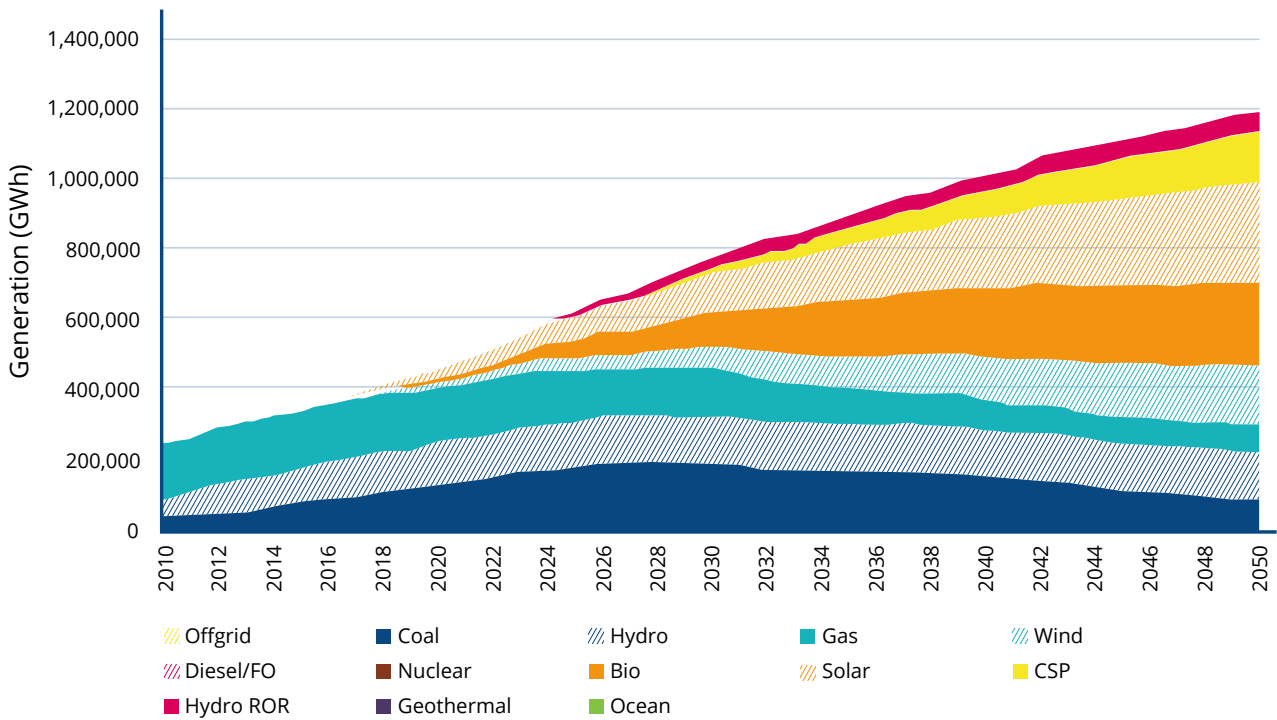
Source: WWF (2016)

wind turbines to be established on 1,220 hectares in Duyen Hai town, and is expected to generate approximately 163 million KWh of energy each year.[29] Likewise, Laos also constructs the world's largest floating solar project at Nam Ngum 1 dam reservoir, which has an installed capacity of 1,200 MW covering an area of over 1,500 hectare.[30] In addition, renewable energy sources in Cambodia are estimated to represent approximately 15% of total power consumption since 2018. Cambodia has constructed solar farms across five provinces to boost the nation's power supply to a total of 160 megawatts a year. According to the Ministry of Mines and Energy, "in 2021, Cambodia will launch another 60 mW in Kampong Chhnang and 60 mW solar farm in Pursat provinces, generating 120 mW when combined.[31] Therefore, expanding the uses of sustainable energy resources at all sectors; increasing private sector investment in renewable resources and green projects; and promoting better regional collaboration and information sharing of the best practices are fundamental to achieve a sustainable and resilient development of the Mekong in the future.

Strengthening sub-regional cooperation: Building stronger collaboration among Mekong countries is important to develop responsive mechanisms to address the irrevocable crises arising from large-scale dam construction. Each riparian state should focus on balancing between dam construction and conservation of the rivers rather than short-term economic benefit in an effort to bring about more sustained growth and better management of the river in the long run. Firstly, transparent data and information should be shared publicly and widely among member states particularly China as these data and information could enable them to forecast the impacts and take immediate actions to reduce negative consequences. MRC's CEO, Dr An Pich Hatda concludes, "To achieve this, cooperation from all the riparian countries and their timely and transparent sharing of data and information on water use and infrastructure is pivotal."[32] Secondly, All states should evaluate and analyse thoroughly the cost and benefit of dam activities and should open transparent discussions with all relevant states

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29. Greater Mekong Subregion, "Construction of Vietnam-Thailand WInd Power Plant Begins", 2 September 2020.

30. Jasmina Yap, "Laos to Build World's Largest Floating Solar Power Project at Nam Ngum 1", The Laotian TImes, February 20, 2020.

31. Chhut Bunthoeun, "Five new solar farms to be connected to the national grid", Khmertime, February 18, 2020.

32. Pech Sotheary, "Data sharing, cooperation for Mekong River management", Cambodianness Tmey Tmey, April 22, 2020.

and stakeholders to ensure that construction would impose negative externalities onto people and the environment. They should also boost synergies and a robust solid framework of cooperation when dealing with Mekong issues.

Conclusion

In conclusion, the development of large dam activities along the Mekong river has long been contentious and worrying from downstream countries, as it radically depletes the ecosystem and affects millions of people who depend on it. Witnessing the dreadful drought and food insecurity in the LMB, effective mechanisms are needed to develop to deal with the crisis. First, improving effectiveness of regional water governance, particularly drought management systems, is underlying to respond to immediate and long-term drought in LMB. Third, more renewable resources and green technologies shall be expanding widely for energy consumption in both the public and private sector. Reducing the dependence on hydropower generation is an affirmative step toward a sustainable development of the Mekong. Third, enhancing transnational cooperation among Mekong governments to ensure that all members are being informed and able to take actions to mitigate the negative impacts. Just like Brain Eyler said, by working together we can revitalize the Mekong spirit and conserve the ecological integrity.

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CAMBODIA'S 5G NETWORK EMBRACE: ECONOMIC AFFORDABILITY AND SECURITY CONSIDERATIONS

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Reading Time: 4 Minutes

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Introduction

The Kingdom of Cambodia is one of the first Southeast Asian states to grasp the fifth-generation wireless internet network better known as "5G". Thanks to its close relationship with Beijing, Phnom Penh is getting a helping hand from Huawei, the Chinese telecom giant. During his visit to Beijing in late April 2019, Cambodian Prime Minister Hun Sen sat side-by-side with Huawei Vice President Li Jinge to preside over an MoU signing ceremony between Huawei and Telecom Cambodia, a state-owned enterprise under the Cambodian Ministry of Post and Telecommunication, in order to provide assistance and cooperation on the development of 5G infrastructure in the Kingdom.[1]

This year, 5G technology has been tested, deployed and developed worldwide, marking a revolutionary period of both internet history and digitalization. With speeds 100x faster than the fourth-generation wireless internet network (4G), 5G is expected to enable a new wave of digitalizing Industry 4.0, including an expansion of artificial intelligence (AI), the Internet of Things (IOT), augmented reality (AR), financial technologies (FinTech), blockchain technology and cloud computing, among others.

In a 2019 study, the London-based market intelligence firm IHS Markit estimated the 5G network would generate as much as $13.2 trillion in new economic output by 2035 and support up to 22.3 million jobs all around the globe.[2] This is not to mention the potential technological leapfrogging to develop and transform smart cities that can deliver better efficiency to systems of healthcare and education while revolutionizing farming and agriculture. China's handset vendors such as Huawei and Zhongxing Telecommunication Equipment firm (ZTE) are now playing a key role to underpin 5G infrastructure around the world.

On the one hand, the Cambodian government has said the adoption of 5G could help to realize various development goals through the digitalization of the national economy.

But on the other hand, the Sino-Cambodian telecom rapprochement has taken place amid heightened friction between the U.S. and China perceived by many as a "New Cold War". Tech has featured heavily in this simmering dispute, and Washington and its allies have either expressed doubts or made direct accusations that leaving 5G development to Huawei could potentially give Beijing an intelligence inroad to recipient countries' telecommunication infrastructures.

Thus, it is timely to discuss the balancing of strategic options to ensure Cambodia may reap the economic advantages of 5G network development while avoiding the costs of virtual sovereignty and damaging long-term national security interests – all while considering economic affordability to the country as well.

5G, Digitization, and Cambodia's Economic Development

As a regional bloc, ASEAN's total GDP accounted for $2.7 trillion in 2017. Of that, 7% came from a digital economy estimated to grow in value to about $1 trillion by 2025.[3]

It is plausible that readiness for digital economy is one of the key objectives of the Cambodian government in order to reach the aspiration of becoming a middle- and high-income country in 2030 and 2050 respectively, in accordance to the Rectangular Strategy Phase IV. In the last decade, Cambodia has made remarkable progress in areas of digitalization. The Telecommunication Regulator of Cambodia (TRC)[4] revealed the number of internet subscribers in the country rose from 320,190 in 2010 to more than 5 million in 2014 and then up to more than 15 million by April 2020, at which point there were also more than 20 million mobile phone subscribers. To date, the TRC has issued licenses for 68 internet service providers (I.S.P.) and 9 mobile phone operators. This development can, at least partially, be traced back to the consistent decrease in the prices of web-enabled and smart devices amid the expansion of internet coverage nationwide.

In March 2019, former Cambodian Telecommunication Minister Tram Iv Tek said in a tech event in Phnom Penh

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1. Xinhua. 2019. "China's Huawei clinches deal to build 5G network in Cambodia". Xinhua News Agency. April 28. Accessed July 01, 2020. www.xinhuanet.com/english/2019-04/28/c_138019453.htm

2. Qualcomm. 2019. "Press Note: 5G Economy to Generate $13.2 Trillion in Sales Enablement by 2035." Qualcomm. November 7. Accessed on March 05, 2020. www.qualcomm.com/news/releases/2019/11/07/5g-economy-generate-132-trillion-sales-enablement-2035

3. Yap, Karl Lester M. 2018. "Bain See $1 Trillion Boost to Asean GDP From Digital Economy". Bloomberg. September 03. Accessed June 30, 2020. www.bloomberg.com/news/articles/2018-09-03/bain-sees-1-trillion-boost-to-asean-gdp-from-digital-economy

4. Read more at: www.trc.gov.kh/en/internet-subcribers

H.E. Sok Puthyvuth (in the right), chairman of Telecom Cambodia and Mr. Li Xiongwei (in the left), CEO of Huawei Technologies (Cambodia) Co., Ltd. signed a MoU on 5G cooperation in Cambodia in April 2019
© http://unb.com.bd/category/tech/huawei-signs-5g-mou-with-telecom-cambodia/17513

that, by 2020, Cambodia was "strongly committed to connecting the country and to ensure the benefits of the information and communications technology reach the remotest corners as well as the most vulnerable communities."[5]

The Cambodian government is also seeing the 5G network as a way to realize its digital economy dreams, stipulating the boom in e-commerce industry. In June 2020, Tram Iv Tek's successor, incumbent Telecommunication Minister Chea Vandeth, addressed the virtual China-ASEAN Year of Digital Economic Cooperation event, telling the audience that Cambodians "have underscored the importance of using 5G as the backbone of the digital economy. I am therefore pleased to share with all members that Cambodia is working with local operators to launch 5G networks in the near future."[6]

Since the MOU was signed with Huawei, Cambodia's top three privately-owned telecom firms, including CamGSM Co., Ltd. (Cellcard), Smart Axiata Company Limited (Smart), and Viettel Cambodia Pte. Ltd. (Metfone), have been racing to roll out their own 5G networks.

Smart and Metfone are now receiving supplies from Huawei, while Cellcard is working with ZTE. The RCR Wireless News, published on 10 June 2020, showed the Cambodian market would adopt up to 1.6 million 5G connections in 2025 but "4G would continue to soar with 9.1 million connections."[7] That report added the "ARPU [average revenue per user]" by mobile connections in 2020 is $2.99, which will decline in 2025 to $2.59."[8]

Question of Economic Necessity

The rush and pressures to advance technological infrastructures have set countries to engage in an endless race for development. While Cambodia pushes to avoid falling behind competitors, it is worth noting the economic realities of the Kingdom.

The country possesses a labor-intensive economic status with the vast majority of its jobs vulnerable to the automation and robotic revolution enabled by the very 5G network it is embracing. A 2016 study by the International Labour Organisation showed that some 57 percent of Cambodian wage workers would be at high risk of automation, adding that in the country's vital garment sector alone there would be some 88

5. Sun, Narin. 2019. "US, China Face Off Over 5G in Cambodia". Voice of America. March 30. voanews.com/east-asia-pacific/us-china-face-over-5g-cambodia.

6. Ministry of Post and Telecommunication. 2020. "H.E. Chea Vandeth Attended the Inaugural Ceremony of China-ASEAN Year of Digital Economy Cooperation." Ministry of Post and Telecommunication. June 12. Accessed June 15. www.mptc.gov.kh/news/សកម្មភាពរដ្ឋមន្ត្រី/ជំពូកគ្រួម-ជា-វ៉ាន់ដែត-បានអ

7. Sbeglia, Catherine. 2020. "With a 'lot at stake,' Cambodia inches towards 5G deployment". RCR Wireless News. June 10. Accessed June 21, 2020. www.rcrwireless.com/20200610/5g/cambodia-inches-towards-5g-deployment

8. Ibid

percent of jobs threatened by such digital revolution.[9] The most critical aspect would be how much the Cambodian government can prepare its job markets for the coming changes.

