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วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์

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Regionalism, Security, and the Environment



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วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์

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1. วัตถุประสงค์

(1) เพื่อเป็นแหล่งเผยแพร่ผลงานทางวิชาการของคณาจารย์ นักวิชาการ นักศึกษาระดับบัณฑิตศึกษา และผู้สนใจทั่วไป

(2) เพื่อส่งเสริมและกระตุ้นให้เกิดการวิจัย พัฒนาและเผยแพร่องค์ความรู้ด้านรัฐศาสตร์ ในสาขาวิชาการเมือง การปกครอง การระหว่างประเทศ และรัฐประศาสนศาสตร์

2. ขอบเขตเนื้อหา

วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์ มหาวิทยาลัยเชียงใหม่ รับพิจารณาบทความวิชาการ บทความวิจัย และบทความปริทัศน์ ทั้งภาษาไทยและภาษาอังกฤษ ซึ่งมีเนื้อหาเกี่ยวข้องกับสาขาวิชาการเมือง การปกครอง การระหว่างประเทศ และรัฐประศาสนศาสตร์

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6. การพิจารณาบทความ

(1) กองบรรณาธิการพิจารณากลั่นกรองบทความในเบื้องต้น โดยพิจารณาจากความสอดคล้องของเนื้อหาของบทความกับขอบเขตเนื้อหาของวารสาร ความน่าสนใจ การนำเสนอองค์ความรู้ใหม่ และความครบถ้วนตามมาตรฐานวิชาการ และจะพิจารณาความซ้ำซ้อนของบทความโดยการนำบทความเข้าสู่กระบวนการตรวจสอบการคัดลอกผลงานการเขียนทางวิชาการผ่านโปรแกรม Turnitin

(2) บทความที่ผ่านการพิจารณาแล้วจะถูกนำต่อไปโดยผู้ทรงคุณวุฒิในสาขาวิชาที่เกี่ยวข้อง อย่างน้อย 3 คน พิจารณา โดยใช้ระบบ Double-blind peer review (ผู้พิจารณาไม่ทราบชื่อผู้เขียน และผู้เขียนไม่ทราบชื่อผู้พิจารณา)

(3) กระบวนการพิจารณาบทความตามข้อ (1) และ (2) จะใช้เวลาไม่เกิน 3 เดือน โดยกองบรรณาธิการจะแจ้งผลการพิจารณาให้ผู้เขียนทราบ และหากกระบวนการพิจารณาล่าช้ากว่าที่กำหนด กองบรรณาธิการจะแจ้งให้ผู้เขียนทราบถึงความล่าช้าดังกล่าว

(4) ในกรณีที่จะต้องมีการแก้ไข หรือปรับปรุงบทความ ให้ผู้เขียนแก้ไขบทความ และนำส่งกองบรรณาธิการภายใน 15 วันนับตั้งแต่วันที่ได้รับผลการพิจารณา

(5) การตรวจสอบความถูกต้องทางภาษา ของบทคัดย่อภาษาอังกฤษ (Abstract) และเนื้อหาของบทความ กรณีที่เป็นบทความภาษาอังกฤษ เป็นความรับผิดชอบของผู้เขียน ที่จะต้องดำเนินการให้ถูกต้องตามหลักไวยากรณ์ และรูปแบบการใช้ภาษาอังกฤษ ตั้งแต่ก่อนนำเสนอส่งบทความเข้าสู่ระบบ และตลอดกระบวนการพิจารณาบทความ วารสารมีสิทธิ์ปฏิเสธการตีพิมพ์บทความในกรณีที่ผู้เขียนไม่ดำเนินการแก้ไขภาษาอังกฤษให้มีความถูกต้องตามข้อเสนอแนะของกองบรรณาธิการ

(6) กองบรรณาธิการจะนำบทความที่ผ่านการพิจารณาและแก้ไขแล้ว เข้าสู่กระบวนการเรียงพิมพ์ และการตีพิมพ์เผยแพร่ โดยกองบรรณาธิการจะแจ้งกำหนดการตีพิมพ์เผยแพร่เบื้องต้นให้ผู้เขียนทราบ

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Editorial

This volume in supplemental issue focuses on the theme "Global Dynamics: Regionalism, Security, and the Environment." The articles featured in this volume are from academic conferences organized by the Faculty of Political Science and Public Administration, Chiang Mai University, namely the "International Security and the Environment", and the "Comparative Regionalism Workshop." Academically, these conferences provide a platform for presenters to explore and share their research interests, whether they are ongoing, completed, or still in the planning stages. These platforms help to build networks, foster dialogue between researchers and their participants, promote the friendly exchange of ideas, and contribute to the growth and development of academic work.

The Political Science and Public Administration Journal has compiled articles from these conferences, or those related to them, to serve as a platform to address new global challenges. These challenges encompass security issues (both traditional and non-traditional security), environmental concerns, and the dynamics of regionalism. These phenomena impact internal changes within countries, as global dynamics in economics, politics, security, and the environment can either intensify or slow down movements within various dimensions of a country.

The editors hope that readers will benefit from the diverse perspectives presented in this volume and be inspired to pursue further study and research in the future.

Narut Charoensri
Editor-in-Cheif

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Special Article

Opening Speech “Central Asia and Southeast Asia: A Tale of Geopolitics, Hedging and Regionalism in Two Regions”

**Dr Paradorn Rangsimaporn
at the Comparative Regionalism Workshop
Chiang Mai University, Thailand
8 February 2023**

Paradorn Rangsimaporn¹

Good morning. It is great to be here in Chiang Mai to participate in this important and timely workshop. I would like to thank Assistant Professor Dr Narut Charoensri and Chiang Mai University for kindly inviting me to give the opening speech today and for their generous hospitality. It is indeed an honour for me to do so. And I am also glad to have the opportunity to meet with several distinguished scholars from around the world both here in person and online. I am also pleased to see that the topics and regions covered today are very wide ranging which is fitting for a workshop that focuses on Comparative Regionalism.

I am a Thai diplomat and amateur researcher. So my speech will be more of a practitioner’s perspective rather than being theoretical in nature. I have to stress that I’m speaking in my personal capacity and the views expressed are my personal views and not that of the Thai foreign ministry or government. I chose to talk about Central Asia and Southeast Asia as this was my latest research during my time posted at the Thai Embassy in Astana, Kazakhstan. This culminated in a book called “Central Asia and Southeast Asia: Exploring the Dynamics of Greater Engagement recently published by Palgrave Macmillan”, which you can buy on Amazon. Please indulge me with this brief moment of self-advertising.

Another reason why Central Asia and Southeast Asia make an interesting comparison is that both share geopolitical similarities which hasn’t really been examined much in the academic literature. I will delve into greater detail on this in my talk.

But first, a word on regionalism. Professor Louise Fawcett, an expert on regionalism at Oxford University defined it “as a policy whereby states and non-state actors cooperate and coordinate strategy within a given region. Its aim is to pursue and promote common goals in one or more issue areas.” Regionalism was

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very much in vogue in the 1950s and 1960s with the creation of the European Economic Community in 1957 that later became the first pillar out of three of the European Union in 1993. And ASEAN was established by the Bangkok Declaration in 1967. While the term globalisation was the buzzword in the 1990s with the unprecedented global connectedness due to the end of the Cold War and the collapse of the Iron Curtain as well as the revolution in information communications technology, namely the internet, a new round of regionalism also took place with the establishment of MERCOSUR in Latin America by a series of treaties in the first half of the 1990s and the launch of the African Union in 2002.

Moreover, the collapse of the Soviet Union gave rise to new regionalism in the post-Soviet space, the largest of which is the Commonwealth of Independent States. The CIS encompassed all the former Soviet republics except for the 3 Baltic states but later saw Georgia and Ukraine leaving after conflict with Russia, while Turkmenistan was never a full member having not yet ratified the CIS Charter. The Shanghai Cooperation Organisation (SCO) is another important example of regionalism in this new Eurasian space. It was formally established in 2003 but had origins in the Shanghai Five grouping formed in 1996 between Russia, China, Kazakhstan, Kyrgyzstan and Tajikistan to settle their border issues. SCO has since expanded and now, in addition to the original Shanghai Five, includes Uzbekistan, India, and Pakistan. Iran is also set to become a full member this April.

Another important example of regionalism in the post-Soviet space is the Eurasian Economic Union which is an economic integration project that consists of Russia, Belarus, Armenia, Kazakhstan, and Kyrgyzstan. It has a combined population of 180 million people and a combined GDP of nearly 2 trillion USD. Not surprisingly that Thailand, like several other countries, is interested in concluding a Free Trade Agreement with the Union, seeing it as a big potential market. The five Central Asian states themselves have also tried to achieve regionalism which I will talk about later. And ASEAN is one of the successful regionalism models that the Central Asian states look to.

In recent years, other buzzwords have been circulating the academic and analytical space, namely minilateralism and the Indo-Pacific. Minilateralism has been increasingly advanced as a complement or perhaps even an alternative to multilateralism in which rising geopolitical tensions between great powers has often brought impasse and ineffectiveness to multilateral fora, most notably the UN. Minilateralism can bring faster-paced diplomacy as it is informal, with select membership and narrower issue-based focus. This is particularly true within the Indo-Pacific region, a contested geopolitical and geoeconomic space between and linking the two oceans. This concept is being challenged by China and Russia who see it as a framework pushed by the US and its Western allies in order to contain Chinese power. ASEAN itself, stuck between escalating US-China rivalry, has tried to promote its own ASEAN Outlook on the Indo-Pacific, focusing on ASEAN's

central role in the Indo-Pacific space, dialogue and cooperation, inclusiveness and prosperity for all.