By July 2020, Cambodia expanded its existing 4G-LTE wireless network to cover 52.7 percent of the Kingdom's land area, providing coverage to 80.3 percent of its population.[10]

Industrially, telecom firms shifting towards 5G would also need to make investments over several hundred million USD according to Smart Axiata, in order to roll out coverage over the country. Research by GSMA Intelligence and the international consultancy McKinsey & Company both indicate a surge in spending for companies and countries moving towards 5G, saying the costs of such a network could double 4G-LTE spending. Global expenses could rise to $1 trillion, not to mention the multiplied increases in energy needs for each 5G base station to power the networks.[11]

For the part of Cambodia and its less-developed industrial status, though 5G networks could help accelerate data speeds and improve economic efficiency, digital government, research and innovation, the rush for large-scale investment in 5G now may be questionable in terms of cost efficiency, especially considering whether such gains could also be achieved by maximizing current 4G-LTE utilizations.

National Security Consideration

The Cooperative Cyber Defence Centre of Excellence, an affiliated body under the NATO security framework, has pointed out that nine in ten economic espionage cases handled by the U.S. Department of Justice from 2011 to 2018 had involvements with China. The defense cooperative added that the Chinese government targets "academia, industry and government facilities for the purpose of amassing technological secrets".[12]

This and similar assessments have raised questions about implementing the 5G standard underpinned by Huawei and ZTE as to whether the Chinese involvement might pose a threat to long-term national security.

Viettel Group, the state-owned telecom firm operated by the Ministry of National Defence of the Socialist Republic of Vietnam (the parent company of Metfone in Cambodia), refused to cooperate with Huawei and ZTE to build 5G infrastructure in Vietnam, due to security concerns. The Vietnamese government intends to work with Finland's Nokia and Sweden's Ericsson instead. Viettel CEO Le Dang Dung explained, "We are not going to work with Huawei right now. It is a bit sensitive with Huawei and there were reports that its service is not safe. Viettel's stance is that, given all this information, we should just go with the safer ones and therefore we chose Nokia and Ericsson from Europe."[13] However, in Cambodia, Viettel's local subsidiary – Viettel (Cambodia) Pte. Ltd. (Metfone) – employed Huawei Technologies Co, Ltd. to equip its 5G network, citing "local market condition".[14]

In Southeast Asia, Vietnam is joined by Singapore in openly rejecting Huawei's entry into city-state's 5G network. Instead Singapore will also rely on European operators, including Nokia and Ericsson, in setting up its new internet infrastructure.[15]

In the case of Germany, Berlin's CDU-led government has recently revised its stand on Huawei as a provider of 5G technology, abstaining from a ban of the Chinese telecommunication giant but raising the security requirements for landing a deal in the implementation process of the 5G standard. Following Handelsblatt experts, this makes a future engagement of Huawei very unlikely.

Most common arguments in this aspect concentrate on state-private relationships in China. The State Council of China holds wide-ranging power on regulating

9. Chang, Jae-Hee, and Phu Huynh. ASEAN in transformation the future of jobs at risk of automation. No. 994906463402676. International Labour Organization, 2016.

10. Fresh News. 2020. "Cambodia Has Some 15 Million Internet Subscribers and More Than 10 Million Facebook Users by Mid-Year". Fresh News. July 20. Accessed July 20, 2020. freshnewsasia.com/index.php/en/freshnewsplus/165748-2020-07-20-06-05-27.html

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12. Kaska, Kadri, Henrik Beckvard, and Tomas Minarik. "Huawei, 5G and China as a security threat." NATO Cooperative Cyber Defence Center for Excellence (CCDCOE) 28 (2019).

13. Boudreau, John, and Nguyen Dieu Tu Uyen. 2019. "Vietnam Prefers Its Mobile Networks to Be Free of Huawei". Bloomberg. August 26. Accessed July 01, 2020. www.bloomberg.com/news/articles/2019-08-26/vietnam-prefers-its-mobile-networks-to-be-free-of-huawei

14. Thou, Virak. 2019. "Metfone to use Huawei's 5g technology for network". The Phnom Penh Post. August 27. Accessed June 25, 2020. www.phnompenhpost.com/business/metfone-use-huaweis-5g-technology-network

15. Reuters News Agency. 2020. "Singapore telcos pick Nokia, Ericsson over Huawei to build main 5G networks". Reuters News Agency. June 24. Accessed June 25, 2020. www.reuters.com/article/us-singapore-telecoms-5g-idUSKBN23V1PG

industries and governing the country. In 2017, China promulgated the cybersecurity law and the national intelligence law that, despite Huawei's repeated denials of establishing backdoor channel to hand over harvested data to the Chinese government, create a potential compliance obligation to do just that. This may raise questions whether companies like Huawei or ZTE can resist when the Chinese government makes a request for data. In Article 7 of the Chinese national intelligence law, it is stated that: "Any organization or citizen shall support, assist and cooperate with the state intelligence work in accordance with the law, and keep the secrets of the national intelligence work known to the public." Chinese tech firms Weibo, Baidu, and Tencent have been fined for apparent violations of cybersecurity laws.

In the case of Cambodia, Phnom Penh and Beijing leveraged their relations with the Comprehensive Strategic Partnership of Cooperation in 2010 and reiterated in 2013. It is now perceived that close bilateral diplomatic ties and Chinese 5G network hardware vendors' relatively affordable and competitive prices have incentivized decision-making when it comes to selecting vendors for supplies.

"Phnom Penh's increasingly close ties with Beijing was one aspect of Huawei's success in the country," said Marc Einstein, chief analyst at Japan-based IT research and advisory company ITR, when asked about the reasons as to why Cambodia would risk to offend its ASEAN partners by incorporating Chinese telecommunication companies in the 5G roll-out process.[16]

Cambodia may perceive threats from Beijing as low-level, or at least not as great as what Vietnam and other countries currently suspect. But, given the country lagging behind in terms of cybersecurity infrastructure and high-end technology, long-term implications on the issues of national sovereignty would come under the spotlight in current and future eras in which a nation's power may be measured by the amount of data it can collect.

At the same time, investing in 5G with support from Huawei and ZTE might have negative implications on

Cambodia's relations with the United States and other strategic and security allies.

The U.S. has been introducing its Clean Network global strategy to press its allies and partners to abandon Chinese-owned digital vendors in order to "join the growing tide to secure our data from the CCP's surveillance state and other malign entities".[17]

According to the strategy's backers, "Building a Clean fortress around our citizens' data will ensure all of our nations' security."

Recently, the Federal Communications Commission (FCC) designated Huawei and ZTE as potential threats to U.S. national security. The FCC thus barred $8.3 billion in purchases of any equipment from the two firms. The United Kingdom also gave up its Huawei engagement in July 2020, banning the firm from supplying the country's 5G networks and giving it until 2027 to remove all of its 5G kits in the UK.

It is understandable that a developing country like Cambodia would have limited options and little economic capacity to maneuver between vendors, explaining why it would go for the most affordable options. But the implications that Cambodia is defying all concerns and warnings aired by the U.S. over its decision to select Huawei could paralyze further the political relations and limited strategic trust between Phnom Penh and Washington. Ironically, digital cooperation in ASEAN, including initiatives like ASEAN Smart City and exchanges of information, will encounter obstacles for some members that are not welcoming to Chinese telecom firms. These members may in the future be reluctant to work with others who do use Huawei and ZTE.

With Washington's extensive bids to obstruct China's technological expansion, wide-ranging concern among European governments and the straightforward ban of Chinese telecommunication providers in some ASEAN member states on one side, and China's efforts to extend its high-technology sector internationally through its two key economic policies Made in China 2025 and China Standards 2035, partnering for example with Cambodia, the world is at risk of being

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16. Turton, Shaun, and Tomoya Onishi. 2019. "Cambodia 5G set to leapfrog ASEAN rivals with Huawei and ZTE". Nikkei Asia. September 5. Accessed June 05, 2020. asia.nikkei.com/Spotlight/5G-networks/Cambodia-5G-set-to-leapfrog-ASEAN-rivals-with-Huawei-and-ZTE

17. Read at: www.state.gov/announcing-the-expansion-of-the-clean-network-to-safeguard-americas-assets/

separated by an iron curtain once more, only that it will be an "iron curtain of technology" this time.

Recommendations

Despite the drawbacks, 5G technology is one of the best options for Cambodia to flourish as an e-economy in 2023, to become a middle-income country by 2030, a high-income country by 2050 and to build a strong e-government in the future. Still, national security matters for survival. Thus, Phnom Penh should be cautious and consider the points as follows:

Taking into Account the Timeliness and Cost Efficiencies: A national comprehensive economic analysis should be done to weigh whether aspirations to shift toward a 5G network at this time would accommodate economic and industrial priorities. The journey towards high-tech industries that require 5G connectivity still has a long way to go. By conducting a cost-benefit analysis, Cambodia may decide whether shifting toward 5G – a task requiring a large sum of capital and which may lead to partnerships with partners whose security credibility is questionable at its best – should be a priority.

Security Sensitive Manners: A whole-of-society ap-proach shall be adopted in the 5G network leapfrog. Multiple government agencies, particularly those in charge of the national defense and homeland secu-rity sectors, shall work together to identify the skele-tons and anatomy of their own cyber-infrastructure and telecommunication networks in their respective sector. Service members in the national defense and homeland security sectors should come up with a clear structure of their existing telecommunication systems and infrastructure and potential plan for future developments and whether 5G networks can be of any assistance. At the same time, there needs to be a thorough identification of national security-re-lated infrastructures and facilities that are especially sensitive, including, for example, the Royal Palace, the Prime Minister's Office, Senate, National Assembly, Interior Ministry, National Defense Ministry, and any headquarters, stations or bases of the military or po-lice. Any high-tech network installations in those highly sensitive areas shall be conducted under strict proce-dures. Meanwhile, individuals working at top levels of governments, including members of the cabinet and parliament, political party leaders, politicians, judges and prosecutors, and members of the armed forces

apparatchiks shall be made designated individuals to be supplied with secure telecommunication devices and materials to make sure the integrity and contents of their communications will not be compromised to the wrong hands.

Building an effective legislation and process: Leaders in government should create a comprehensive legal infrastructure and robust enforcement process to regulate the entire process of telecom services, binding telecom firms and their foreign vendors to comply with national law protecting individual privacies as well as state secrets and the national security of Cambodia.

Comprehensive and Inclusive Approaches: Broader public awareness of new network technologies is needed to make sure the population is onboard with new and future telecom plans. The awareness should include an understanding of personal safety and security as well as a holistic concept of privacy in adopting new technologies. Health and medical matters related to the new internet networks and telecom devices should also be made widely known to the public for the benefit of transparency and accountability to the public health.

Promoted Human Resources and Innovations: National strategy to realize the country's telecoms and economic dreams should include concrete plans to equip new generations with the capabilities, qualifications and full assistance to take charge of safeguarding and innovating a secure telecommunication infrastructure system in the future. More investments are needed to support home-grown scientific research and development in the telecom sector. A surplus in human resource and innovation would imply that Cambodia can somehow secure — partially or entirely — its sovereignty on the digital networks critical to self-defense and maintaining a sustainable future in digital economy.

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WOMEN'S PARTICIPATION IN POLICYMAKING DECISIONS AND ECONOMIC EMPOWERMENT

Khim Pichmolika

Reading Time: 5 Minutes

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Introduction

After the 1980s, feminist theories began to penetrate the International Relations discipline that is dominated by state actors.[1] The recognition of the need to diversify from state-centrism in international politics happened simultaneously with the acknowledgment of the importance of women's roles in peace and security as stated in the UN 1995 Beijing Platform for Action that "without the active participation of women and the incorporation of women at all levels of decision-making, the goals for equality, development, and peace cannot be achieved".[2] Women remain marginalized in high-level decision-making bodies with a global average of 21% in ministerial level positions[3] and 25% in parliaments.[4] The Ambassador Verveer for Global Women's Issues emphasized that the absence of women in policy-making deprived women of their talents, perspective, and experience—which are valuable to inform decisions that greatly affect them and their families.[5]

In the Cold War, the meaning of 'security' was expanded from state to human and non-traditional security, focusing on economic and environmental issues, and human rights.[6] The potential threats to human security are associated with structural violence[7] which refers to systematic ways in which social structures harm people by preventing individuals from meeting their basic needs.[8] Structural violence is conditioned by uneven life chances, inequitable distribution of resources, and unequal decision-making power.[9] Gender economic inequality which eventually leads to poverty, human rights violations, and social injustice[10] are crucial

aspects of structural violence to be explored as a contribution to human security studies. A quote from the United Nations holds true that "peace includes not only the absence of war, violence, and hostilities at the national and international levels but also the enjoyment of economic and social justice, equality and the entire range of human rights and fundamental freedoms within society."[11]

This paper studies the relationship between women's participation in policy-making and women's economic empowerment in SEA. The regional situation of women's political participation is dynamic and complicated. In tandem with momentous robust economic growth after the end of the Cold War, SEA has seen an improvement in the percentage of female ministers and parliamentarians although it is inferior to other regions. It reflects the reality that gender equality in politics remains a critical challenge for the region. The underrepresentation of women in policy-making poses a real challenge for women's economic empowerment across Southeast Asia where women are far more likely than men to be in vulnerable employment and to be taking unpaid labor through domestic work.[12]

The Evidence of Women's Voice and Leadership Impact

The studies of women's participation in policy-making decisions in SEA are quite limited.[13] A study on gender equality and efficiency from Profeta (2017) claims that women in decision-making positions positively impact economic outcomes in developing countries because gender equality produces conditions that accelerate economic development and boost economic growth. Gender equality in the upper-level positions is not merely a diversity beneficial to challenge the status quo, but also a contribution to better institutions and organizations, positive economic consequences and performance, and a new policy agenda owning to the fact that women are said to be more responsible, more empathetic leadership style, and less corruptible than men. An American survey revealed that roughly 61% of adults say female political leaders are better at being

1. John Baylis, et al., The globalization of world politics: an introduction to international relations (Oxford: Oxford University Press, 2011) 259-271.