Minilateralism can be a form of regionalism, some being regional or region-centred in nature such as the Lower Mekong Initiative and cooperation amongst the Greater Mekong Subregion countries. Members of the Quad – the US, India, Japan and Australia – can also be seen as part of the Indo-Pacific region, while members of the SCO represent Central Asia or Eurasia, but has since expanded to cover South Asia as well. BRICS and AUKUS, on the other hand, transcend regions and are groupings of like-minded countries be they in ideological, security or economic terms.

So regionalism has many flavours and forms but I would like to now focus on two regions that I believe deserve greater attention and comparison. And I would do so through 3 prisms – the geopolitical environment, hedging behaviour, and regionalism efforts. Central Asia and Southeast Asia are both on the Asian continent, but historically and culturally they are very far apart. Central Asia has been under Russian rule for over 100 years under the guise of first the Russian Empire and then the Soviet Union. It was immensely Russified and arguably Europeanised with Central Asian culture and identity firmly suppressed for a long time. Since gaining independence at the end of 1991, these countries have increasingly tried to restore and reassert their national identity, culture, and language, though Russian influence is still pervasive. But despite this difference, one could say that both regions have experienced colonisation and are decolonising states with Southeast Asia beginning earlier in the post-WW2 period and Central Asia in the post-Cold War period.

Geopolitically they are also similar. Both regions are beset by great-power competition and rivalry, with China looming large in both regions as a massive and powerful neighbour which is spreading its influence economically through its Belt and Road Initiative in both regions, and also politically and militarily. In Southeast Asia, it is the strategic rivalry between the US and China that dominates. In Central Asia, where the loaded term the Great Game is often applied to, there was strategic competition between the West, on the one hand, and Russia and China on the other. However, since the withdrawal of US and NATO troops from Afghanistan and following the Taliban retake of the country in August 2021, the West's role in the region has been severely limited, compared to its post-9/11 height. While Russia and China share strategic convergence and interests in countering US global predominance they are also, for now, in a strategic condominium in Central Asia, with a broad division of roles. Russia is seen as the traditional security guarantor in the region and has a dominant political and military role, while China plays an increasingly influential economic role, gradually displacing Russia's previous economic dominance. For now, both powers seem to be comfortable with this arrangement, but China's expanding security footprint in Central Asia, with bases established in Tajikistan and increasing arms exports to the region, arguably sets the

stage for potential geostrategic rivalry between Russia and China in Central Asia. Russia's war on Ukraine and the subsequent Western sanctions has also made it increasingly isolated from the world economy and more reliant on China, making it increasingly the junior partner in the relationship. This strategic disbalance will likely breed tensions in the future.

Both regions also consist of states that vary from small states like Laos and Kyrgyzstan and medium states or secondary powers like Indonesia and Kazakhstan. Both regions' states are also in asymmetrical relationships with their respective region's great powers – Russia and China in Central Asia, and China and the US in Southeast Asia. The foreign policies of countries in Central Asia and Southeast Asia have, therefore, similar characteristics, but employ different terms. Central Asian states are often described as pursuing a multi-vector foreign policy to varying degrees, while Southeast Asian countries' foreign policies have often been described as omnidirectional or multidirectional. In aim and practice, they are essentially the same as they seek to diversify their foreign relations to secure as many security, political and economic benefits as they can. They also seek to enhance their bargaining position whilst minimising potential threats and challenges. Such a policy enables the successful implementation of a hedging strategy, neither balancing nor bandwagoning, which helps preserve their strategic autonomy and creates a stable environment for their economic development in an increasingly multipolar world.

Countries in both regions have tried to implement such a hedging policy to varying degrees and success. They have tried to avoid taking explicit sides, pursued opposing measures to offset different risks, and tried to diversify their relations to cultivate a fall-back position, particularly with middle-level powers like Japan, South Korea, India and the EU. But the degree to which each state can pursue an effective hedging strategy varies according to their capability and their geostrategic environment. For instance, the case of Tajikistan and Kyrgyzstan is similar to Laos and Cambodia. Due to their limited economic capabilities and resources, geographical proximity to China, as well as overwhelming dependence on Chinese investment and loans, they have less room for manoeuvre vis-à-vis China. Due to these internal and external limitations, these states are more restricted in their pursuance of a hedging strategy, compared with more resourceful and advantageously-located countries like Kazakhstan and Uzbekistan in Central Asia, and Indonesia, Vietnam and Singapore in Southeast Asia.

Another factor that constrains the Central Asian states' strategic and foreign policy manoeuvrability is their geographic position as landlocked states that forces them to be dependent on their neighbours as transit states to access the global market. This is in sharp contrast to the countries of Southeast Asia where all, except Laos, are coastal states and strategically positioned along the important maritime routes of the South China Sea and the Malacca Straits, thereby with greater access to the world market and less constrained than the landlocked Central Asian states in

both geography and strategic flexibility. Moreover, while their landlocked condition has forced the Central Asian states to try to pursue a multi-directional strategic orientation and to forge good relations with their neighbouring transit states, those who are major energy exporters such as Kazakhstan have succeeded more than their energy-poor landlocked neighbours, namely Kyrgyzstan and Tajikistan. Kazakhstan has been notably successful in pursuing a hedging policy by courting various foreign partners and investors and establishing multiple gas and oil pipeline routes to different markets in order to reduce their vulnerability.

While Southeast Asia has been relatively successful in its regionalism project, namely ASEAN, Central Asian states have been less so. Like Southeast Asian states, external threats and challenges and common concerns and interests have prompted Central Asian states to try to cooperate with each other more and achieve a certain level of regionalism. However, they have so far not been successful as their past attempts have often been hijacked by Russia – the traditional hegemon – who, for instance, displaced the Central Asian Cooperation Organization with the Russian-led Eurasian Economic Community that later became the EAEU. Central Asian regionalism attempts were also often derailed by mutual suspicion and rivalry, most evidently between Kazakhstan and Uzbekistan, the two regional powers, which was compounded by the personal animosity and rivalry of their leaders – Nazarbayev and Karimov. This changed with Uzbekistan’s new President Mirziyoyev in 2016 who opened up the country and improved relations with other Central Asian states. Recognising the need for greater regional cooperation, the Central Asian states are cooperating with each other more and there is discernible momentum towards an exclusive Central Asian regionalism, in which neither Russia nor China are part of. Four “consultative” summits have so far been held in Kazakhstan (2018), Uzbekistan (2019), Turkmenistan (2021) and Kyrgyzstan (2022) which seems set to be a regular dialogue platform. The Central Asian states also have in place what is called C5+1 dialogue formats in which the five Central Asian states engage with external powers that include Japan, South Korea, the EU, India, the US and recently even Russia and China.

Central Asian states recognise the need for such a dialogue platform in order to manage relations with external powers. This is similar to the use of ASEAN as a platform to manage relations with the great powers, through ASEAN-led platforms such as the ARF, ASEAN+3, and East Asia Summit, to ensure that no individual power dominates and to enmesh them in a network of diplomatic and economic relations in which ASEAN can assert influence while insulating themselves from undue external influence. Such a what I call “hedging regionalism” role of ASEAN, namely the use of regional cooperation or regional platforms as a hedging mechanism, is one of the attractions of the ASEAN model for Central Asian states. Indeed, the first C5+1 dialogue format with Japan was based on the ASEAN+3 format. Another appeal is the normative factor where the ASEAN way of respect for sovereignty, non-interference, consensus, flexibility and informality, as well as

the focus on regime security, economic development and stability over democracy promotion by several ASEAN members converges well with the norms, principles, and priorities held by Central Asian leaders. Another attraction is ASEAN's "soft regionalism" approach, focusing on consensus, consultations, flexibility and weak institutions that do not override national sovereignty, as opposed to the "hard regionalism" of the EU with its formal integration and institutionalisation, leading to a supranational organisation. The ASEAN model is therefore one of the main examples of successful regionalism that Central Asian states often look to.

I would like to end by noting that the theme of this workshop – comparative regionalism in a Volatile, Uncertain, Complex and Ambiguous (VUCA) world – is a very apt and timely one. The Covid-19 pandemic and the war in Ukraine has laid bare the uncertainties that we face in today's highly volatile, complex, ambiguous and dangerous world. The return of great-power conflicts in the form of US-China rivalry as well as Russia's conflict with the Western world adds another layer of complexity to other common challenges such as climate change, pandemics, and terrorism in our already complex and multi-polar world. In a time when major multilateral institutions such as the UN are too paralysed to act, the need for cooperation amongst countries that share the same region or the same values has become even more pressing in order to act swiftly in addressing their common challenges. That is why it is increasingly more important for us to look beyond our immediate region to learn from and study about other regions to gain insights and lessons learned that can be usefully applied to our own region. And that is why Comparative Regionalism matters.

Sino-Thai Energy Collaboration: A Chinese Perspective on the Present State, Emerging Challenges, and Prospective Trajectories

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Abstract

China-Thailand energy cooperation has made significant progress in recent years, positively contributing to the economic development and energy security of both countries. The purpose of this article is to discuss the current situation, challenges, and prospects of energy cooperation between China and Thailand. Firstly, the article reviews the history and development trends of China-Thailand energy cooperation, emphasizing the collaborative projects between the two countries in oil, natural gas, renewable energy, and electricity. Second, the article analyzes the main challenges facing Sino-Thai energy cooperation, including energy price volatility, ecological concerns, and environmental protection in sustainable development. The article then explores potential opportunities for future Sino-Thai energy cooperation, including the prospects for promoting innovation in clean energy technology and strengthening regional cooperation through energy connectivity. Finally, the article summarizes the significance of energy cooperation between China and Thailand, emphasizing that collaboration in the energy sector will positively impact regional and global energy security.