2. UN DOC/A/CONF.177/22, 1995.

3. World Bank, Proportion of women in ninisterial level positions, (2019).

4. Inter-Parliamentary Union, Women in parliament: 1995-2020. (Geneva: Inter-Parliamentary Union, 2020).

5. Tanya Devani, "The role of women in peace and security: an interview with Ambassador Melanne Verveer," Harvard International Review 38, No.3 (2017) 63-66.

6. Keith Krause and Michael Williams, "Broadening the agenda of security studies," Mershon International Studies Review 40, No. 2 (1996) 229-254.

7. David Roberts, "Empowering the human security debate," International Journal on World Peace 22, No. 4 (2005) 3-16.

8. Johan Galtung, "Violence, peace, and peace research," Journal of Peace Research 6, No. 3 (1969) 167-191.

9. Ho-Won Jeong. Peace and conflict studies: an introduction. (Oxfordshire: Routledge, 2000) 29-35.

10. Naila Kabeer, "Women's economic empowerment: key issues and policy options," (Stockholm: SIDA, 2009).

11. The United Nations, The United Nations and the Advancement of Women 1945-1996, Document No. 84, (New York: UN, 1996) pp. 313.

12. Kelly Gerard, Redefining women's empowerment in South-East Asia, (2018).

13. See Profeta, 2017; Shvedova, 2005; Duflo, 2012; Squires & Wickham-Jones, 2001.

compassionate and empathetic, whereas only 5% say male political leaders are stronger in this area.[14] On corruption, no evidence proves women are intrinsically less corrupt but increasing women's participation would indirectly contribute to reducing corruption by promoting gender equality.[15] This study, however, acknowledges that more research is needed to create a causal relationship between gender equality and efficiency.[16]

Another study from Shvedova (2005) states that the absence of women from positions of power jeopardizes the development of democratic principles and hinders the economic development of a society. Men's decisions do not necessarily concern women's priorities of decision making, giving the differences in interests, backgrounds, and working patterns. Men tend to focus on areas that help consolidate their power, whereas women tend to prioritize social security, health care, and children's issues. The male-dominated arrangement is further reflected in the day-to-day working schedule nationwide, which is often characterized by a lack of supportive structures for women's dual burden. Women, who contribute immensely to global economies through their paid and their unpaid labor, are being neglected of their roles as mother, wife, sister, and grandmother by policies made utilized by the patriarchy system.[17]

In contrast, Duflo (2012) suggests that differences between men and women's preferences are insufficient to guarantee that women policymakers will act differently from men, particularly those selected through quotas. Both men and women would try to follow what their constituents expect of them to get reelected. Despite the thought that women leaders have a better understanding of women's needs, it would not mean that women will necessarily design policies to ensure more inclusive outcomes if they are politically weak which would obstruct them from influencing actual decisions.[18]

Squires and Wickham-Jone's (2001) study on the British House of Commons indicates that women MPs were likely to raise issues of equality, education, women's economic position, childcare, violence against women, and integration of gender into the issues of employment and pay, but only a few initiatives dovetailed with existing government policy were considered a success in terms of outcomes. The evidence from the UK shows mixed results of greater women's representation in parliament with few women's oriented policy-related outcomes.[19]

I aim to overcome these ambiguous conclusions and bias-finding from western countries by using the newest secondary data of women's economic empowerment and focusing on SEA. The participation of women in policy-making decisions will be based on women's share of seats in national parliaments from the Inter-Parliamentary Union.[20] The percentage of seats held by women in parliaments does not necessarily reveal how fully they participate or how much influence they wield, but it is a reliable measure due to the stability of these bodies and the comparable headcount among countries.[21] Women's economic empowerment in this study will use Women, Business and the Law (WBL) 2020 index of the World Bank Group[22] to demonstrate where laws and regulations that are in force facilitate or hinder women's economic participation.[23]

Looking into Data Analysis

The share of women in parliaments is the independent variable (X) which was measured by the percentage of parliamentary seats in a single or lower chamber held by women. The WBL index is the dependent variable (Y) which is composed of eight indicators that are built around women's interactions with the law from the beginning to the end of their careers. Those indicators are mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets, and pension, covered by 35 questions (Annex I). The average of each indicator will be calculated, with 100 representing the highest score.

14. Juliana Horowitz et al., Views on leadership traits and competencies and how they intersect with gender (Pew Research Center, 2008).

15. Frédéric Boehm, Are men and women equally corrupt? (Anti-Corruption Resource Center, 2015)

16. Paola Profeta, "Gender equality in decision-making positions: the efficiency gains," The Economic Costs of Gender Inequality in Europe 52, No. 1 (2017) 34-37.

17. Nadezhda Shvedova, "Obstacles to women's participation in parliament," Women in Parliament: Beyond Number 33, (2005) 22-45.

18. Esther Duflo, Women empowerment and economic development. Journal of Economic Literature 50, No. 4 (2012) 1051–1079.

19. Judith Squires and Mark Wickham-Jones, Women in Parliament: a Comparative Analysis (Equal Opportunities Commission, 2001).

20. Inter-Parliamentary Union, Global data on national parliaments, (2020).

21. Lori Ashford, (2012). "Women in power and decisionmaking," in Global women's issues: women in the world today. (Washington: Bureau of International Information Program, 2012).

22. World Bank Group, Women, Business and the Law 2020, (2020).

23. Ibid.

First, the average growth of the number of women in national parliaments and the WBL index in the ten SEA countries from 2001 to 2020 are shown (Figure 1 & 2). Then, the data of the two variables in 2020 are depicted on a scatter plot (Figure 3) to determine the nature of the relationship. After, the data of women in national parliaments is employed with each indicator of the WBL index by using the regression coefficient to study the directions, if any, of the relationship between variable X and any variables Y (Table 1).

The Results

In Figures 1 and 2, the averages of both the percentage of women in national parliaments and the WBL index in SEA from 2001 to 2020 continue to increase every five years. The average growth of each variable are at different rates. The depiction of the data on a scatter chart is to observe the relationship between the variable X and variable Y.

Figure 1: *Women in National Parliaments Southeast Asia, 2001-2020*
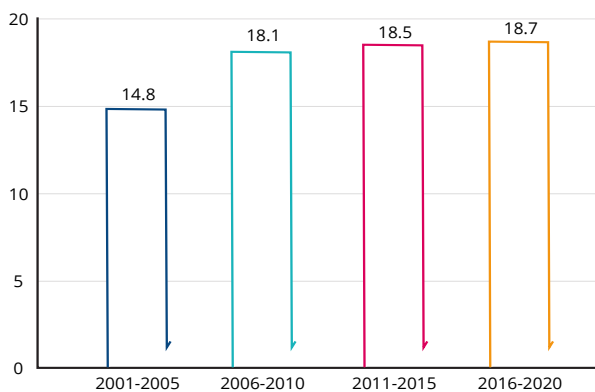
Source: *World Bank, Proportion of Seats held by Women in National Parliaments (2020), https://data.worldbank.org/indicator/SG.GEN.PARL.ZS*

Figure 2: *Women, Business and Law Index Southeast Asia, 2001-2020*
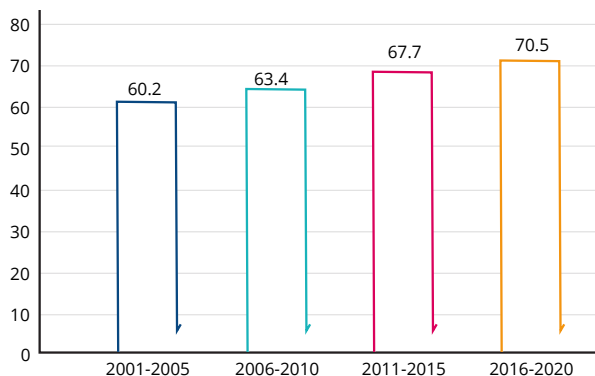
Source: *World Bank (2020)*

In the chart, the dots spread upward to the right, indicating a positive relationship between the two variables. The correlation of the two variables does not by itself imply causality but we at least know that there is a statistical relationship. A positive relationship means that an increase in the percentage of women in national parliaments will lead to an increase in the WBL index. The two variables have a strong positive linear relationship with an R2-value of .85 (> .7) and the R^2 is .72, which tells that 72% of the variation in the WBL index is explained by the percentage of women in national parliaments.

Figure 3: *Linear Regression of WBL Index on Share of Women in National Parliaments*
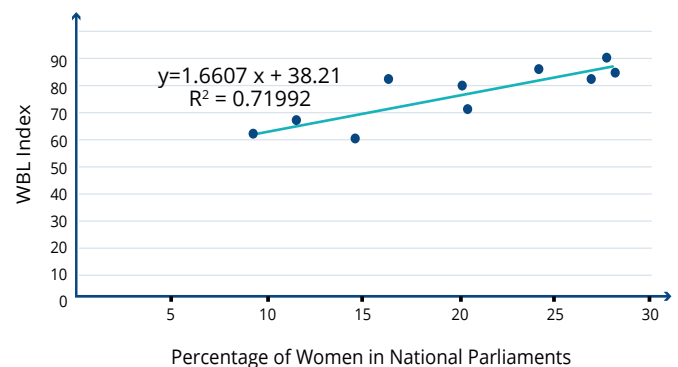
Source: *Author's Analysis*

The results of bivariate regression models support the finding above. All indicators have a positive correlation coefficient R with the independent variable. The correlations between pay, assets, and pension index with women in national parliaments are not statistically significant because their p values are bigger than the significance level (>.05). The mobility, marriage, and entrepreneurship index show strong relationships with women in national parliaments which are significant at a 5% level. The workplace and parenthood index show a relatively stronger relationship, the results are significant at a 1% level.

Table 1: Linear Regression Output of regressing WBL Index on Share of Women in National Parliaments

Women in National Parliaments		
Variables	R	p Value
Mobility	0.620*	0.045
Workplace	0.791*	0.006
Pay	0.388	0.268
Marriage	0.535*	0.050
Parenthood	0.773**	0.009
Entrepreneurship	0.730*	0.020
Assets	0.373	0.289
Pension	0.297	0.404

** p<0.05, * p<0.1

Source: *Author's Analysis*

Gender Quotas & Empowering Women at the Grassroots

Gender quota is vital to create gender-balance in politics. In order to solve the problem of women under-representation, gender quotas on both government bodies and political parties have to reflect the reality of the population. Gender quotas on civil servants are actively implemented but are indifferent to political parties. Relevant ministries, local NGOs, and influential IOs should urge political parties to commit to gender quotas. Moreover, parties usually place their female candidates at the bottom of the list during elections at all levels which put women at a huge disadvantage. A solution for this is a party should specify the sex ratio 2:3 for the top five candidates on the list. This integration of women will also serve as role models for other women to participate in politics.

But this is far from enough to reverse gender inequality in politics. The way forward lies in eliminating barriers to women's entry to politics and political effectiveness.[24] A bottom-up approach is fundamental for women to prove their political abilities and influence. Relevant ministries and IOs should work closely to further their efforts in capacity development for young girls and women, be it through direct or indirect involvements. Ensuring that potential young women are equipped with all necessary competencies, including leadership, negotiation skills, confidence-building, critical thinking, lobbying ability, and so forth are indispensable for them before entering the political arena. Capacity development should extend to female candidates and elected women in national and local level politics as a way to strengthen their performances and to bind women across parties together for networking and information sharing.

Local women's organizations and NGOs are equally significant for women's political empowerment in terms of professional and financial support that would assist them to campaign on an equal platform with men. It would minimize the effect of party affiliation on women and allow them to undertake policies on issues affecting their community and other women. They also possess a role in innovative lobbying and monitoring of gender mainstreaming for the progress toward gender equality and the democratic process.

In tandem, the power of women's organizations on positive reforms of state systems is needed to be utilized to allocate more spaces for young girls and women in government. It is easier said than done but it is, by all means, possible. More than just an end in itself, one thing they can do is to provide grants for younger women aspirants. There are yet distinct scholarships for women in politics. Passionate women in political fields might have different hurdles to overcome, especially in terms of social and financial support. Offering scholarships specific to political degrees for girls and young women would commence and continue their journey in politics because scholarships often ensure long-term engagement and investment.

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24. Elizabeth Asiedu et al., The effect of women's representation in parliament and the passing of gender sensitive policies (American Economic Association, 2018).

Looking at the bigger picture, these stakeholders' roles in capacity development and empowerment for girls and young women are important mechanisms to create changes in the system as a whole. More women in the public eyes would be a big source of inspiration. Even some empowered women could not become powerful politicians or make it to top positions in decision-making, they have received substantial training and support that will be fundamental for their careers. If those women are stretched out across national and sub-national institutions en masses, there will be noticeable changes in bureaucracy operations and policies as the results of having women who care about the community problems and are equipped with the abilities to disentangle the complex, multi-dimensional social issues rather than pursuing more power.

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Conclusion

In light of the literature on women's participation in policy-making decisions, this study reveals that increasing the number of women in policy-making is an affirmative step to greater inclusion in politics vis-à-vis economics. More gender-mainstreaming economic policies or laws will be created, be it in forms of protections or opportunities. Economic power encourages women to meaningfully engage in public life, namely political and legal spheres. This further highlights the capacity of poor women to participate in, contribute to and benefit from growth processes in which the value of their contributions is recognized, their dignity is respected and a chance to negotiate is available[25] to ensure inclusive and sustainable economic growth[26] — a decisive contribution towards stability, peace and security.[27] Just as the UN Secretary-General said, women's economic disempowerment is both a cause and an effect of violence in the Open Debate on Women, Peace and Security.

Limitations

Primarily, the study treats women as a homogenous group. Women's roles and needs are different due to their location, race, class, and so on.[28] Secondly, using women in national parliaments as an independent predictor, this study might be reluctant to test the effect of other measures on women's economic empowerment or vice versa. Lastly, focusing solely on women in national parliaments is insufficient because women's meaningful engagement in decision making is important at all levels, in both formal and informal settings.[29] Future research should focus on women in the executive because most policies in SEA are not made in parliaments. Thus, women in ministerial positions would be a more precise and interesting subject of study. More research is needed to understand the depth of this topic in order to promote WPS.

25. Rosalind Eyben et al., Conceptualizing empowerment and the implications for pro-poor growth (Brighton: Institute of Development Studies at the University of Sussex, 2008).

26. United Nations Secretary-General, Special edition: progress towards the Sustainable Development Goals (New York: UN, 2019).

27. Mariano Rajoy, Women Empowerment, a crucial factor for achieving peace and stability (The Union for Mediterranean Secretariat, 2017).

28. Naila Kabeer, "Women's economic empowerment: key issues and policy options," (Stockholm: SIDA, 2009).

29. Gender and Development Network, Turning promises into progress: gender equality and rights for women and girls (London: Gender and Development Network, 2015).

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CYBERPOLITICS VS. INTERNATIONAL CYBER COOPERATION: THE STRUGGLE OVER THE MANAGEMENT OF CONSTRAINTS

Nguon Somaly

Reading Time: 3 Minutes

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Many states have begun to routinize service delivery via cyber venues which have created new challenges and opportunities. By 2020, about three-quarters of the ASEAN population are netizens, and the use of internet and information and communication enabled, short ICT-enabled services is an increasingly indispensable part of everyday life. The enhancement of e-readiness and e-participation requires states to strengthen service delivery and competencies in the political system, i.e. the reliability of cyber access, clarity of purpose, specificity of instructions via national policies, and the increase of political cyber participation and collaboration at the regional and international levels. According to Nazli (2012), the logic of international cooperation and collaboration rests on why, when, and how to collaborate. Cooperation generally takes place following the actors common interests or in order to manage common aversions, resulting in "*Cyberolitics*".

The *Cyberpolitics* is a venue for the struggle over the management of constraints embedded and embodied in law, the ultimate authoritative manifestation of values and their preservation. In the context of cybersecurity, the need for international cooperation between states, international and regional organizations and other entities is emphasized by the borderless and increasingly sophisticated nature of cyberthreats. Lack of harmonization is one of the major challenges of the state system. To reach agreement on cyberspace norms and operational goals is crucial while many governments have become major players in cyberspace to exert their power and influence and extend their reach as well as their instruments of sanction and leverage.[1] The Global Cyber Security Agenda, a "framework for international cooperation aimed at enhancing confidence and security in the information society" launched by the International Telecommunication Union (ITU), a subordinate organization of the United Nations, identifies five strategic pillars themed as *legal, technical, organizational, capacity-building*, and *cooperation*.

The *legal* pillar focuses on harmonized regulation and law related to cybersecurity and cyber-dependent and cyber-facilitated crimes. This category includes cybercrime law, data protection law and regulation, electronic commerce and transaction. To entrench a

regional cybersecurity strategy and joint policies, all ASEAN member states must enact laws and regulations that harmonize the definition of terms to ensure policymakers have common understanding while drafting laws and policies to govern this area while keeping compliance with international principles and standards. These definitional areas include distinguishing between legal concepts such as cybersecurity and cybercrime. In this instance, cybersecurity law governs the security of computer systems (including prevention, protection and cybersecurity resilience framework, institutional arrangements, authority concerns, compliance and standards, and enforcement of corporate compliance), while cybercrime law governs the criminal acts that involve computer systems such as types of offences, investigation powers and procedures, mechanisms, and sanctions.[2]

The *technical* pillar focuses on existing institutions, cybersecurity standards and protocols, and the measures needed to deal with cybersecurity threats. This pillar includes concepts like a Computer Emergency Response Team (CERT), i.e. a technical institution, to strengthen service and support both in preventing and responding to computer security incidents. In practice, this could include promptly responding to a cyberattack first to quickly contain and investigate a breach and then to facilitate rapid recovery to a pre-incident state.

In 1990, the Forum of Incident Response and Security Teams (FIRST) was established as a global community for information exchange, which consisting of around 539 teams from a wide variety of organizations operating all over the world including educational, commercial, business, government and military.

Cambodia's own national computer emergency response team, the Cambodia Computer Emergency Response Team (CamCERT), a non-profit team of IT security professionals, was established in December 2007 to provide information security advice and cooperate with the government and other stakeholders. Unfortunately, CamCERT is not a member of the FIRST community and lacks adequate cybersecurity expertise to effectively mitigate cyber risk in the country.[3]

1. Nazli Choucri, Cyberpolitics in International Relations, 2012, Cambridge (MA) : MIT Press, 320.

2. Nguon Somaly, 2016, Cambodia's Effort on Cybersecurity Regulation: Policy and Human Rights Implications, Master's Thesis, Tallin University of Technology.

3. CDRI, Cybergovernance in Cambodia: A Risk-Based Approach to Cybersecurity, 2020, https://cdri.org.kh/publication/cybergovernance-in-cambodia-a-risk-based-approach-to-cybersecurity/.

The *organizational* pillar refers to the structure and policies on cybersecurity. This includes the responsible agencies for coordinating cybersecurity policy, such as any national, strategic frameworks as well as the regulatory bodies that oversee implementation of such. The Royal Government of Cambodia (RGC) is working on structural reform to improve development of the ICT sector. In 2014, the RGC adopted the ICT Master Plan 2020 in line with the internationally targeted ICU Connect 2020 Agenda and ASEAN's ICT Master Plan 2020. The national strategy was widened in scope and depth by the implementation of the Cambodian Law on Telecommunications, passed in 2015.

As mentioned previously in this article, Cambodia also established CamCERT in 2007 to handle Information Security. On 11 April 2016, the RGC approved a Telecom/ICT Development Policy drafted by the Ministry of Post and Telecommunications (MPTC) working team. Last but not least, the RGC integrated the National ICT Development Authority (NiDA) into the MPTC's structure in 2013 and established Telecommunication Regulator Cambodia (TRC) in 2015 in order to formulate

the regulations relating to the operation and provision of telecommunication in line with the RGC's policy on the telecommunication sector.[4]

The *capacity building* pillar covers cybersecurity efforts to promote awareness, education and training, including public awareness campaigns, cybersecurity research and development, professional training, and national education program and curricula. Cambodia has made significant achievements in some key efforts on cybersecurity and policy implication through promoting cybersecurity culture, establishing e-government service, boosting e-commerce, and focusing on raising awareness and building capacity among both citizens and agencies. MPTC together with other partners organized a number of workshops, seminars, trainings, and contests to enhance and strengthen institutions and individual's skills. However, understanding of cybersecurity vulnerabilities among institutions and individuals remains a huge challenge

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4. Nguon Somaly, 2016, Cambodia's Effort on Cybersecurity Regulation: Policy and Human Rights Implications, Master's Thesis, Tallin University of Technology.

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for development in this sector due to shortages of both budgetary and human resources.

Finally, the *cooperation* pillar focuses on inter-agency and public-private partnerships, information sharing networks, and cooperative agreements. Sustainable development of ICT and cybersecurity requires a wide range of cooperation between international partners. To a large extent, it depends on the political will of various actors involve. Information/intelligence sharing and mutual assistance may become crucial in responding to cybercrises. Nonetheless, the efficiency of such cooperation depends heavily upon strategically aligned policy goals and bilateral and multilateral relations. In order to promote international collaboration on cybergovernance, ASEAN adopted the Declaration to Prevent and Combat Cybercrime in 2017.

A year after that declaration was adopted, it was furthered with the ASEAN Leaders' Statement on Cybersecurity Cooperation and the ASEAN-United States Leaders' Statement on Cybersecurity Cooperation. These two statements aim at promoting cross-border coordination of cybersecurity policy development and capacity building.

In 2019, the ASEAN-EU Statement on Cybersecurity Cooperation was adopted, focusing on adopting and implementing a regional cyber confidence-building measure to increase inter-state cooperation and transparency. This cooperation also includes capacity- and awareness-building in the protection of critical infrastructure through the exchange of best practices regarding responsible behavior in cyberspace among states. It also encourages further engagement through relevant ASEAN-led mechanisms, such as the ASEAN Regional Forum Inter-Sessional Meeting on Security of and in the Use of Information and Communications Technologies (ARF ISM on ICTs Security) and the ASEAN Telecommunications Ministers Meeting (TELMIN), as well as the ASEAN Ministerial Conference on Cybersecurity (AMCC).

There are many challenges ahead for ASEAN to achieve its cybergovernance goals. These hurdles include insufficient IT and cybersecurity expertise and a lack of unified policy and information sharing in the region. Differences in national priorities and capabilities, as well as a lack of trust between ASEAN member states or a unifying technology governance

framework makes it difficult for governments and organizations to collaborate their efforts.

Given that ASEAN countries are at different stages of development, some national governments are unable to commit to cybersecurity efforts and investments due to more pressing domestic concerns demanding their attention.[5] Compared to other ASEAN member states, Cambodia is lagging behind in the rapid implementation of new technologies and methods to expand capacity to handle cyberthreats.

Presently, Cambodia does not have enough resources to tackle these issues alone. Thus, if the country is to achieve its goals in cybergovernance, its leaders must actively engage in collaborative efforts with other ASEAN member states and use regional and international frameworks to enhance, strengthen and improve cybersecurity frameworks and practices.

5. CDRI, Cybergovernance in Cambodia: A Risk-Based Approach to Cybersecurity, 2020, https://cdri.org.kh/publication/cybergovernance-in-cambodia-a-risk-based-approach-to-cybersecurity/.

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SUSTAINABILITY - SHAPING ENVIRONMENTAL LAW

Touch Likhedy and Bin Rasmeykanyka

Reading Time: 4 Minutes

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Introduction

In the past few decades, environmental law has evolved rapidly with the acknowledgment that environmental issues are highly integrated with economic development as well as national security and human security. Today, the international community is prioritizing the achievement of sustainable development goals (SDGs) through environmentally friendly practices. Digital transformation has created both positive and negative impacts on the environment, reflecting on the development of legal and regulatory frameworks at all levels, whether globally, regionally, or locally including the limitations of environmental law in addressing the environmental problems.

Legal Frameworks of Global Environment Governance

Looking at environmental problems on a global level, we can see all states are facing their own environmental problems, each with their own risks and consequences. The main environmental concern among the international community is global climate change, a process generally understood to be driven by pollution of CO2 or equivalent gas emissions.[1] Environmental problems such as this generally are not contained by borders and thus require collective attention and action to be addressed. Due to the substantial and long-lasting effects, it challenges states and non-state actors to work together to respond to environmental threats and impacts.

In terms of international law, states and other stakeholders have been able to come together and create a global, legal framework to govern activities that might harm the environment. The main legal instrument today is the United Nations Framework Convention on Climate Change (UNFCCC) that acts as a foundation for the development of additional environmental agreements to address climate change, especially those that deal with the stabilization of greenhouse gas concentrations.[2] UNFCCC marked a key milestone in the history of international environmental law by firmly acknowledging climate change and the causal role of human activities, particularly urbanization as

The 18th Law Talks on Contemporary Environmental Law in Cambodia and Future Perspectives organized by Konrad-Adenauer-Stiftung
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well as deforestation tied to economic development. In addition to implementation of the UNFCCC, other notable, international steps include the adoptions of the Kyoto Protocol and the Paris Agreement.