Keywords Energy Cooperation, Energy Security, Challenges, Sustainable Development, Clean Energy

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1. Introduction

In the contemporary global landscape, it is widely acknowledged that the cultivation and sustenance of positive diplomatic relations are pivotal to the attainment of enduring national interests (Guo & Wang, 2017). Thailand, situated in the central region of the Indochinese Peninsula, is a close and friendly neighbor of China and an important link for China to enhance its energy cooperation with ASEAN. Since establishing diplomatic relations between China and Thailand in 1975, the two countries have been good neighbors and friendly, with steady progress and fruitful results in bilateral cooperation. In 1993, China became a net importer of refined oil products. In the same year, China's energy sector began the era of "going out", active participation in global energy cooperation (Xu, 2017). After the financial crisis 2008, China's initiative for energy cooperation with the outside world has been strengthened. China and Thailand signed the Memorandum of Understanding between the Government of the People's Republic of China and the Government of the Kingdom of Thailand on Cooperation in Sustainable Development in Bangkok on 22 December 2011. They collaborated on cleaner and renewable alternatives for the economy, as well as research and development on energy efficiency 2012, China and Thailand reached a consensus and signed the "China-Thailand Joint Action Plan on Strategic Cooperation 2012-2016," which established a comprehensive strategic partnership and further promoted cooperation between the two countries in the fields of sustainable development and energy efficiency. In 2019, Thailand officially became a part of the "Belt and Road" energy partnership, marking the beginning of a new phase in China-Thailand energy cooperation. In 2021, China will become the second-largest source of foreign investment in Thailand. The Thai Chinese Rayong Industrial Park (RIP) is not only a flagship of China's outbound investment but also a typical example of China-Thailand cooperation. In 2022, marking the 10th year of the strategic partnership between China and Thailand, General Secretary Xi Jinping described the relationship between the two countries as "China and Thailand are one family." He also signed the "China-Thailand Joint Action Plan on Strategic Energy Cooperation" and the "China-Thailand Cooperation Plan on Jointly Promoting the Construction of BRI. "The Thai side is also willing to take this opportunity to build a more prosperous, stable, and closer Thailand-China community of destiny."

As the Russia-Ukraine crisis intensifies, global energy prices are fluctuating dramatically, posing a severe challenge to the energy security of all countries. In the contemporary geopolitical milieu, China has been at the forefront of advocating for a paradigm of sustainable security cooperation with nations situated along the Belt and Road Initiative's (BRI) expansive network. This initiative is underpinned by an integrative approach that harmonizes the imperatives of security with those of development, thereby creating a synergistic framework that is conducive to positive bilateral engagements (Guo & Liao,

2019). In 2022, Thailand's power generation capacity was 180.4 gigawatt-hours (GWh), marking a 2.3% increase from the previous year. The breakdown of power generation sources is as follows: oil accounted for 1.7 GWh, natural gas for 114.6 GWh, coal for 35.5 GWh, and renewable energy for 28.5 GWh (BP, 2023). Thailand continues to rely on natural gas as the primary source of energy for power generation. This reliance means that significant fluctuations in the global price of natural gas can have a profound impact on its energy security. Simultaneously, the gradual recovery of Thailand's domestic economy is leading to an increased demand for energy, widening the gap between energy supply and demand. Therefore, securing energy supply and promoting sustainable socio-economic development through energy transition is an urgent need for Thailand. Globally, 151 countries have proposed carbon neutrality targets, encompassing 92% of the world's GDP, 89% of the world's population, and 88% of the world's emissions (Xu, 2023). Electricity Generating Authority of Thailand (2023), in its 2022 Sustainability Report, aims to achieve carbon neutrality by 2050. The report emphasizes a significant effort towards power transformation and a 30% reduction in carbon emissions by 2030 compared to 2021 (EGAT, 2023). In 2020, China proposed for the first time at the UN General Assembly a "dual carbon" goal, stating that it would be "carbon neutral" by 2060 and "peak carbon emissions" by 2030. Both China and Thailand share the vision and goal of developing renewable energy and promoting a low-carbon energy transition to achieve sustainable development.

2. Literature Review

Against the backdrop of the growing significance of global energy security and environmental protection, energy cooperation among countries has made significant progress. China's strategic positioning and cooperation mechanisms in the international energy transition are examined through a SWOT analysis. This analysis is used to assess the advantages and disadvantages of China, as a non-Arctic country, in carrying out energy projects in the Arctic region. The study systematically examines the cooperation on oil and gas resources between China and North and Central Asian countries, focusing on the supply and demand characteristics, interdependence, and cooperation prospects of the two sides based on relevant data from 2016-2021 (Duan & Duan, 2023). Energy collaboration between China and ASEAN within the Belt and Road framework is being systematically pursued, focusing on electricity cooperation. The discussion involves exploring opportunities, complementary advantages, and pathways for electricity cooperation between China and ASEAN (Fen, Gong, & Guo, 2020). However, energy cooperation under the Belt and Road framework is still unsustainable. Energy projects are not in line with ASEAN's green policies, and China's renewable energy achievements have not benefited its energy cooperation

with neighboring countries. This presents a trilemma of security of energy supply, energy justice, and environmental sustainability. Nevertheless, Yang, Huang, and Wang (2023) propose that energy cooperation between China and Thailand is sustainable. China's foreign energy cooperation projects are growing rapidly. However, there is a noticeable lack of research on energy cooperation between China and Thailand. Many Chinese scholars tend to focus on typical countries' energy cooperation within the context of regional energy cooperation between China and ASEAN. As a result, studies on energy cooperation between China and Thailand are often overshadowed by regional studies. This paper will further explore fossil energy cooperation and renewable energy cooperation between China and Thailand in greater detail, building on the existing foundation.

Thailand's future energy strategy and guidelines prioritize reducing fuel consumption and increasing the utilization of renewable energy sources. This gradual shift aims to reduce the country's over-reliance on natural gas and enhance national energy security (Shoram, Hirunlabh, Kasayapanand, Amornkitbamrung, Teekasap, & Khedari, 2018).

In terms of renewable energy, there is a growing emphasis in Thailand. Thailand's energy demand has gradually increased over the past few decades, but energy efficiency has been limited by the structure of the domestic economy (Tip Pichai, 2022). With the implementation of the Alternative Energy Plan, Thailand has boosted the utilization of renewable energy within the country. This includes promoting the production and consumption of renewable energy, as well as estimating the marginal abatement cost of subsidized renewable energy generation (Muangjai et al., 2022). Thailand's heavy reliance on fossil fuels has led to high greenhouse gas (GHG) emissions. Scholars have increasingly emphasized the crucial role of hydrogen in achieving net-zero GHG emissions, leading to discussions of scenarios involving low and high hydrogen use (Pradhan, Limmeechokchai, Chaichaloempreecha, & Rajbhandari, 2024). Despite China's significant investment in the construction of various renewable energy projects in Thailand, there is a dearth of literature addressing the current status of renewable energy development in Thailand as a whole. This gap fails to provide a comprehensive summary of the collaborative energy projects undertaken by China and Thailand in the sector.

Nuclear energy is characterized by its high level of cleanliness and stability, and it has gradually become part of the energy transition plans in Asian countries. As early as 2013, some scholars proposed the construction of a nuclear power plant in Thailand to generate clean and safe electricity by harnessing heat energy from nuclear reactors. The establishment of nuclear power plants plays a crucial role in ensuring Thailand's energy security. However, due to concerns about the potential threats posed by nuclear power plants and public opinion, the Thai government decided to postpone the construction plan for nuclear power plants (Pongsoi & Wongwises, 2013). Nuclear power has significant advantages,

but modern nuclear reactors are prone to accidents and failures. Additionally, there may be an imminent shortage of high-quality uranium, and the thermoelectric fuel cycle of nuclear power plants consumes and degrades large amounts of water. The use of nuclear energy should be limited during the transition to alternative energy sources (Sovacool, 2010). However, this section of the article only addresses the feasibility and potential threats of constructing nuclear power plants as an alternative energy source in Thailand. It does not delve into the potential for cooperation between China and Thailand to build nuclear power plants.

Currently, there is insufficient research on energy cooperation between China and Thailand. Southeast Asia's energy cooperation is deeply influenced by the strategic rivalry between the U.S. and China. As China's global influence grows, the U.S. has heightened its competitive stance, impacting regional energy collaborations (Luo & Chen, 2022; Yang, 2022). China's Belt and Road Initiative promotes economic integration, while the U.S. champions democratic values and a rules-based order. Southeast Asian nations must navigate this complex dynamic, with decisions potentially reshaping domestic and regional energy landscapes.

Energy cooperation between China and Thailand only exists as a case study within the broader context of energy cooperation between China and ASEAN, and it lacks a separate and detailed study. This paper aims to analyze the current status of fossil fuels and renewable resources in Thailand. Additionally, it examines the existing energy projects between China and Thailand, presenting the status of energy cooperation between the two countries. The current situation highlights the challenges of energy cooperation between the two countries and provides insight into the prospects for future collaboration.

The remainder of this paper is divided into four sections. The following section provides a detailed overview of the current status of natural gas, hydroelectric, wind, solar, biomass, and nuclear energy in Thailand, along with energy cooperation projects between the two countries. The article discusses the challenges of energy cooperation between China and Thailand in terms of energy security and sustainable development. The final section of the article discusses the opportunities and significance of energy cooperation between China and Thailand at the bilateral, regional, and international levels. The conclusion summarizes the paper.

3. Methodology

Qualitative analysis, as an esteemed research methodology, is distinguished by its emphasis on elucidating the intrinsic qualities of social phenomena, encompassing their contextual nuances, underlying processes, and the profound significance of human conduct. In contradistinction to quantitative methodologies, which are predicated on the empirical measurement and statistical inference of

numerical data, qualitative analysis delves into the subject matter by amassing non-numerical data. This approach affords a deeper exploration of the subject's internal logic and the multifaceted dimensions of complexity it embodies.