The Kyoto Protocol was adopted in 1997 to bind developed countries to limit and reduce greenhouse gas emissions to respective agreed targets.[3] The Kyoto Protocol also established an enforcement mechanism, including a system for monitoring, review and verification, and a compliance program to ensure transparency and accountability of the state parties.[4]

The Paris Agreement was adopted and entered into force in 2016. The overarching goal of the agreement is to fight climate change and adapt to its effects. More specific goals include keeping global temperature rise below 2 degrees Celsius above pre-industrial levels while pursuing efforts to limit the temperature increase further to 1.5 degrees Celsius.[5]

To keep signatory states on track with emissions goals, the agreement includes mandatory emissions reporting, a new technology framework and global stock taking every five years.[6]

Another significant international legal framework is the Vienna Convention for the Protection of the Ozone Layer, concerning the depletion of the ozone layer and its impact on human health and the environment. It later developed the Montreal Protocol on Substances

1. Food & Water Watch. (n.d.). Climate Change & Environment. https://www.foodandwaterwatch.org/problems/climate-change-environment

2. United Nations Framework Convention on Climate Change. (1992). New York: United Nations, General Assembly.

3. United Nations Climate Change. (n.d.). What is the Kyoto Protocol? https://unfccc.int/kyoto_protocol

4. Ibid.

5. United Nations Climate Change. (n.d.). The Paris Agreement. https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement

6. Ibid.

Joint Communique of the 25th ASEAN Labour Ministers Meeting (ALMM) "Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community"
© https://asean.org/

that Deplete the Ozone Layer, which regulates the ban of global production and consumption of ozone-depleting-substances (ODS). The protocol has been highly successful in meeting its objectives, as it provides a stable enforcement framework that established a panel for assessing technology and economics, created multilateral funds for developing countries. The protocol's authors also built a compliance procedure with a non-punitive approach that also gives space for industry to plan long-term research and innovation.[7]

Legal Frameworks of ASEAN's Environment Governance

Southeast Asia is party to this international community but faces its own challenges in environmental governance. Despite, and in some ways because of its abundance and diversity of natural resources, the region is facing the enormous task of balancing environmental sustainability with economic development. The young and growing human population of the region is driving growing consumption that inevitably impacts the environment in many different ways. For this reason, the Association of Southeast Asian Nations (ASEAN) maintains a growing focus on addressing these issues of environmental conservation and long-term growth.

The availability of abundant natural resources in the region encouraged ASEAN states to push infrastructure projects forward with the hope of generating energy from renewable sources. In 2018, member-states collectively adopted the Declaration on Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community with the aim to promote 'green' jobs and skills.[8] In order to ensure sustainability, ASEAN is devising green building codes that prioritize environmentally friendly construction practices in a bid to fuel demand for labor in green industries.[9] This effort includes Mapping of Green Building Codes and Building Energy Efficiency in ASEAN: Towards Guidelines on ASEAN Green Building Codes with support from German institutions. On a macro-construction-level, ASEAN also has a Smart Cities to support member-states' existing and new national development plans underpinning its three

strategic goals: Competitive Economy, Sustainable Environment, and High Quality of Life.[10]

7. The Conversation. (2012). Saving the Ozone Layer: Why the Montreal Protocol worked. https://theconversation.com/saving-the-ozone-layer-why-the-montreal-protocol-worked-9249

8.   ASEAN. (2018). ASEAN Leaders commit to promote green jobs. https://asean.org/asean-leaders-commit-promote-green-jobs/

9. ASEAN. (2018). ASEAN Sustainable Urbanization Strategy. https://asean.org/storage/2018/11/ASEAN-Sustainable-Urbanisation-Strategy-ASUS.pdf

10. ASEAN-German Energy Program. (2019). Mapping of Green Building Codes and Building Energy Efficiency in ASEAN: Towards guidelines on ASEAN Green Building Codes. https://agep.aseanenergy.org/report-on-mapping-of-green-building-codes-and-building-energy-efficiency-in-asean-towards-guidelines-on-asean-green-building-codes/

Legal Frameworks of Cambodia's Environment Governance

Meanwhile, glancing at the local level, Cambodia is rich in biodiversity and is home to the third-largest lowland dry evergreen forest in Southeast Asia. In the interest of natural preservation, Cambodia has ratified various international environmental instruments showing its commitment to a green development path.

The main legal instrument is Cambodia's Constitution, the supreme law of the Kingdom, which reads:

> *"the State shall preserve and protect the environment and the balance of natural resources by establishing a precise plan of management of land, water, atmosphere, air, geology, ecological system, mines, energy, petroleum and gas, rocks, sands, gems, forests, and forest-by-products, wildlife, fish and aquatic resources."[11]*

This specific article has paved the way for the development of Cambodia's national law, policy, strategic plan and code, which centers the Ministry of Environment as the main touchpoint for implementing the law and regulations, including the development of national and regional environmental management plans. In support of its practices, in 1996, Cambodia developed a main legal framework addressing environmental protection and the management of natural resources titled: "Law on Environmental Protection and Natural Resources Management".[12]

This law was adopted to protect the environment through sustainable management of existing and abundant natural resources. In that, the law included requirements for the completion of environmental impact assessments (EIA) prior to any development projects.[13] To further supplement environmental regulations, in 2017 the Royal Government of Cambodia drafted a new Environmental and Natural Resources Code (ENR Code) that laid out general principles and procedures for EIAs and other strategic environmental assessments, as well as protections for biodiversity and endangered species. The code also addressed the protection of cultural heritage, public participation and access to information, a collaborative management

process and dispute resolution procedures.[14] Besides legal instruments and regulations, in 2013, the Council of Ministers approved the National Policy and Strategic Plan for Green Growth (2013-2030), with the aim of balancing socioeconomic development with environmental health.[15] This ongoing plan strives to advance on a national level the principles of a global green economy through sustainable practices, thus building a Kingdom of green jobs, finance and investment.[16]

Potential Challenges for Regional and National Levels, and Recommendations

In the context of ASEAN, the region is taking progressive steps towards sustainable development through the adoption of the discussed legal instruments and the promotion of green jobs and construction. However, Southeast Asia still has a long way to go. Due to the varied geographical, political and developmental factors between member-states, it appears to be difficult to collectively achieve full implementation at an equal level. For instance, compliance with the ASEAN Declaration on Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community requires member states to create a market for goods and services from green industries. There is a need to retrain the existing workforce across different sectors with green skills including the skilled workers and professionals in this newly emerging sector.[17]

Green construction is another main challenge for member states across ASEAN in terms of implementation due to the high cost of environmental friendly construction materials and the lack of expertise in the green construction industry, which creates a significant barrier for private companies to move forward and invest in green building projects.[18] However, according to a report from the Building Construction Information

12. Law on Environmental Protection and Natural Resources Management. (1996).

13. Ibid.

14. Draft on Environmental and Natural Resources Code of Cambodia. (2018).

15. Cambodia National Strategic Plan on Green Growth 2013-2030. (2013). https://www.greengrowthknowledge.org/national-documents/cambodia-national-strategic-plan-green-growth-2013-2030

16. Ibid.

17. ASEAN Declaration on Promoting Green Jobs for Equity and Inclusive Growth of ASEAN Community. (2018). https://asean.org/storage/2012/05/ASEAN-Declaration-on-Promoting-Green-Jobs-for-Equity-and-Inclusive-Growth-of-ASEAN-Community.pdf

18. Building Construction Information Asia. (2014). Green Building Market Report 2014 South East Asia. https://www.bciasia.com/wp-content/uploads/2015/03/Green.Building.Market.Report.2014.pdf

Figure 1: *The Main Climate Summits and their Achievements*

THE MAIN CLIMATE SUMMITS
(AND THEIR ACHIEVEMENTS)

2019
COP25 - CHILE
Held in Madrid

2018
COP24 - KATOWICE
Katowice Rulebook
Rule of the Paris
Agreement

2017
COP23 - FIJI
Held in Bonn

2016
COP22 - MARRAKESH
Marrkesh Partnership
The Paris Agreement
comes into effect

2012
COP18 - DOHA
DOHA Agreement:
21st Stage of the
Kyoto Protocol

2013
COP19 - WARSAW
International
Warsaw
Mechanism

2014
COP20 - LIMA
Contributions for
a global agreement

2015
COP21 - PARIS
Paris
Agreement

2011
COP17 - DURBAN
Durban
Platform

2010
COP16 - CANCÚN
Cancún
Agreements

2009
COP15 - COPENHAGEN
Copenhagen Agreement:
Long-term fanancing,
2°C Challenge

1992
UNFCCC
The United Nations Framework
Convention on Climate Change

1997
COP3 - KYOTO
Kyoto Protocol:
Emissions reduction

2007
COP13 - BALI
Bali Road Map

Source: Iberdrola, Climate negotiations: 25 years of searching for consensus on the fight against climate change (2020), https://www.iberdrola.com/environment/international-agreements-on-climate-change

Asia (BCI), there is an increase of green buildings only amongst ASEAN members namely Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam.[19]

Cambodia particularly is still far behind most of member-states. The Kingdom is slowly but progressively moving towards sustainable development through the ongoing creation of national legal instruments and policies to address environmental issues. The obstacles here are mainly due to domestic factors ranging from economic conditions to the lack of capital and human resources in the specialized green economy. To catch up with the other ASEAN member states, and especially its neighboring countries, Cambodia's government needs to further develop its legal framework and national development plans, keeping a focus on both sustainable infrastructure projects and building human resources and capacity.

That latter, crucial element should include training

both unskilled and skilled workers in green sectors.

Greater environmental education is necessary if Cambodia hopes to catch up with the rest of ASEAN. Though various national policies and sustainable development measures have been written, real-world implementation is yet to be fully realized when it comes to efficient resource management and respect for environmental law.

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19. Ibid.

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DREAM BIG - WOMEN EMPOWERMENT IN CAMBODIA'S DIGITAL ECONOMY

Oum Oudom

Reading Time: 4 Minutes

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Introduction

The world has embraced the digital economy with a dramatic transformation in various ways. The digital economy is providing new opportunities for businesses, including digital enterprise, tech start-up, and e-commerce, which are vital for economic growth and development. However, same to many countries, when it comes to the integration of women into the digital economic development, undeniably, gender inequalities in Cambodia still remain pervasive in the world of work. The country still faces great obstacles to deliver high-level commitment to meet its set goal in promoting gender equality. Women's ability to participate as equal partners to men in social, political, and economic life is still severely limited.[1] Gender identity still weights as the dominant factor of workforce discrimination that creates gender gap and inequality in many sectors. This particular challenge smothers the aspiration to sustainable and future-oriented economic development. Therefore, this article aims to argue the importance of the contributions of women into the processes of digital economic development with reflections from both the global and Cambodian contexts.

Graphic 1: *Women's share in world population and poverty*

Men 51%

Women 49%

Women **represent 70%** of the world's poverty

Source: *The Guardian (2013)*

Women have been severely discouraged, marginalized, and excluded from digital economic integration and are under-represented in the tech sector. There are 327 million fewer women than men worldwide that have a smartphone and are able to access the internet.[2] While they are less likely than men to receive a pension, which translates into large income inequalities, women are also under-represented in information and communication technologies (ICT) jobs, top management, and academic careers and are four times less likely than men to be ICT specialists. At 15 years of age, an average of only 0.5 per cent of girls wish to become ICT professionals, compared to 5 percent of boys. In addition to the limited use of digital tools by women and girls, the relatively low number of girls in educational enrolment in STEM disciplines (science, technology, engineering, and mathematics), and information and communication technologies could lead to widening gaps as well as greater inequality within the digital economy.[3] This gender gap becomes a key obstacle to achieve a modern economy that provides sustainable inclusive growth. Women represent 70 per cent of the world's poverty, despite only half of the world's population being female.[4] Globally, women earn 24 per cent less than men and at the current rate of progress, it will take 170 years to close the gap.[5] The value of unpaid care work made by women each year, including childcare and housework, is estimated at least US$10.8 trillion, which is three times bigger that the size of the global tech industry.[6] Amid the outbreak of the COVID-19 pandemic, women are more likely to be exposed to informality and are in a more vulnerable situation than men in low- and lower-middle-income countries.[7] These gender gaps lead to greater poverty, slower economic growth, and a lower standard of living. Because men and women are imperfect substitutes, the discrimination against
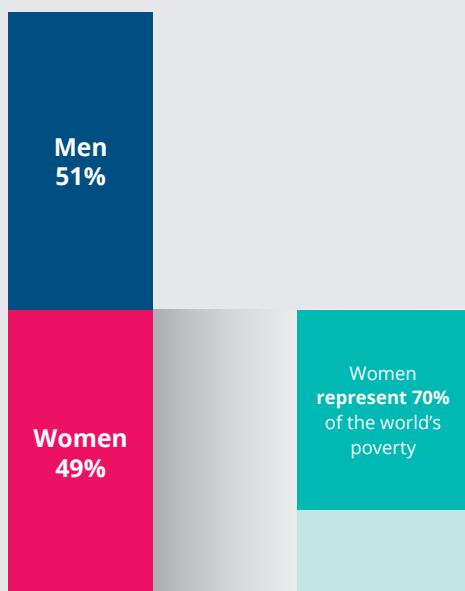
1. The Asia Foundation . 2013. The Role of Women in Cambodia. San Francisco: The Asia Foundation. pp.1-2.

2. Rowntree, Oliver. 2018. Connected Women The Mobile Gender Gap Report 2018. GSM Association. p.10.

3. OECD. 2018. BRIDGING THE DIGITAL GENDER DIVIDE INCLUDE, UPSKILL, INNOVATE. Organisation for Economic Co-operation and Development. p.5.

4. The Guardian . 2013. Is empowering women the answer to ending poverty in the developing world? Mar 27. Accessed Sep 01, 2020. https://www.theguardian.com/global-development-professionals-network/2013/mar/26/empower-women-end-poverty-developing-world.

5. Oxfam . 2020. Why the majority of the world's poor are women. Accessed Sep 01, 2020. https://www.oxfam.org/en/why-majority-worlds-poor-are-women.