Within the purview of the present scholarly work, a qualitative analytical framework is embraced to facilitate an inquiry into the dynamics of energy cooperation. The study's purview encompasses China and Thailand, selected for their pivotal roles in regional energy diplomacy. The research endeavors to synthesize an overview of the bilateral energy collaboration by critically examining a compendium of data sources, including the authoritative BP Statistical Yearbook of World Energy 2023, Thailand's strategic energy development plan as articulated by its Ministry of Energy, and the pertinent energy policy directives emanating from China's Ministry of Energy. Through this qualitative lens, the paper aims to offer a nuanced interpretation of the energy partnership's trajectory, challenges, and potential avenues for future synergy.

4. Current Situation of China-Thailand Energy Cooperation

Although the energy cooperation between China and Thailand began relatively late, the outcomes of the collaboration should not be underestimated. With the extensive promotion of the "Belt and Road" initiative, energy cooperation between China and Thailand has reached a new level. Chinese enterprises are actively expanding their presence in Thailand, focusing on technical cooperation, engineering contracting, and market expansion. Currently, collaboration in the sectors of oil, natural gas, and renewable energy, including hydro energy, wind energy, solar energy, biomass energy, and nuclear energy, is beginning to materialize.

Petroleum Cooperation

Thailand had 300 million barrels of proven oil reserves as of 2020, representing 0.1 percent of global reserves in that year. The growth rate of oil production from 2012 to 2022 is -3.5%, while the growth rate of Thailand's domestic oil consumption is 1.3%, leading to a significant disparity between oil supply and demand (BP, 2023). China is the world's second-largest oil consumer after the United States, but it is also the world's largest oil importer. Chinese oil companies actively respond to the "going out" policy and have formed important cooperation and development partnerships with many oil-rich countries around the world. China and Thailand have been collaborating in the petroleum industry, focusing on extraction technology, industry skills training, infrastructure construction, and market expansion.

Firstly, China and Thailand have enhanced technical cooperation in oil exploration. In 1993, the China National Petroleum Corporation (CNPC) was granted the right to explore and develop the Bangya Block in Thailand, marking the first time China had been granted such rights to explore and develop oil

overseas. The GW80 team of Great Wall Drilling International has been operating in Thailand for 19 years, completing a total of 743 wells and drilling over 1.99 million meters. Their efforts have been acknowledged by Thailand's largest onshore oil company, PPTEP (Su & Yang, 2023).

Secondly, the two countries have also enhanced their collaboration on skills training in the oil industry. In 2020, SINOPEC and Thailand's Ministry of Labour collaborated to "develop skills training for the oil, gas, and chemical industry," to enhance the professional skills of Thai local employees, addressing the shortage of high-level talent in Thailand's oil and gas industry, and boosting the overall international competitiveness of the industry (Zhao, 2020). The petroleum industry also emphasizes infrastructure development. The construction of the refined oil products pipeline in northeastern Thailand, undertaken by the PetroChina Pipeline Bureau, was completed in 2022. This project is a strategic energy initiative for Thailand. The successful completion of the pipeline will not only contribute to local economic and social development, but also enhance Thailand's connectivity with Myanmar, Laos, Vietnam, and other countries, and strengthen energy cooperation within ASEAN countries (Sun 2022a).

Thirdly, in the context of oil market expansion, Sinopec (Hong Kong) Limited signed an equity acquisition agreement with Susco Refined Oil and Jet Fuel Sales Company in Thailand to acquire 49% of its wholly-owned subsidiary, Susco Dealers Company Limited, in 2022. This collaboration will leverage Sinopec's strengths in resources and branding, as well as Susco's advantages in terms of network. The collaboration will expand the terminal network, continuously increase the sales of refined oil products, actively explore new energy and low-carbon environmental protection-related businesses, and jointly develop refined oil and new energy markets in Thailand and Southeast Asia (Liu & Li, 2022).

Cooperation on natural gas

As of the end of 2022, Thailand had 46,588.77 billion cubic meters of proven natural gas reserves (Ministry of Energy, 2023), which are relatively abundant. In 2022, 25.6 billion cubic meters of natural gas were produced. Over the decade from 2012 drive for natural gas pipelines. These achievements have technology, as well as in China has made significant advancements in research and development (BP, 2023). According to 2022, the annual growth rate of natural gas production was only -2.4%, with natural gas production declining year by year (BP, 2023). According to Thailand's Ministry of Commerce, natural gas imports accounted for 22.3% of Thailand's total energy imports in 2023. China has made significant advancements in the research and development of natural gas exploration technology, as well as major technology and equipment for natural gas pipelines. These achievements have continued to drive independent innovation, further enhancing China's capacity for independent innovation, as

stated in the China Innovation, and enhancing China's development steadily (Department of Oil and Gas, 2022). China and Thailand's collaboration on cooperation, with a focus on the construction of a natural gas pipeline. China and Thailand are collaborating on engagement capability (2022). It has the technical capability to "engage" and participate in international cooperation. China and Thailand are collaborating on natural gas cooperation, with a focus on the construction of a natural gas pipeline.

China and Thailand's collaboration on natural gas is steadily deepening. Over the past decade, PetroChina Pipeline Bureau has constructed over 1,500 kilometers of pipelines in Thailand, representing more than 60% of the total length of Thailand's long-distance oil and gas pipeline network. In a single decisive move, CNPC Pipeline Bureau Asia Pacific successfully secured the turnkey project for Thailand's seventh gas treatment plant and interconnecting pipeline in 2021. This achievement, marking the largest project undertaken by Chinese-funded enterprises in Thailand, effectively disrupts the longstanding monopoly held by Japan and South Korea over the natural gas market in the country. With an annual processing capacity of 5 billion cubic meters, the project is designed to replace Thailand's No. 1 gas treatment plant, which has been operational for over 30 years. This will lay the foundation for entering the high-end oil and gas market in Thailand (Li, 2021). In the natural gas power generation sector, natural gas is projected to account for 63.5 percent of Thailand's total power generation in 2022 (BP, 2023). PetroChina Pipeline Bureau Engineering Co., Ltd.'s Thailand branch has been awarded the contract to supply natural gas for the Sun Gang Power Plant gas pipeline project in Ratchaburi province, Thailand. Once completed, the project will meet the demand for clean energy in Ratchaburi province and the west-central region of Thailand (Sun, 2022b).

Cooperation on renewable energy

Thailand is situated in the tropics and possesses ample reserves of renewable energy, including hydro, wind, solar, and biomass. The installed capacity for renewable energy power generation is 3,119.62 megawatts (EGAT, 2023), and renewable energy has been developed to a significant degree. During the 13th Five-Year Plan period, China's renewable energy development has achieved remarkable results. By the end of 2020, China's installed renewable energy power generation capacity accounted for 42% of the total installed power generation capacity, totaling 934 million kilowatts, which ranked first in the world for many consecutive years. China plans to vigorously develop renewable energy in its 14th Five-Year Plan, to adapt to the global energy revolution trend and continue to participate in the construction of the global green low-carbon energy system. The focus will be on constructing a new type of power system and deepening the promotion of energy technology and production capacity cooperation (NDRC, 2023). With the deepening of China-Thailand cooperation

under the "Belt and Road" initiative, an increasing number of Chinese enterprises are investing in Thailand's renewable energy sector through engineering contracting, technical cooperation, and capacity produced. Currently, cooperation between China and Thailand in the field of renewable energy has developed in the areas of hydro energy, wind energy, solar energy, biomass energy, and nuclear energy.

Hydro Energy Cooperation

As of August 2023, Thailand's installed hydropower capacity is 3,038.13 MW (EGAT 2023), and hydropower has been developed to a greater extent than other renewable energy sources. Since 2014, China has held the top position in the world for installed hydropower capacity and power generation. This has given the country a significant competitive edge in international hydropower development. Under the "Belt and Road" initiative, Chinese enterprises have emerged as significant partners in Thailand's hydropower development, leveraging their financial and technological advantages.

China-Thailand hydropower cooperation primarily involves engineering contracting. On January 18, 2023, the EPC project for Thailand's Pachu 2*7 MW hydropower plant, awarded to Sinohydro (Thailand) and entrusted to Jiangxi Hydropower Company, was fully handed over. As the largest hydropower project invested in and constructed by the National Electricity Authority of Thailand in recent years, the Phachu Hydropower Station has an average annual power generation capacity of 91.26 million kWh. This capacity plays a crucial role in promoting the development of sustainable green power in Thailand (Li & Zeng, 2023). The successful handover of this project marks significant progress in the collaboration between China and Thailand in the field of hydro energy and establishes a strong foundation for future cooperation.

Wind Energy Cooperation

Thailand is abundant in wind energy resources because of tropical monsoons and cyclones, but the average wind speed is low and primarily concentrated in the southern region of the country. Thailand's wind power generation has increased by 69.8 percent from 2012 to 2022, with a wind power generation capacity of 3.4 MW in 2022 (BP, 2023). Thailand aims to generate 3.4 MW of wind power by 2036 (BP, 2023). Thailand's wind power generation capacity is expected to reach 3.4 gigawatts by 2026 (BP, 2023). Thailand aims to achieve 3,000 MW of wind energy by 2036 (Ministry of Energy, 2016) and increase the country's wind energy target to 7 GW by 2037 (Ministry of Energy, 2020). In 2023, the Thai Wind Energy Association and the Wind Energy Professional Committee of the Chinese Renewable Energy Society signed a Memorandum of Understanding (MOU) on China-Thailand cooperation in the field of wind energy, with the expectation of strengthening their cooperation in the future. China is the world's largest producer of wind power. Low-speed wind

power has become the primary source of new domestic installed capacity, and the technology for low-speed wind power continues to mature and advance. China and Thailand have strong technical expertise in the field of wind power.