6. Ibid, 6.

7. ILO. 2020. COVID-19 crisis and the informal economy Immediate responses and policy challenges. Geneva: International Labour Organization. p.1.

women will lower the maximization of real output in economic productivity as if men contribute more than women, the marginal product to the male input will be lower than the marginal product to the female input.[8] Also, gender inequality leads to aggregate inefficiency in economic productivity as the allocation of talent is not fully directed.[9]

In a more digital and interconnected world, a future-oriented, sustainable, and just economic development is the ultimate outcome of the inclusive workforce with the integration of female contributors. Sustainable economic growth is partly connected with a high standard of living and the inclusive well-being of everyone in society. However, this growth cannot be achieved by counting only on one group, thereby excluding or marginalizing another group that makes up half of the total population from the so-
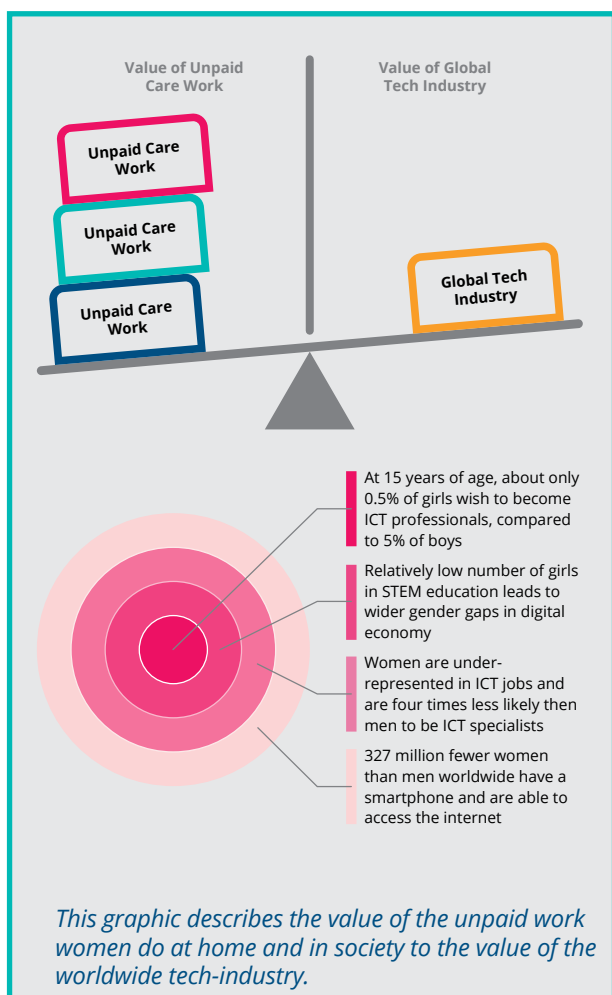
cial, economic, and political development. Therefore, closing the gender gap and achieving gender equality are intrinsically linked to sustainable development in the way that the concerns of both men and women are taken into consideration, while the outcomes are benefiting everyone in the society.

"No country can ever truly flourish if it stifles the potential of its women and deprives itself of the contributions of half of its citizens."

– Michelle Obama[10]

The First Argument: A Greater Gender Equality Leads to a Greater Success in International Economic Growth and Development

Globally, women represent 49.6 percent of the total population, but make up only 39 per cent of the total workforce,[11] while less than two-thirds of women are in the labor force, compared to 93 per cent of men.[12] Stamping out gender inequality can help economies make the best use of their talent and enrich the level of productivity in the workforce. McKinsey Global Institute (MGI) has conducted a study on the impact of achieving gender parity on economic growth by modeling the current and potential output of the world's women. The institute assesses 95 countries that are home to 93 per cent of the world's female population and generate 97 per cent of the global GDP (Gross Domestic Product). The institute calculates by taking into account the labor-force participation rates by gender and age cohorts within each country, the prevalence of part-time vs. full-time work among men and women, and employment patterns for men and women across sectors of the economy.[13] The study concludes that in the full-potential scenario, by eliminating gender gaps and inequality in labor

At 15 years of age, about only 0.5% of girls wish to become ICT professionals, compared to 5% of boys

Relatively low number of girls in STEM education leads to wider gender gaps in digital economy

Women are under-represented in ICT jobs and are four times less likely then men to be ICT specialists

327 million fewer women than men worldwide have a smartphone and are able to access the internet

This graphic describes the value of the unpaid work women do at home and in society to the value of the worldwide tech-industry.

Source: Author's Graphic

8. Silva, Stephan Klasen & Manuel Santos. 2018. Gender Inequality as a Barrier to Economic Growth: a Review of the Theoretical Literature. Goettingen: Courant Research Center. p.5

9. Ibid, 4.

10. The Telegraph. 2016. Michelle Obama's 16 most powerful quotes about women. Dec 20. Accessed Sep 1, 2020. https://www.telegraph.co.uk/women/life/michelle-obamas-12-most-powerful-quotes-about-women/no-country-can-ever-truly-flourish-if-it-stifles-the-potential-o/.

11. World Bank Group. 2020. Labor force, female (% of total labor force). Jun 21. Accessed Aug 26, 2020. https://data.worldbank.org/indicator/SL.TLF.TOTL.FE.ZS.

12. United Nations. 2020. Women and Girls – Closing the Gender Gap . Accessed Aug 26, 2020. https://www.un.org/en/un75/women_girls_closing_gender_gap.

13. McKinsey Global Institute. 2018. The People of Parity: Advancing Women's Equality in Asia Pacific. McKinsey & Company. p.31

markets could add US$ 28 trillion (or 26 per cent) to global annual GDP growth, while in the alternative best-in-region scenario in which all countries match the rate of improvement of the best-performing country toward gender parity in their region, US$12 trillion could be added in annual 2025 global GDP.[14] The full-potential scenario is the positive impact of closing the gap on three factors that combine to lower the share of economic output produced by women. First, women do not share the same numbers as men in the labor force; increasing the labor-force of women's participation accounts for 54 per cent of potential incremental GDP. Second, women have fewer working hours than men in the labor force as many of them are in part-time jobs; closing this gap could generate 23 per cent of the GDP opportunity. Third, women in many countries are disproportionately represented in the lower-productivity sectors such as agriculture and insufficiently represented in higher-productivity sectors such as industrial workforces; shifting women into work in the higher-productivity sectors on a par with the employment pattern of women could contribute another 23 per cent of the total opportunity.[15] Empowering women, in particular, could lead to positive progress in general.

The Second Argument: Women's Factor Contributes to Peaceful Development

Women empowerment is crucial for achieving inclusive peace, stability and prosperity.[16] Firstly, women prevent violence and provide security. Statistical analysis of the largest dataset on the status of women in the world today identifies gender equality as a more reliable predictor of peace than a country's GDP, religion, or level of democracy. Countries with lower levels of gender inequality are less likely to resort to the use of military force or go to war with their neighbors.[17] A cross-national quantitative analysis also found that the more women in parliament the less ricks of civil war will occur.[18] Secondly, women strengthen peacemaking. A

study of 40 peace processes in 35 countries over the last three decades found that women's groups were able to effectively influence a peace process, and once an agreement was reached, the influence of women's groups was also associated with a much higher rate of peace implementation.[19] Thirdly, women rebuild and sustain more peaceful societies. A study of 58 conflict-affected states between 1980 and 2003 showed that when 35 per cent of the legislature is female, the risk of relapse is near zero. However, the risk of relapse increases over time when no women are represented in the legislature.[20] The integration of women into the development processes could generate a more peaceful society since women are more harmonious and cooperative than men in doing the same jobs.

The Third Argument: Women Are Holding More Effective and Better Leadership than Men

Taking the case of COVID-19 management for example. States with female leaders, including New Zealand, Germany, Finland, Norway, and Taiwan, have fared better against the pandemic.[21] Women in leadership roles appear to be more risk-averse than men when it comes to attitude towards risk and uncertainty, while men are more risk-averse than women when it comes to economic and financial losses than gains.[22] Also, many recent studies conclude that women in leadership positions have made significant contributions to positive change in the organization. There is a positive correlation between the presence of women in corporate leadership and organizational performance.[23] Peterson Institute for International Economics shows that workforce diversity in general improves organizational performance, while women in the C-suite contribute to improve organizational

14. McKinsey Global Institute. 2018. The People of Parity: Advancing Women's Equality in Asia Pacific. McKinsey & Company. p.1

15. Ibid, 4.

16. O'Reilly, Marie. 2015. Why Women? Inclusive Security and Peaceful Societies. Oct. Accessed Sep 10, 2020. https://www.inclusivesecurity.org/publication/why-women-inclusive-security-and-peaceful-societies/.

17. Jessica Howard. 2018. 5 Ways Gender Equality Benefits Everyone. Aug 26, 2020. https://canadianwomen.org/blog/5-ways-gender-equality-benefits-everyone/

18. Melander, Erik. 2005. "Gender Equality and Intrastate Armed Conflict." International Studies Quarterly. pp.395-714.
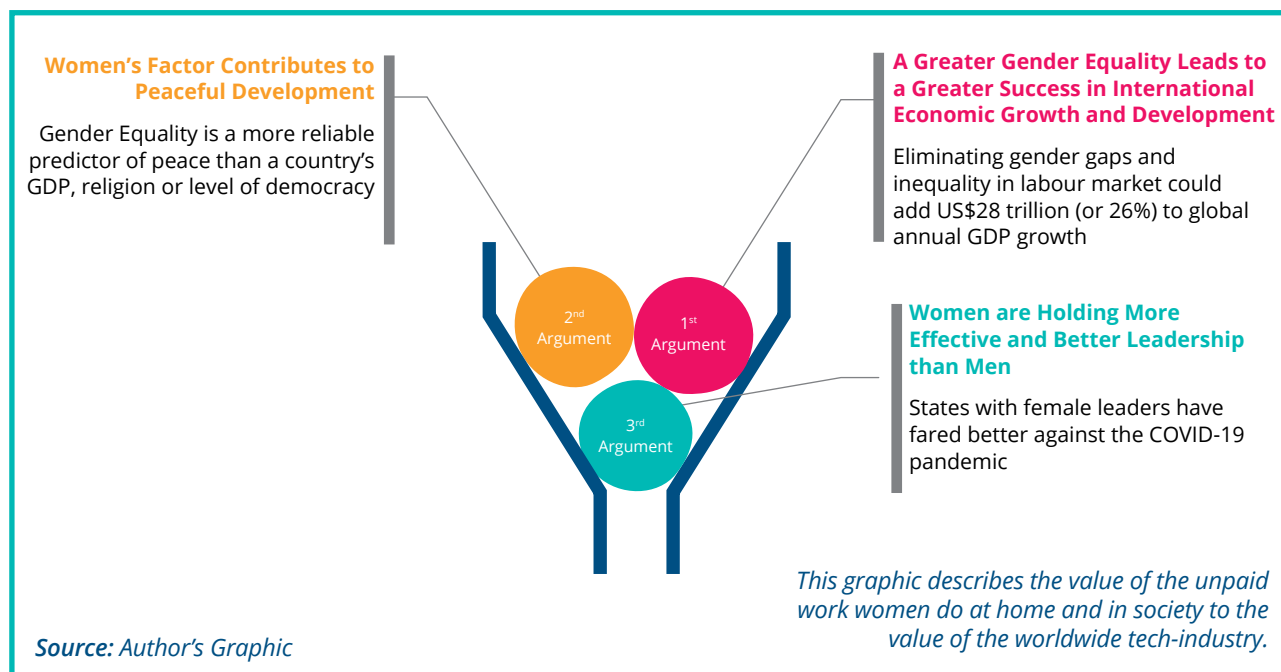
19. Marie O'Reilly, Andrea Ó Súilleabháin & Thania Paffenholz. 2015. Chapter 3: Women's Participation and a Better Understanding of the Political. International Peace Institute. p.38-59.

20. Jacqueline H.R. Demeritt, Angela D. Nichols & Eliza G. Kelly. 2015. "Female Participation and Civil War Relapse ." Civil Wars Journal. pp.346-368.

21. Carbonaro, Giulia. 2020. Why have female leaders been so successful in handling COVID-19? Jun 06. Accessed Aug 29, 2020. https://newseu.cgtn.com/news/2020-06-06/Why-have-female-leaders-been-so-successful-in-handling-COVID-19--R6upTUoNTa/index.html.

22. Supriya Garikipati, Uma Kambhampati. 2020. Women leaders are better at fighting the pandemic . Jun 21. Accessed Sep 1, 2020. https://voxeu.org/article/women-leaders-are-better-fighting-pandemic.

23. Archer, Seth. 2016. Companies with women in leadership roles crush the competition. Jun 17. Accessed Sep 10, 2020. https://www.businessinsider.com/companies-with-women-in-leadership-roles-perform-better-2016-6.

Women's Factor Contributes to Peaceful Development

Gender Equality is a more reliable predictor of peace than a country's GDP, religion or level of democracy

A Greater Gender Equality Leads to a Greater Success in International Economic Growth and Development

Eliminating gender gaps and inequality in labour market could add US$28 trillion (or 26%) to global annual GDP growth

Women are Holding More Effective and Better Leadership than Men

States with female leaders have fared better against the COVID-19 pandemic

2nd Argument

1st Argument

3rd Argument

This graphic describes the value of the unpaid work women do at home and in society to the value of the worldwide tech-industry.

Source: Author's Graphic

outcomes.[24] Having more women in the workplace and on boards is causing greater wellbeing in the working environment, which leads to better productivity and highly financial outperformance.[25] With the integration of women into the processes, future development is going to be more inclusive, equitable, peaceful, and sustainable.

Cambodia, a tiny post-conflict Kingdom, has not only made its significant move to the inclination for continuous poverty rates reduction and improvement in social indicators but also for a strong pace of economic growth of around 7.0 per cent annually for the last two decades.[26] This significant dynamic has allowed Cambodia to entitle itself since 2015 with the status of a "Low-Middle Income Country" in terms of GDP per capita,[27] and commit to becoming a developed country by 2050.[28]

Amid this significant move, Cambodia's government

is committed to the positive development of gender equality and inclusive development integration. Article 35 of the country's Constitution guarantees that all Khmer citizens of both sexes have the right to participate actively in the political, economic, social, and cultural life of the nation.[29] Strengthening gender equality and social protection has become a core commitment of Rectangle 1, human resource development, of the government's Rectangular Strategy - Phase IV, a strategy that guides the government's mission for the sixth legislature of the National Assembly (2018-2023).[30] The government is also firmly committed to achieving CSDG 5, one of the Cambodian Sustainable Development Goals Framework 2016-2030 (CSDGs) focusing on gender equality and empowerment of all women and girls across the country along with its national and international partners.[31] In addition, under *Neary Rattanak IV (2014-2018),* a five-year strategic plan for gender equality and women empowerment in Cambodia, the Ministry of Women Affairs (MoWA) was committed mainly to advance Women's Economic Empowerment (WEE), extend access to social services and protection, strengthen women's position in cross-cutting issues, including political empowerment, and advance institutional strengthening and capacity

24. Ayers, Ryan. 2020. The Rise of Women Leadership in Business . Accessed Sep 10, 2020. https://gethppy.com/leadership/the-rise-of-women-leadership-in-business.

25. Center for Creative Leadership. 2020. Women in the Workplace: Why Women Make Great Leaders and What You Can Do to Retain Them . Accessed Sep 10, 2020. https://www.ccl.org/articles/white-papers/7-reasons-want-women-workplace/.

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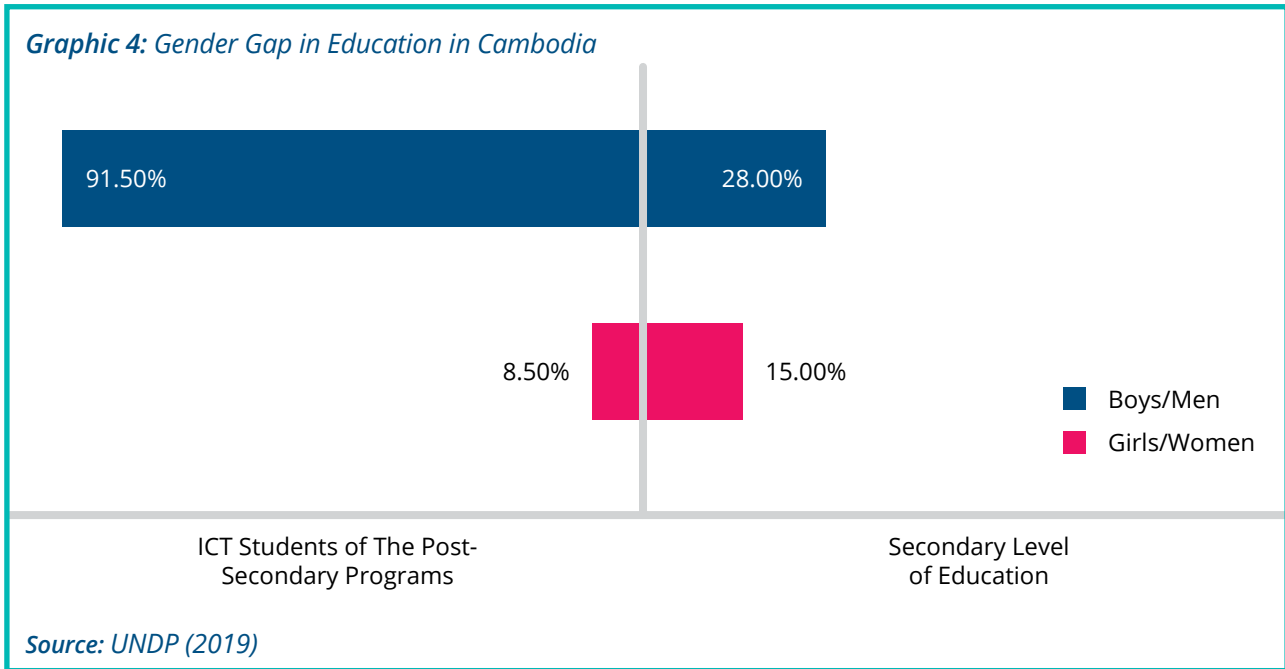
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28. Xinhua. 2018. Cambodia aims to become "developed country" by 2050: PM. Mar 15. Accessed Aug 26, 2020. http://www.xinhuanet.com/english/2018-03/15/c_137041624.htm.

29. Constitutional Council. 2010. The Constitution of the Kingdom of Cambodia. Phnom Penh: Constitutional Council. p. 11.

30. Royal Government of Cambodia . 2018. Rectangular Strategy for Growth, Employment, Equity and Efficiency: Building the Foundation Toward Realizing the Cambodia Vision 2050, Phase IV. Phnom Penh: Royal Government of Cambodia. p. 20.

31. Kem Sothorn, Ros Bandeth, Florent P.B. Zwiers, Kem Keothyda. 2019. The Empowerment of Women in Cambodia. Phnom Penh: Parliamentary Institute of Cambodia (PIC). pp. 19-20.

Graphic 4: Gender Gap in Education in Cambodia

	ICT Students of The Post-Secondary Programs	Secondary Level of Education
Boys/Men	91.50%	28.00%
Girls/Women	8.50%	15.00%

Source: UNDP (2019)

development towards gender equality,[32] paving the paths for the formulation of *Neary Rattanak V (2019-2023)*. With these commitments and past achievements, Cambodia, as scored by the World Economic Forum, has had its better improvement of ranking in the progress towards overall gender parity from 112 in 2016[33] to 89 in 2020, among 153 countries on the list, making the Kingdom ranked ahead of Brunei, Malaysia, and Myanmar in the Southeast Asian region.[34] Women have found their ways to contribute to the country's progress. They comprise 48.38 per cent of the country's total labor.[35] Over 13 per cent of Cambodia's small-and-medium-sized enterprises (SMEs), 28 per cent of medium businesses, 18 per cent of small businesses, and over 61 per cent of micro-businesses are also run by women.

Although gender equality is positively progressing, there are still a set of setbacks that somehow drive the country into a backward direction. The long-standing gender stereotype and family norms have imposed invisible barriers for girls and women and prevented them from obtaining levels of education equally high as men that would result in higher paid employment. This systematic gender discrimination limits life options

and economic autonomy throughout the lifecycle of many girls and women across the country.[36] Over 15 per cent of Cambodian adult women have reached at least a secondary level of education compared to 28 per cent of their male counterparts.[37] Women comprise only 8.5 per cent of total students studying ICT related subjects of the post-secondary programs.[38] In order to achieve digital economic inclusion, gender equality has to be first done in girls' educations. Therefore, digital education should be widely accessible and affordable for both men and women. This accessible digital education is leveling to foster women's digital literacy and ICT education, empowering women in terms of innovative digital entrepreneurship, tech start-ups, and e-commerce, and fully integrating women into the digital economy. ICT skills for women are very important in strengthening their competitiveness in the labor market within the context of the digital economy.

Women are facing a high level of vulnerability in Cambodia's informal economy. They are found in the vulnerable forms of informal works with low and unstable wage employment, casual work, and risky

32. Ministry of Women's Affairs. 2014. Neary Rattanak IV (2014-2018). Phnom Penh: Ministry of Women's Affairs. p.16-24.

33. World Economic Forum. 2016. The Global Gender Gap Report 2016. Geneva: World Economic Forum. p.11.

34. Ibid, 113.

35. IFC. 2019. Exploring the Opportunities for Women-owned SMEs in Cambodia. Washington, D.C.: International Finance Corporation. p.13.

36. MoWA. 2014. Attitudes: Gender Relations and Attitudes, Cambodia Gender Assessment . Phnom Penh : Ministry of Women's Affairs. p.4.

37. UNDP. 2019. Inequalities in Human Development in the 21st Century, Briefing note for countries on the 2019 Human Development Report: Cambodia. UNDP. p.6.

38. Tiffany Tsang, Chansocheata Poum. 2018. Factors Affecting Women Engaging in Tech Careers in Cambodia. USAID. p.2.

work environments.[39] This has been worse during the COVID-19 pandemic since women in the entertainment industry are left without jobs and incomes. [40] Women are also facing the gender wage gap in the formal economy. Women's average monthly real wage is about 15 per cent or 1.2 times lower than that of men. In other words, women earn about 87 per cent of what men earn.[41] Moreover, since more than 80 per cent of garment workers are women, the impacts of the European Union's (EU) Everything But Arms (EBA) partial withdrawal amid the pandemic are going to negatively affect women in particular, especially when factories are closed. With no livelihood options, they are placed in desperate situations as many of them have heavy debt repayment burdens and monthly expenditures.[42] Therefore, parts of the social protection policy should be extended to vulnerable women in the informal economy, including health services. The government should work closely with the private sector to develop affirmative action and soft regulation to achieve gender wage equity and equal promotion opportunities for women. The government also has to formulate policies that reserve benefits for women in particular once the EBA partial withdrawal fully affects the country's factories, or to secure the jobs and incomes for women.

Overall, Cambodia is still a male-dominated society, despite 51.5 per cent of the country's population being female. In a democractic society, a group of population is expected to be represented by at least a shared number of members in the parliament. However, women have currently occupied only 25 out of 125 seats (or 20 per cent) in the country's National Assembly, increasing 0 per cent from the last legislative term,[43] while among 28 Cambodia's ministries and secretariats, only three are led by women.[44] Social structures and political culture

prevent women from aspiring to be equal partners to men in public decision-making. Women's capacities and potential are most likely under-valued, which somehow creates invisible barriers for them to actively participate and play a prominent role in politics and governance.[45] A lack of women in decision-making positions is reflected as the failure to recognize and bring the diverse inputs, including needs, concerns, and opinions of every person in the society, to the public policy formulation. Therefore, the integration of women in the decision-making processes is very essential in constructing a sustainable future since the more women are involved, the more inclusive, just, and sustainable the outcomes will be. A system of quota setting at the managerial levels is suggested to be considered by public and private parties to reserve places for women. Companies in the private sector should also consider reserving seats for women at the decision-making positions since the creativeness and commitment of women could generate more productive results.

Nevertheless, the traditional gender stereotype still presents pressure on women and girls in society. Women are expected to follow serious social norms, while men are allowed to enjoy their 'gender privilege.'[46] These social norms still remain as a set of rules that value women less than men, leading to the persistent gender gap, discrimination, and obstacles that prevent women from effectively engaging in the country's development. [47] The *Chbab Srey*, the Khmer traditional code of conduct for women that holds significant moral and cultural value in setting a set of serious rules for girls and women to become a virtuous woman or wife, has been still codified as part of the secondary school curriculum in Khmer literature and severally used to place a standard on women within this digital age.[48] Despite the fact that one in five men, aged between 18-49, reported raping a woman or girl,[49] the government is taking a step to initiate a draft version of the Public

39. Oxfam. 2020. Promoting Economic Empowerment for Women in Marginalized Conditions. Feb 25. Accessed Sep 01, 2020. https://cambodia.oxfam.org/latest/policy-paper/promoting-economic-empowerment-women-in-marginalized-condition.

40. Ros, Sokunthy. 2020. Women workers in Cambodia under the COVID pandemic. May 07. Accessed Sep 01, 2020. https://focusweb.org/women-workers-in-cambodia-under-the-covid-pandemic/.

41. Cheng Savuth, Ngov Penghuy, Heng Molyaneth & Heng Seltik. 2019. Investigating the Gender Wage Gap in Cambodia. Phnom Penh: CDRI. p.153.

42. Ros, Sokunthy. 2020. Women workers in Cambodia under the COVID pandemic. May 07. Accessed Sep 01, 2020. https://focusweb.org/women-workers-in-cambodia-under-the-covid-pandemic/.

43. Youbonphark, Vilavong. 2018. The Challenges to Women in Political Participation at the National Level from the Two Latest Elections in Cambodia, Lao PDR and Myanmar. Phnom Penh: Parliamentary Institute of Cambodia (PIC). p.4.

44. Royal Government of Cambodia. 2019. Cambodia's Voluntary National Review 2019 on the Implementation of the 2030 Agenda for Sustainable

Development. Phnom Penh: Royal Government of Cambodia. p.56.

45. Ministry of Women's Affairs (2011) Report on Study of emerging gender issues among women, girls and youth in Cambodia. Phnom Penh.

46. MoWA. 2014. Attitudes: Gender Relations and Attitudes, Cambodia Gender Assessment . Phnom Penh : Ministry of Women's Affairs. p.2.

**47.** The Asia Foundation. 2013. The Role of Women in Cambodia . The Asia Foundation. pp.1-2.

48. Emily Anderson, Kelly Graceemily. 2018. "From Schoolgirls to "Virtuous" Khmer Women: Interrogating Chbab Srey and Gender in Cambodian Education Policy." Studies in Social Justice . pp.215-234.