Firstly, onshore wind power development cooperation is progressing steadily. Thailand's EGC's inaugural wind power project, THEPPANA wind farm, is situated in Chaiyaphum Province, northeast of Bangkok, Thailand. The project marks the first commercially operated wind farm in Thailand to be connected to the national PEA grid. The wind turbines, supplied by China's Goldwind, include the largest single-capacity wind turbine installed in Thailand to date. Since its grid connection and operation in 2016, the project has not experienced any safety accidents, and the units have operated with high reliability (Song & Guo, 2022a).

Thailand's GNP wind power project is contracted by CECC Zhongnan Hospital. The project has a total installed capacity of 67.5 MW, with 33 Gamesa G114 wind turbine units installed, including 18 units of 2.0 MW and 15 units of 2.1 MW. The hub height is 153 meters, which is currently the highest onshore wind power in Asia. The project is scheduled to achieve grid connection of the entire wind farm, consisting of 33 units, on 19 October 2017, with the final handover of the project expected on 14 February 2018 (Li, 2017).

Secondly, thanks to Thailand's extensive coastline along the Gulf of Thailand, the country has favorable conditions for the development of offshore wind energy. In 2023, the Thai government plans to collaborate with China Vision Energy Group, Gunkul Engineering & Design, and the Ratch Group to develop the 260 MW Hanuman offshore wind project. The project will comprise 65 wind turbines, each with a capacity of 4 MW.

Solar energy collaboration

Statistics from the Thai Ministry of Energy show that Thailand receives an average of 18 megajoules per square meter of solar energy per day. Thailand aims to increase its installed PV capacity to around 15 GW by 2037, with half of its renewable energy generation coming from PV (Ministry of Energy, 2020). In 2022, China's exports of PV products increased by 67.8% year-on-year. The cost of PV power generation in China decreased by more than 80% in terms of kilowatt-hours (kWh). As a result, China's PV industry has evolved into an industrial and supply chain with a competitive advantage in the global market (Liao, 2023). China-Thailand photovoltaic (PV) cooperation focuses on technical and industrial collaboration.

At the technical cooperation level, the project utilizes the hydroelectric power station at the Sirindhorn Reservoir in Ubon Province, Thailand, in combination with PV panels manufactured in China. This setup enables the provision of PV power during the daytime and hydropower at night, thereby enhancing the stability of the power supply in the region. The project has installed over 144,000 PV modules,

totaling an installed capacity of 58.5 MW. It can reduce 47,000 tonnes of carbon dioxide emissions annually, helping Thailand decrease its dependence on highly polluting thermal power generation and achieve its goal of increasing the proportion of renewable energy to 35% by 2037 (Song & Guo, 2022b).

Under the "Belt and Road" initiative, China Trina Solar Technology (Thailand) Co., Ltd. has been actively engaging in industrial cooperation. The company has invested US\$200 million to establish a solar module factory in Thailand's Thai Chinese Rayong Industrial Park, with a projected annual production capacity of 700 megawatts of photovoltaic cells and 500 megawatts of photovoltaic modules. This investment has led to the creation of numerous jobs in the local area. At the same time, Trina Solar's investment project will attract a series of supporting enterprises in the industrial chain, thus forming a complete industrial cluster in the Thai market. The new energy cooperation between China and Thailand has a radiating effect on other countries in the Southeast Asian region (Li & You, 2016).

Biomass Collaboration

Thailand has a well-developed agricultural sector, with five crops (rice, sugarcane, cassava, maize, and oil palm) serving as biomass feedstocks. These crops are primarily used in the industry and produce minimal electricity. Biomass is not centrally utilized, despite a large surplus, due to high collection costs. According to the International Energy Agency (2021), Thailand's energy supply from biomass and waste was 882,462 kJ (2021). Waste-to-energy cooperation is a focus of energy in various aspects of collaboration between China and Thailand, with Chinese companies participating in Thailand's waste-to-energy initiatives.

China Electric has signed an EPC contract for the 1x12MW waste power plant project of TPIPP Songkhla in Thailand, marking another milestone in China Electric's ongoing regional development in the Thai market. CECC International Group and Pathum Rat Sugar have signed an EPC (Engineering, Procurement, and Construction) contract for an integrated comprehensive project involving a sugar mill and biomass power plant in Bangkok, the capital of Thailand. The contract is valued at USD 208 million. This is the first new type of project signed in Thailand since the establishment of the International Group. The signing of this project brings new opportunities for China Electric and International Group to develop in the Thailand market (Wang, 2022).

Nuclear Energy Cooperation

With its high energy density and low energy consumption, nuclear energy is a crucial area for the advancement of renewable energy in the future. In 2022, China is expected to have 53 commercial nuclear power units with a nuclear power generation capacity of 417.78 billion kWh, representing a 2.5% year-on-year increase. The scale of nuclear power units under construction will continue to be the largest in the world. Additionally, there will be significant achievements in

nuclear energy science and technology innovation, new developments in nuclear energy-related industries, and progress in the application of nuclear technology. Furthermore, international cooperation in nuclear energy will continue to deepen (Wang, 2022). International cooperation continues to deepen (Zhang, Li, & Bai, 2023). In 2017, China and Thailand signed an Agreement between the People's Republic of China and the Government of the Kingdom of Thailand on Cooperation in the Peaceful Uses of Nuclear Energy. The first meeting of the China-Thailand Joint Committee on Cooperation in the Peaceful Uses of Nuclear Energy was held in Beijing in 2018, reviewing the positive progress made in nuclear energy cooperation between the two countries. According to Thailand's energy development report PDP2010, the country's installed power capacity is projected to reach 70.69 million kilowatts (kW) by 2030, with 2 million kW coming from nuclear power. Thailand plans to finalize the feasibility study by 2017, complete the bidding for nuclear power projects in 2020, and construct the first nuclear power unit in 2026 (Ministry of Energy, 2010). In recent years, Thailand has strengthened its development of nuclear power plants, but the actual construction of nuclear energy has been slow. Currently, the focus of China-Thailand renewable energy cooperation remains on wind power and photovoltaic power generation. On the one hand, the development of nuclear power in Thailand was criticized by some academics and environmentalists after the Fukushima nuclear crisis in 2011. The National Energy Policy Committee postponed the 4,000 MW nuclear power generation plan it had set out in 2010 (Pongsori & Wongwises, 2013). On the other hand, the contradiction between Thailand's domestic energy supply and demand has further increased. According to the National Energy Development Report PDP 2015, Thailand plans to achieve the target of nuclear energy contributing no less than 5 percent of the total energy supply by 2036 (Ministry of Energy, 2016). In the future, cooperation between China and Thailand in the field of nuclear energy will be an important aspect of renewable energy collaboration.

5. Challenges in China-Thailand Energy Cooperation

Although China and Thailand have made progress in the collaboration on fossil energy and renewable energy, they still encounter significant challenges. China and Thailand face challenges in energy cooperation, particularly in the areas of energy security and sustainable development. Energy security is reflected in three aspects: high external dependence, lack of energy storage facilities, and inability to control energy pricing power. Sustainable development encompasses the fields of oil, natural gas, renewable energy, and nuclear energy.

Energy security

The escalating energy prices resulting from the global energy crisis have presented a challenge to the energy security of China and Thailand. This challenge is primarily evident in the growing dependence on foreign countries for energy, the inability to ensure a stable energy supply, and the absence of a robust energy market. According to BP's 2023 statistics, energy prices surged in 2022. The price of Brent crude oil averaged \$101 per barrel in 2023, reaching its highest level since 2013. Additionally, natural gas prices in Europe and Asia reached new highs (BP, 2023). In response to the increasing fuel prices, the Electricity Generating Authority of Thailand has implemented changes in fuel price management and power generation schedules to alleviate the impact of fuel price fluctuations on people's livelihoods and to uphold the security of the national power system (EGAT, 2023). Energy dependence, which refers to the extent of a country's net energy imports about its energy consumption, is a crucial indicator of energy security. According to the World Bank, Thailand's reliance on external energy sources was as high as 42 percent in 2014. Meanwhile, the price of natural gas has increased, impacting the Thai government's imports of natural gas, and leading to a decrease in energy supply. On the one hand, Thailand's domestic power development is highly reliant on natural gas, with 180.4 MWh of electricity generation in 2022, marking a 2.3 percent increase compared to the previous year. Additionally, 1.7 MWh is generated from oil, 114.6 MWh from natural gas, 35.5 MWh from coal, and 28.5 MWh from renewable energy (BP, 2023). Thailand's natural gas primarily comes from imports. According to the Organization of Petroleum Exporting Countries 2022 report, Thailand's natural gas imports of 17,131 million cubic meters are the highest in the last decade. Thailand's natural gas import infrastructure is relatively limited and vulnerable to geopolitical manipulation, and the domestic energy security situation is not promising. Thailand's energy policy is currently being adjusted in the short term to align with national interests and specific economic conditions. However, the fundamental dominance of natural gas in the country has not changed. The Electricity Generating Authority of Thailand of Thailand has emphasized in a relevant report that individuals and businesses need to conserve energy in their daily lives to address the energy crisis. On the other hand, the escalating cost of imported energy has amplified Thailand's financial burden and contributed to inflation, compelling companies to reduce production or cease operations altogether. This has diminished people's standard of living and has had an impact on the overall economic security of the country.

Although Thailand has abundant renewable resources, they can only be utilized if they are converted into electricity. While Thailand utilizes its renewable resources to some extent, the lack of transmission equipment and energy storage facilities weakens the capacity for renewable energy consumption. The wind power plant in the northeastern province of Chaiyaphum and the Sirindhorn photovoltaic-

hydroelectric power plant in the eastern province of Upon are still far from Thailand's economically developed areas. They require the construction of high-voltage transmission lines to achieve the balance of supply and demand for renewable energy. Due to the inherent variability of renewable energy sources, it is essential to construct energy storage facilities to ensure a consistent supply of electricity. Thailand's current emphasis on developing renewable energy generation projects, with fewer transmission lines and storage facilities, has resulted in a resurgence of cheaper but more carbon-intensive coal power during energy crises. In its 2022 Sustainability Report, the Electricity Generating Authority of Thailand proposes to decrease the reliance on natural gas as a fuel for power generation, postpone the scheduled decommissioning of unit 8 of the lignite-fueled Mae Moh power plant, and reintegrate unit 4, which was decommissioned in 2019, into the system (EGAT, 2023). Thailand is currently constructing numerous renewable energy projects, yet it still has high carbon emissions.

Currently, pricing power in the international energy market is still predominantly held by Western countries, led by the United States. The trend of financialization of energy has increased, exacerbating the risk of short-term price volatility. Energy cooperation between China and Thailand primarily focuses on energy-related engineering construction and technical cooperation, with less emphasis on energy trade. In the future, the energy trade will primarily involve the green power trade, with less emphasis on the fossil energy trade. It will be challenging to achieve a high level of local currency cooperation between China and Russia. The two countries have not established a robust energy market mechanism, and they are unable to control energy pricing. Additionally, Thailand's reliance on a limited number of energy import channels makes it more vulnerable to fluctuations in international energy prices.

Sustainable Development

The Thai Cabinet adopted the draft 13th Five-Year Plan in 2021, which emphasizes four principles and concepts: the idea of a self-sufficient economy, self-healing capacity, the UNDAF Sustainable Development Goals, and the BCG economic model (Bioeconomy, Circular Economy, and Green Economy). The plan aims to create a socio-economic environment with equal opportunities to safeguard natural resources and the environment. socio-economic environment plays a crucial role in ensuring the sustainable development of natural resources and the environment (Zhou, 2022). Currently, Thailand's energy is still predominantly derived from fossil fuels, leading to carbon dioxide emissions of 275.3 million tonnes, the second highest among ASEAN countries after Indonesia (BP, 2023). As a consequence of the global energy crisis, Thailand has reactivated several coal-fired power stations. While China and Thailand are collaborating in the energy sector, they still face varying levels of sustainability challenges in the oil and gas sector, renewable energy, and nuclear energy.

Thailand is a prime example of a country that has achieved high socio-economic growth through the excessive depletion of environmental resources. However, in recent years, the Thai government and people have shown considerable attention to environmental protection in the country. Although Thailand has developed numerous policy plans to promote renewable energy, the dominance of natural gas will not be easily disrupted. Additionally, the resurgence of coal-powered stations will lead to an increase in carbon emissions, posing a threat to the carbon neutrality target. According to BP 2022, Thailand's carbon dioxide emissions from gas venting and flaring in 2022 were 200 million cubic meters, accounting for 0.2% of the world's total emissions (BP, 2023). The Thai government is currently taking active measures to improve energy efficiency and strengthen carbon sequestration efforts. In the field of renewable energy, the challenge to sustainable development is the alteration of the local ecological environment caused by the construction of energy projects. The construction of water conservancy dams will inevitably alter the dynamic between nature and society within the watershed, impacting fish migration and spawning as well as local biodiversity. Similarly, the establishment of onshore wind power installations can lead to the degradation of land resources and the disruption of local flora and fauna due to turbine operation noise. Additionally, the proper disposal of solid waste generated during the installation process poses a significant challenge. Meanwhile, some developers fail to comprehend the environmental protection laws in Thailand before construction, leading to both economic and environmental losses. In the global energy transition process, the advancement of renewable energy is essential. Both developers and target countries need to conduct thorough environmental assessments in advance, engage in timely communication and exchange with residents, and consider residents' perspectives when enhancing operation and maintenance.

The sustainable development of nuclear power may be a current concern, as Thailand halted its nuclear power plant preparatory program in 2011 following the Fukushima nuclear leakage incident in Japan. Nuclear power plants are a cleaner source of energy and complement renewable energy generation, but the risk of leakage is indisputable. Dealing with nuclear waste is an important aspect of the sustainable development of nuclear power. Currently, Thailand only has plans to develop nuclear power plants and lacks relevant construction experience and infrastructure for nuclear power development personnel. To achieve sustainable development of nuclear power, it is essential to focus on preliminary preparatory work and educate the public about the necessity of nuclear power construction to reduce social opposition. Adequate funding should be ensured, and nuclear waste should be promptly disposed of to minimize damage to the ecosystem.

***Opportunities and Importance of China-Thailand Energy Cooperation
Possibilities for collaborating on energy abound, from pioneering clean energy
technologies to fostering regional partnerships built on interconnectedness.***

This year marks the 10th anniversary of China's "Belt and Road" initiative. Over the past decade, China and Thailand have upheld the principle of "joint construction and sharing" to advance the comprehensive development of energy cooperation between the two countries. The future energy collaboration between China and Thailand will be centered on interconnection to facilitate the exchange of innovative clean energy technologies and regional cooperation.

China and Thailand are collaborating on energy initiatives to advance clean energy technology innovation. In recent years, China has made remarkable achievements in the field of renewable energy development, and its scale of clean energy development and utilization ranks first in the world. In addition, China has made significant advancements in clean energy technology and equipment. It boasts the world's largest megawatt hydropower turbine design and manufacturing capacity in the hydropower sector. Its low-speed wind power technology is among the world's leading, and its photovoltaic power generation technology continues to improve. China has repeatedly set new world records for battery conversion efficiency, and its nuclear energy technology has matured significantly. These achievements demonstrate China's robust influence and strength in the renewable energy sector, as well as its unwavering determination and proactive approach to developing clean energy. Thailand is rich in natural resources and has a high energy demand. However, its renewable energy technology is relatively underdeveloped, making it challenging to independently increase installed power generation capacity. Therefore, it needs to collaborate with other countries to advance the country's energy transformation and upgrade its technology. Currently, cooperation between China and Thailand is thriving, with significant progress in wind and solar energy. The focal point of future collaboration between the two countries may be in the area of nuclear energy. China has advanced nuclear power generation technology, and Thailand has expressed strong interest in developing nuclear power generation capacity.

China and Thailand are actively enhancing their energy diplomacy as part of the "Belt and Road" initiative. They are relying on the China-ASEAN Energy Community of Destiny, the "Belt and Road" Energy Partnership, and other energy cooperation platforms to bolster their energy policy. Through the China-ASEAN Energy Community of Destiny, the "Belt and Road" Energy Partnership, and other energy cooperation platforms, China and Thailand have intensified policy consultations in the energy sector, built consensus on cooperation, facilitated project agreements, and actively advanced the deepening of their energy collaboration. Firstly, China and Thailand are collaborating through project contracting, technical cooperation, infrastructure construction, and EPC (Engineering, Procurement, and Construction). Secondly, China is conducting global energy diplomacy as part of

the "Belt and Road" initiative, aiming to provide international public goods to stabilize the global energy supply, ensure energy transport security, address obstacles and challenges in energy cooperation, and foster energy interconnection among countries. China's Guangxi Zhuang Autonomous Region aims to establish a national comprehensive energy base for ASEAN by 2030. China and Thailand can utilize this energy base as a foundation to enhance energy interconnection and facilitate the expansion of energy cooperation between the two countries in the domains of energy storage, energy transportation, and energy trade.

The significance of energy cooperation between China and Thailand holds multifaceted importance in bilateral collaboration.

China and Thailand are close and friendly neighbors. Strengthening energy cooperation between the two countries is of great significance for safeguarding the energy security of both sides and promoting low-carbon energy transformation. Secondly, China and Thailand are part of the Greater Mekong River region, and Thailand is situated in the core of the ASEAN countries. Therefore, energy cooperation between the two countries holds significant importance in promoting energy interconnection within the Mekong subregion and subsequently extending it to the entire ASEAN region. This cooperation aims to strengthen energy technology collaboration, facilitate clean energy transformation and advancement, and reduce carbon emissions. Finally, energy cooperation between China and Thailand is beneficial for fostering innovation in a new international energy order in today's turbulent world energy landscape.

First, energy cooperation between China and Thailand is an important aspect of their bilateral cooperation. China and Thailand can achieve energy complementarity through bilateral cooperation in technology, capital, and resources. Strengthening energy cooperation between China and Thailand can guarantee national energy security. Renewable energy technology and financial cooperation can enhance power generation from renewable sources, reduce reliance on fossil fuels, and mitigate the impact of international energy price fluctuations on the domestic economy. On the other hand, energy cooperation between China and Thailand can facilitate the interconnection of energy sources between the two countries, expand the channels for energy import and export, and ensure the diversification of the national energy supply. The two countries will enhance communication between the "Belt and Road" initiative and the "Thailand 4.0 Strategy" as well as the "Thailand Eastern Economic Corridor Strategy". They will prioritize infrastructure "hard connectivity" and reinforce rules and regulations. With a focus on "hard connectivity" in infrastructure, "soft connectivity" in rules and regulations, and the ultimate goal of "heart connectivity" between the two peoples, China and Thailand aim to advance the "One Belt, One Road" project through energy engineering and construction, energy capital and technology cooperation, and energy market development.

Through energy project construction, energy capital and technology cooperation, and energy market development, China and Thailand will further promote high-quality collaboration under the "Belt and Road" initiative, and work together to establish a China-Thailand community of destiny (UCLG-ASPAC Committee on the Belt and Road Local Cooperation, 2022).