49. OXFAM. 2020. Gender Justice: What should be done in Cambodia? Accessed Aug 26, 2020. https://cambodia.oxfam.org/latest/stories/gender-justice-what-should-be-done-cambodia.

Graphic 5: *Share of Women in Cambodia's National Assembly and the Royal Government, 2019*

CAMBODIAN NATIONAL ASSEMBLY

CAMBODIAN MINISTERIAL CABINET

Men
Women

20.00%

80.00%

10.00%

90.00%
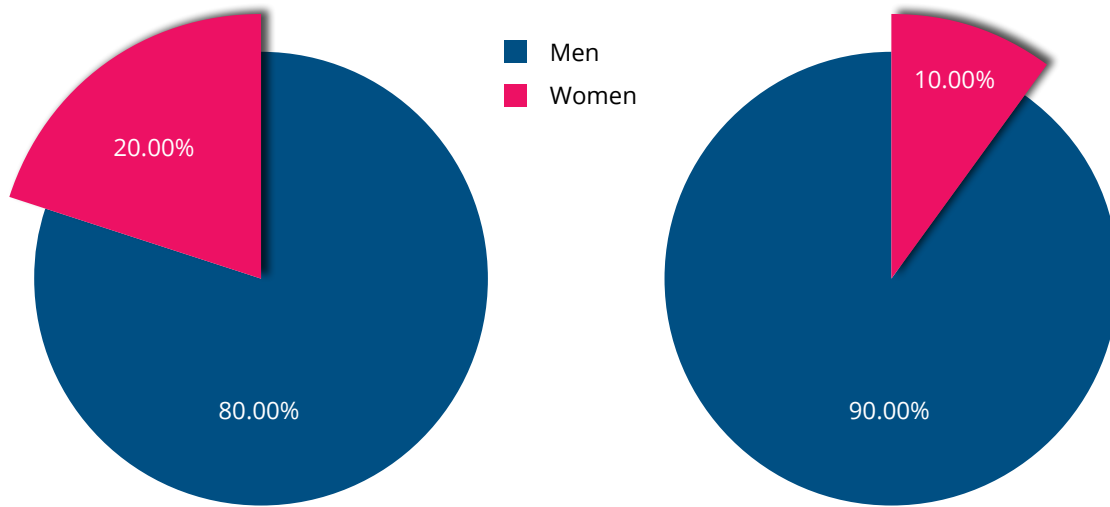
Source: *Youbonphark Vilavong (2018); Royal Government of Cambodia (2019)*

Order Law that aims to determine how Cambodians can dress in public.[50] This is not a rational response to this particular social issue. Instead of making a law to punish rapists harder, or run public campaigns to foster the social value among men, the government tends to limit the personal freedoms of individuals, especially of women, claiming that their ways of dressing are the factor for higher rape crimes in Cambodia. The traditional gender stereotype itself also comes from within since most Cambodians continue to maintain biased ideologies on domesticity. Women tend to undermine their own capacity and limit their own options in social, economic, and political development. 92.7 per cent of females and 82.4 per cent of males still believe that a woman's most important role is to take care of the house and home, and 62.6 per cent of males and 57.1 per cent of females agree that men should have the final say in family matters,[51] while 98.5 per cent of Cambodian women believe that they must obey their husbands.[52] Therefore, in order to foster the integration of women, we need to challenge this traditional gender stereotype and social norms that place a double standard on girls and boys, women and men, in the society. In addition, girls' and women's

reachable and equal education and opportunities are very important in addressing this traditional gender stereotype from within. Well-educated girls with greater access to outdoor opportunities and interaction with a diverse group of people tend to hold an opposite view from the girls who were not as well-educated,[53] which can ultimately shape the social perception on girls and women from within. Girls and women shall be encouraged to dream big and aim as high as the boys and men do, especially in the fields of the digital economy that is dominated by men. Moreover, a form of support systems for girls and women should be built, counting from the initial support of the family, school and education, community, law, policy, and regulation that aim to ultimately close the gender gap in Cambodia and fully integrate girls and women into the development processes. Once the women are integrated, everyone benefits.

50. Romdoul Chetra, Sao Phal Niseiy. 2020. Government Seeking to Control How Cambodians Dress with Public Order Law. Aug 04. Accessed Aug 26, 2020. https://cambodianess.com/article/government-seeking-to-control-how-cambodians-dress-with-public-order-law.

51. UNDP Cambodia . 2020. Partnership for Gender Equity Phase IV . Accessed Aug 26, 2020. https://www.kh.undp.org/content/cambodia/en/home/projects/partnership-for-gender-equity-phase-iii.html.

52. CCHR . 2018. Fact Sheet: Violence Against Women in Cambodia. Fact Sheet, CCHR. p.2.

53. Chin, Leabphea. 2020. "Chapter 6: A Discussion on the Role of Buddhism in Contemporary Cambodian Gender Roles." In 2020 Working Papers, by 2019 Young Fellows. Phnom Penh : Future Forum. p.12.

TECH STORY: A NEW SEED OF THOUGHT FOR CAMBODIAN TECH START-UPS AND E-COMMERCE PLATFORMS

Reading Time: 3 Minutes

In the pursuit of becoming an upper-middle income economy by 2030, it is compelling for the Royal Government of Cambodia to adhere to the Rectangular Strategy IV in an effort to diversify the country's economy through forging a vibrant and dynamic digital startup ecosystem so as to prepare the Kingdom for the Digital Economy and the Fourth Industrial Revolution. This notion was underscored by H.E. Tram Iv Tek, the Minister of Posts and Telecommunications, during the launching of Cambodia's first technology startup report "Startup Kingdom: Cambodia's Vibrant Tech Startup Ecosystem in 2018" on 15 March 2019. Remarkably, the report highlights the opportunities and challenges of Cambodia's startup investment landscape and provides comprehensive recommendations, all of which serve as the foundation for multiple line ministries to shape future policy and create an optimal business environment that ultimately fosters the country's startup ecosystem.

According to the Report, Cambodia has seen a recently booming startup ecosystem as the number of publicly-disclosed startup investments had doubled from 2015 to 2018. To accelerate this momentum, the Ministry of Posts and Telecommunications is in the process of formulating a policy that will help spur innovation and promote tech startups as well as Micro Small & Medium Enterprise (MSME) sectors. Joining hands with the ministry to boost this dynamic, stakeholders in the Cambodian tech ecosystem – including, development partners (e.g. UNDP, USAID, IFC, etc.), corporates, universities and training institutes – have embarked on promoting entrepreneurship and technical skills as well as supporting startups to drive innovation and digitize business. One of the most vivid manifestations of such commitment refers to the Smart Start program by Smart Axiata which aims at offering learning platforms along with mentorship and financial support for Cambodian university students to launch their tech startups in cooperation with Smart and Impact Hub.

Navigating in this conducive dynamic, STYLE, which is a startup digital business created by a small group of young talented university students, won the Smart Start Competition last year. With the incorporation of digital platforms into the operation of its tailor shops, STYLE offers a unique clothes rental experience in Cambodia. Start-ups present an important part of tech ecosystems and add to countries innovation capacities.

In light of your remarkable journey in starting up STYLE, can you share with us what motivated you to enter the Smart Start Competition? How did you stand out and what do you think is the reason you won?

We want to solve the current daily problems that people are facing by using technology such as mobile phone applications and websites that enable them to rent clothes of their desire. In addition, we want to apply all the theories and approaches that we have learned from school in practice. First, we strive to resolve problems and fulfill the needs of our customers. During the 6 months incubation with Impact Hub and Smart, we met different types of customers whose valuable feedback has helped to improve the overall operations of our business. Second, the diversification of our team potential has led us to bring together different skills and responsibilities to our business operations as a whole. Our team spirit is: "*Work hard and be positive*" and "*If not now, then when?*" Third, we are not hesitant to seek help along the way; seeking external support from experts is one key pillar of STYLE's success. Due to the limitation of our knowledge and experience, we are truly grateful for the support from our mentors at Impact Hub Phnom Penh, Smart Team,

lecturers at Paragon University, and our friends who are always there to help from afar. Last but not least is time management. We define appropriate goals, set out certain plans with specific timeframes so that everyone is on the same page.

The utilization of digital platforms vividly distinguishes STYLE from its old-school counterparts. Can you help us to understand how technology contributes to the operations of your business?

There are two ways that technology remarkably lies in the core of our operations. First, digital platforms like websites and mobile apps make it more convenient for customers to reach out to us and get the deals done with just instant clicks. Moreover, it is also easier for us to monitor certain information such as bookings, transactions, feedback, etc. since it is automatically recorded into the database. Second, the utilization of social media platforms, i.e. Facebook and Instagram, has helped to raise awareness of STYLE and build customer trust on our platform as well.

The common challenge of E-commerce is closely associated with the prevailing digital disparity among citizens given

the different levels of internet access as well as the gap of digital-based knowledge and equipment. What is your insight with regard to this challenge?

In light of these challenges, we have indeed targeted different types of customers. One of our main customers is the garment factory workers whose technological literacy is quite limited. Therefore, our solution is that we are trying to utilize our Facebook page at this initial phase given its familiarity to the majority of our citizens rather than make use of mobile applications and websites as it might be too complicated for our customers.

Apart from this, what do you perceive as the existential hurdles for Cambodia's E-Commerce sector in general and for STYLE's operation in particular?

If we browse through Google, many websites in Cambodia do not acquire the basic principles of customer service and user experience. Many sites are still suffering from poor hosting and general understanding of basic e-commerce principles as well as basic technical setup, for example, the lack of SSL certificates. Apart from this, delivery, online payment, and the trust deficit between customers and merchants also pose certain degrees of challenges to STYLE's operation and to Cambodia's E-Commerce at large.

The prospect of Cambodia's E-Commerce is parallel with the future of STYLE. How do you foresee the field of E-Commerce in Cambodia in the next 10 years? Do you regard such a conceivable outlook as an opportunity or challenge to STYLE?

Recently, relevant government agencies, INGOs, NGOs, and the private sector are embracing and adapting to the digital economy. Buying and selling products online in Cambodia is being seen as the trend in the past few years. E-commerce has been a boost to those who own small businesses or medium enterprises. So, we believe that this trend will continue to grow even more over the next 10 years, especially if the platform can guarantee a safe online transaction coupled with the new enacted law on e-commerce last year. In this regard, it would be a great opportunity for STYLE whereby our customers are more aware of technological usage via our platforms such as website, mobile app, and social media. In the meantime, our team also tries our best to deliver the most satisfactory user experience with our service as well.

As part of Cambodia's E-Commerce, instead of passively benefiting from the growth of the field, how can STYLE step up to actively contribute to prospering the Kingdom's E-Commerce?

Our vision is to actively contribute to advancing the Kingdom's E-Commerce by sharing our knowledge and experience to the new and emerging startups including mentoring and counselling them toward appropriate direction, relevant guidelines, and potential networks. We encourage our young generation to be more confident in joining this industry because if you do not try, you will never know. Don't be afraid to fail because many people are there for you and willing to help you along the way.

Wrap-Up

We are wrapping up 2020 with a fragile peace of mind, unfortunately. At the time of writing, Cambodia is experiencing its first incident of community transmission cases of the Covid-19 pandemic, while it had been all imported cases in the past 11 months. The government has taken proactive measures to contain further spread and to effectively trace those who have been in direct or indirect contact with the infected. This incident has severely disrupted many parts of our lives. We all shall look forward in a more optimistic direction to 2021, when the vaccines will hopefully become globally available as a public good.

To recap this publication, a comprehensive discussion on the sustainability aspects in the region and digital future of ASEAN has been a major challenge, on top of the ongoing pandemic spread that has put additional pressure to the staggering implementation of the SDGs. We do acknowledge the setbacks put forth by the push and pull factors of environmental concerns vis-à-vis economic empowerment. ASEAN Smart Cities Network (ASCN), for instance, has seen a lot of progress; lessons-learned and experience-sharing help to keep this spirit on track, despite developmental gap between member states. Water governance remains to be a key subject of discussion, particularly regarding the sub-regional cooperation frameworks, with increasing tensions in the Mekong basin as a result of the unceasing hydropower development and (geo-)political contestation of various cooperation mechanisms. The aspect of national security concern while having to balance with the aspiration toward digital advancement for 5G technology is somewhat an overlooked issue yet arguably a critical one. Cyberpolitics and international cyber cooperation remain fairly alienated given the modern-day superpowers and other countries making it tough to tie together one common framework and vision. Speaking of gender, one would argue that there is still long way to go toward gender equality, but we ought to appreciate the progress been made in the context of women empowerment including the increase of woman representation in politics and the security sector as well as their escalating contribution to the global economy. We also recognize the important role of youth across all sectors, be its politically, economically, or socially.

Last but not least, we wish to express our sincere thanks and appreciation to all the contributors, making this edition another lively set of insights on cross-cutting subjects in relations to the development prospects. The next edition will be released in mid-2021, looking primarily into the theme of "Diplomatic Briefing on Indo-Pacific Strategies and Cambodian Responses". If you are interested to contribute your perspective to the latter theme, please send us your abstract to our email address. For our readers, thank you for your supports throughout and we hope you find our Diplomatic Briefing as a useful resource.

Stay tuned for the third issue!

Pich Charadine
Deputy Director, Cambodian Institute for Cooperation and Peace

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edited by

Pich Charadine, Robert Hör

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