Secondly, energy cooperation between China and Thailand will strengthen the relationship between the Mission Hills subregion and ASEAN countries. As one of the founders of the Meilan Cooperation Mechanism, China has made significant advancements in mechanism construction, strategic planning, financial support, and practical cooperation over the past seven years since its establishment. This has infused new vitality into regional development and delivered tangible benefits to the people of all participating countries. China-Thailand energy cooperation is highly significant for enhancing the interconnection of the Mekong-Meilong Sub-region and alleviating the blockage of energy transport in neighboring countries. Under the "One Belt, One Road" initiative, Chinese enterprises have been actively expanding their operations to collaborate with the Thai government in constructing energy projects, which have become integral to numerous energy cooperation projects in the Mekong subregion. As Thailand is strategically located in the center of ASEAN, energy cooperation between China and Thailand has a significant impact on the entire ASEAN region. At present, China and Thailand are engaged in extensive cooperation in various aspects of fossil fuels and renewable energy. Through numerous projects in Thailand, we are showcasing China's advanced technology and high level of business capacity in the energy sector to ASEAN countries. This is aimed at attracting more ASEAN countries to collaborate with China, promoting the development of low-carbon energy transformation across the entire ASEAN region, and achieving ASEAN's overall emission reduction plan.

Finally, cooperation between China and Thailand in the energy sector will contribute to the establishment of a new global energy order. Energy cooperation within the "Belt and Road" framework has disrupted the longstanding dominance of Western countries in the global energy sector and shifted the unfavorable perception of energy collaboration among developing nations. China's energy cooperation is based on the concept of a community of human destiny and aims to establish cooperative partnerships with a wide range of developing countries under the principle of common development and resource sharing. Energy cooperation between China and Thailand plays a crucial role in reshaping the global energy landscape. The collaboration between the two countries has defied the inflexible demands and compulsory dispute-resolution measures typically imposed by traditional dominant nations in energy cooperation. This holds significant importance for advancing the democratization of international energy collaboration.

6. Conclusion

China and Thailand are both significant consumers of energy, and they share the common objective of transitioning to sustainable energy sources to ensure national energy security and achieve long-term energy development. China-Thailand energy cooperation is a crucial component of the energy collaboration between China and ASEAN, and it serves as a model for other ASEAN countries. This paper analyzes the current state of energy cooperation between China and Thailand in the context of the global energy crisis. It also outlines the challenges related to energy security and sustainable development that both countries are facing. The paper aims to provide recommendations for future energy cooperation between China and Thailand. The analysis concludes that the current energy cooperation between the two countries primarily revolves around engineering construction and technical collaboration, with limited trade cooperation. The level of collaboration in the nuclear power sector still needs improvement. Second, energy security is a shared challenge that both countries have long confronted. Exploring ways to enhance energy self-sufficiency and advance the development of energy storage facilities will represent a new area of cooperation between the two countries.

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Shedding Light On Climate Change as A Threat to Multi-Dimensional Security: Case study of Thailand

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Abstract

This study investigated how Thai stakeholders perceive climate change as a threat to security, aiming to answer the research question: "How do key stakeholders in Thailand perceive climate change-induced threats to security, and are the current climate governance and policy responses sufficient to address the multifaceted impacts of climate change?" Perceptions were gathered from key informants, including representatives of government authorities, scholars, NGO officers, and staff from international agencies. Data were collected through semi-structured interviews and analysed using qualitative content analysis via MAXQDA software. The responses of 12 interviewees were examined using a framework for climate security discourse: who are the referent objects, what is the nature of threats, who are the agents to take action to solve the issues, and how to respond to or address those threats? The findings revealed a wide range of referent objects, the nature of threats, agents, and responses specific to Thailand, providing a comprehensive understanding of the complexities of climate change. Climate change is primarily considered a threat to human security. Additionally, the study found that some Thai government responses and efforts to address climate change have been misguided, thereby creating further threats to climate security. A clear understanding of the multifaceted impacts of climate change is essential for designing sound public policies and educating the actors leading the responses.

Keywords Climate Change, Threats, Security, Discourse, Thailand

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1. Introduction

Amid the global COVID-19 pandemic, the Intergovernmental Panel on Climate Change (IPCC) published the first part of its Sixth Assessment Report on August 9, 2021, emphasizing that “the climate crisis is unequivocally caused by human activities and is unequivocally affecting every corner of the planet’s land, air and sea already” (IPCC, 2021). Climate-induced disasters ranging from heatwaves in Greece and western North America to floods in Germany, Japan, Malaysia, and China were headlines throughout 2021. Such incidents raise awareness that climate change is a “planetary threat” and add empirical evidence to the debate on the relationship between climate change and security (Buhaug, 2022; Gleick, 2021).

Kameyama and Takamura (2021) pointed out that existing literature on climate change and security needs to be more balanced because the scholars and case studies are mostly from Europe and North America. Cases from other regions vulnerable to climate change, e.g., Asia and Africa, have yet to be reported. Although studies from Asia, such as those from Japan (Hasui & Kamatsu, 2021; Koppenborg & Hannsen, 2021; Yamada, 2021) have recently been published, the authors concluded that the notion of climate change and security was unfamiliar to Japanese policymakers, business people, and politicians. This lack of understanding weakens Japanese public support for climate actions, especially emission reduction efforts (Kameyama and Takamura, 2021).

According to the Global Climate Risk Index 2021 (Eckstein et al., 2021), Thailand ranked ninth in the countries most affected by extreme weather events between 2000 and 2019. Climate change impacts in Thailand have been well observed and recorded. A longitudinal study analyzed data collected between 1970 and 2009 and concluded that the average temperature in Thailand increased by 0.92 °C, whereas the annual global temperature from 2000 to 2009 was 0.61 °C (Osborn, 2021). The number of rainy days and the level of precipitation have declined over the last 50 years. Moreover, extreme precipitation events, e.g., flooding, are predicted to be more severe and more frequent (Ponpang-Nga & Techamahasaranont, 2016; Shrestha & Lohpaisankrit, 2017). Bangkok, Thailand’s capital, faces rising sea levels, sinking land, and cyclone-induced storm surges. Consequently, the city sinks lower yearly and could be submerged by 2050 (Asian Development Bank, 2021). Climate migrants from neighboring countries, such as Myanmar and Cambodia, are expected to increase due to storms and drought. This influx of climate-induced migrants could arguably increase the risks of transnational and local crimes, illegal drugs, drug trafficking, human trafficking, and communicable diseases (Marks, 2011). Lastly, decreasing water resources in the Mekong River due to climate change could trigger tension and conflicts among Viet Nam, Thailand, Myanmar, Laos, Cambodia, China, and the US (Kittikhoun & Staubli, 2018; Lebel & Lebel, 2018).

Climate change impacts in Thailand include slow-onset events like sea-level rise, extreme weather events, i.e., drought and flooding, socio-economic problems such as health and livelihood, and transnational issues such as climate migrants, conflicts over water resources, and PM 2.5 pollution. The situation with PM 2.5 pollution has worsened, particularly in urban areas. According to recent reports, air quality in Thailand, especially in Bangkok and northern regions, frequently exceeds the safe levels set by the World Health Organization. This has been attributed to a combination of vehicular emissions, industrial activities, and seasonal agricultural burning. The persistent haze has significant health implications, increasing the incidence of respiratory and cardiovascular diseases among the population (World Bank, 2023; Nature, 2023). Climate change is an environmental problem and a threat multiplier because it exacerbates conflicts and fragility's social, political, and economic drivers, causing negative impacts on peace, stability, and security (UNDP, 2020a)

Thus, climate change poses security risks for humans, nation-states, the international community, and the environment (Mobjörk, Gustafsson, Sonnsjö, Van Baalen, Dellmuth, & Bremberg, 2016). However, whether Thailand has sufficiently sound climate governance and policy responses to address multifaceted climate impacts is questionable. This study is the first to investigate climate change in Thailand through the security lens. It aims to show how key stakeholders view climate change-induced threats undermining the security of various entities. Insightful perceptions were obtained from 12 interviewees from the government, academia, NGOs, and international agencies. The research applied qualitative content analysis to interviewing transcripts using the analytical framework of climate security discourse analysis proposed by McDonald (2013). The findings provide a comprehensive understanding of the complexities of climate change. Climate change not only directly impacts extreme weather or slow-onset processes but also multiplies pre-existing socio-economic and political problems, exacerbating the vulnerability of particular populations. More importantly, the study found that some Thai government responses and efforts to address climate change are counterproductive, creating further security threats. Understanding the multifaceted nature of climate impacts is essential for designing sound public policies and encouraging appropriate actors to lead these responses.

2. A literature review on climate change as a threat to security in various dimensions

The study of climate change as a security issue has evolved significantly over the past few decades. Initially, the concept was explored in the early 2000s with foundational works like Barnett (2003), who examined the broader implications of environmental change on global security. Subsequent research by

authors such as Trombetta (2008) and Hsiang, Meng, and Cane (2011) provided empirical evidence linking climate variability to conflict and migration. The idea gained further traction with studies like those by Black, Adger, Arnell, Dercon, Geddes, and Thomas (2011) and Busby (2021), which emphasized climate change as a threat multiplier, exacerbating existing social, economic, and political vulnerabilities. Existing research identifies four main dimensions of climate security: human security, national security, international security, and ecological security. The following paragraphs will describe each type and highlight relevant studies.

Human Security: Climate change is often described as a threat multiplier affecting human security. For example, Mason (2013) and Busby (2021) discuss how climate change exacerbates existing vulnerabilities and creates new ones. Hsiang et al. (2011) found that El Niño/Southern Oscillation changes could have influenced several civil unrests in the second half of the 20th century, opening the door to further study of the empirical evidence of causal mechanisms between climatic changes and conflicts. Climate change's impact on human settlements and forced migrations has attracted increasing attention. Black et al. (2011) highlighted the need to consider environmental change as a direct and indirect cause for the decision to migrate nationally and internationally. Climate change induces rural-urban migrations, which could happen between cities in one country or different countries. The latter would exemplify how climate change threatens the international community's security. Although challenging to validate with historical data, an increase in urban violence may lead to shanty-town development in peri-urban areas and stimulate much-needed reflection on the consequences of rural-area abandonment (Buhaug & Urdal, 2013). In addition, job losses and forced migration caused by climate change could lead to human trafficking and slavery (Bales & Sovacool, 2021).

National Security: Climate change can also threaten countries' national security and sovereignty. Some authors, such as Boas (2014), Boas and Rothe (2016), and Selby, Dahi, Fröhlich, and Hulme, (2017), caution against using climate change to explain all modern conflicts. However, military and defense organizations are showing increasing concern about climate change. While countries like the United States have a long history of incorporating climate change into the defense agenda (Stricof, 2021), others like Japan have only recently adopted climate emergency declarations, and the securitization of climate change is still "a new minor discourse" (Koppenborg and Hanssen, 2021). In 2003, climate change was mentioned as a threat to national security in a report commissioned by the United States Pentagon (Schwartz & Randall, 2003). In general, the militaries of superpowers are addressing the domestic effects of climate change at various levels (Brzoska, 2012). Military alliances such as NATO have considered climate change a non-traditional threat multiplier (Causevic, 2017). This has opened a debate on whether the United Nations

Security Council (UNSC) should have a role in the climate change agenda (Cousins, 2013; Scott, 2015), considering the relevance to all its agencies and programs (Conca, 2018). Indeed, this has been a long-debated issue (Maertens, 2021). In December 2021, the UNSC failed to adopt a resolution integrating climate-related security risks into conflict prevention strategies (UN, 2021).

The trend toward considering climate change as a military issue has raised concerns about the risk of treating it as a sovereignty matter rather than a global common problem (Barnett, 2003; Buxton, 2021). There are also unintended or unexpected negative consequences from using this frame. Similarly, the term “climate emergency” can trigger action but can also lead to the marginalization of specific stakeholders and the development of placebo solutions (McHugh et al., 2021). Furthermore, the securitization of climate change could unexpectedly promote militarization and increase state authority over citizens (Detraz and Betsill, 2009; Deudney, 1991; Hartmann, 2010). Floyd (2015) even stated that climate change must be de-securitized or that climate change must be detached from security issues.

International Security: Climate change also threatens international security. Studies such as those by Black et al. (2011) highlight the role of environmental change in driving migration both within and between countries. This can lead to increased tensions and conflicts over resources, as discussed by Buhaug and Urdal (2013). Additionally, the influx of climate-induced migrants can lead to transnational issues such as human trafficking and illegal activities (Bales & Sovacool, 2021). The debate on the United Nations Security Council’s role in addressing climate change (Cousins, 2013; Scott, 2015) underscores the international community’s concern about the broader implications of climate-induced security risks.

Ecological Security: Finally, emerging literature highlights climate change as a threat to ecological security, impacting vulnerable populations, other living creatures, and future generations (Trombetta, 2008; McDonald, 2013; Mitchell, 2014). McDonald (2018) focuses on ecosystem resilience and the rights and needs of the most vulnerable groups, including impoverished populations in developing countries, future generations, and other living beings across different times and places (p. 155). The Anthropocene concept, which contests the separation of humans and nature, provides a foundation for this idea. Steffen, Grinevald, Crutzen, and McNeill (2004) pointed out the profound and invasive effects of humans and their activities that can interrupt the whole Earth system and radically threaten every component: human beings, other living creatures, and non-living beings. Approaching climate change from the perspective of ecological security means moving beyond humans or communities of humans (nation-states, international community) by considering “ecosystems” and their interdependence with human beings and other living creatures. However, the notion faces moral and pragmatic criticism. Counter-arguments include the uncertainty about how

and to what extent climate change affects the non-human world, the difficulty of knowing what future generations think and want, and the limited constituency in global politics to promote such notions (Palmer, 2011).

3. Research methods

3.1 Data collection

The study used semi-structured interviews and a qualitative content analysis approach with abductive reasoning to address the research questions. From January to April 2021, 12 semi-structured interviews in English with experts (from civil society, government, academia, and international agencies) whose work was related to climate change were conducted. Accessing interviewees in Thailand proved challenging, as researchers employed a snowball approach to request interviews, yet few individuals were available or agreed to participate in online interviews. Government officers were very busy, and the research team lacked the authority to compel participation. Additionally, the interviews were conducted in English because the researchers were from Western country and Thailand, making it challenging to find interviewees, especially government officials, who could speak English fluently. Each interview required approximately 1.5 hours and involved asking participants to review and provide feedback on Thailand's climate change policy beforehand, further discouraging participation due to the significant time commitment.

The interviews were conducted through the Zoom application and transcribed. Table 1 presents the interviewee affiliations and the names used for reference in this paper. The interview questions were designed to be structured but open enough to encourage free expression. They were: (1) How do you perceive the climate change problem? Is climate change a threat? If yes, whose security is threatened, and how? If not, why do you disagree? (2) How do you understand the term climate security? (3) How do you evaluate the climate security of Thailand based on what you understand the term? (4) How do you view Thailand's Climate Change Master Plan (2015–2050)? Do you want to add to or improve any issues in the plan? Each interview took 1–1.5 hours to complete and was transcribed into English text for the following analysis step.

Table 1: Interviewees and their affiliations

No	Affiliations	Referred to in this paper as
1	Governmental officer, Royal Irrigation Department, Ministry of Agriculture and Cooperatives	Government-A
2	Governmental officer, Climate Change Management and Coordination Division, Office of Natural Resources and Environmental Policy and Planning, Ministry of Natural Resources and Environment	Government-B
3	Environmental Activist, WWF, Climate Strike Thailand	NGO
4	Sustainability senior researcher at Unit for Social and Environmental Research, Department of Social Science and Development, Faculty of Social Sciences, Chiang Mai University	Scholar-A
5	Professor in Reef Biology Research, Department of Marine Science, Faculty of Science	Scholar-B
6	Lecturer from the Department of Geography, Faculty of Social Sciences	Scholar-C
7	Associate Professor from the Department of Forest Ecology, Faculty of Science	Scholar-D
8	Associate Professor specializing in Climate Adaptation plan, Faculty of Science	Scholar-E
9	Expert in Natural Sciences, UNESCO Bangkok Office	UN Agency-A
10	Policy Specialist, Climate and Security Risk, Conflict Prevention, Peacebuilding & Responsive Institutions Team, UNDP New York	UN Agency-B
11	Project manager at UNDP Thailand Office	UN Agency-C
12	Principal Climate Change Specialist and Climate Change Focal Point for Southeast Asia, Asian Development Bank	ADB

Source: The authors' self-compiled list of interviewees.

3.2 Data analysis

The literature review suggested climate change affected security across many dimensions. To understand climate change as a security issue in Thailand, the present study adopted the analytical framework proposed by McDonald (2013). The framework comprises four analytical questions to extract referent objects, the nature of the threats, agents to respond, and responses to threats. The questions are (1) whose security is at stake? (2) who is responsible for or able to respond to the threat, (3) how is the nature of the threat defined, and (4) what responses are suggested for dealing with that threat? As a result, four discourses were identified concerning different referent objects (needing protection): human security for people, national security for nations, international security for the international community, and ecological security for ecosystems. Each discourse highlights different ideas of the nature of the threats, possible responses, and the actors expected to lead these responses, as shown in Table 2.

Table 2: Four conceptions of climate security discourse

Discourse	Referent objects	Nature of threats	Agents	Responses
National security	Nation-state	Conflict, sovereignty, economic interests	State	Adaptation
Human security	People	Life and livelihood, core values and practices	States, NGOs, the international community, and communities themselves	Mitigation
International security	International society	Conflict, global stability	International organizations	Mitigation and adaptation
Ecological security	Ecosystem	Challenges to equilibrium associated with the contemporary political, social, and economic structure	People, changing political consciousness	Fundamental reorientation of societal patterns and behaviors

Source: Adapted from McDonald (2013)

Interview transcripts were analyzed using a framework based on these four questions with the help of MAXQDA software. Code segments were coded under each question and labeled with words or phrases to inform the key ideas. During coding, the researchers adopted grounded theory to identify and record all referent objects, threats, agents, and responses mentioned by interviewees. As shown in Figure 1 (in the Results and Discussion section) the study detected many new referent objects, the nature of threats, agents, and responses peculiar to Thailand. These new items were then thematically classified and aggregated. In the following section, the paper illustrates the analysis of 12 interview transcripts against an analytical framework, as presented in Table 2. The essential contribution is that the paper identified more types of nature of the threats in addition to what was proposed by McDonald (2013).

4. Results and Discussion

Based on the framework described in the data analysis method section, the study ran analyses on 12 interview transcripts and identified code segments answering each of the four questions. The results are visualized by MAXQDA software, as shown in Figure 1. Square symbols represent the frequency with which segments are coded. A bigger square represents a higher frequency. Colors correspond to the size of squares, with red for bigger squares and blue for smaller squares. It is noted that the frequency could imply that the code segments were perceived as necessary by the interviewees. However, it also happened that the

interviewees spoke more on a particular topic because they were asked for further clarification. When the findings of the present research from Thailand, shown in Figure 1, are compared with those of McDonald (2013), established in Table 1, several new referent objects, threats, agents, and responses are found. This section discusses critical findings on the four questions.

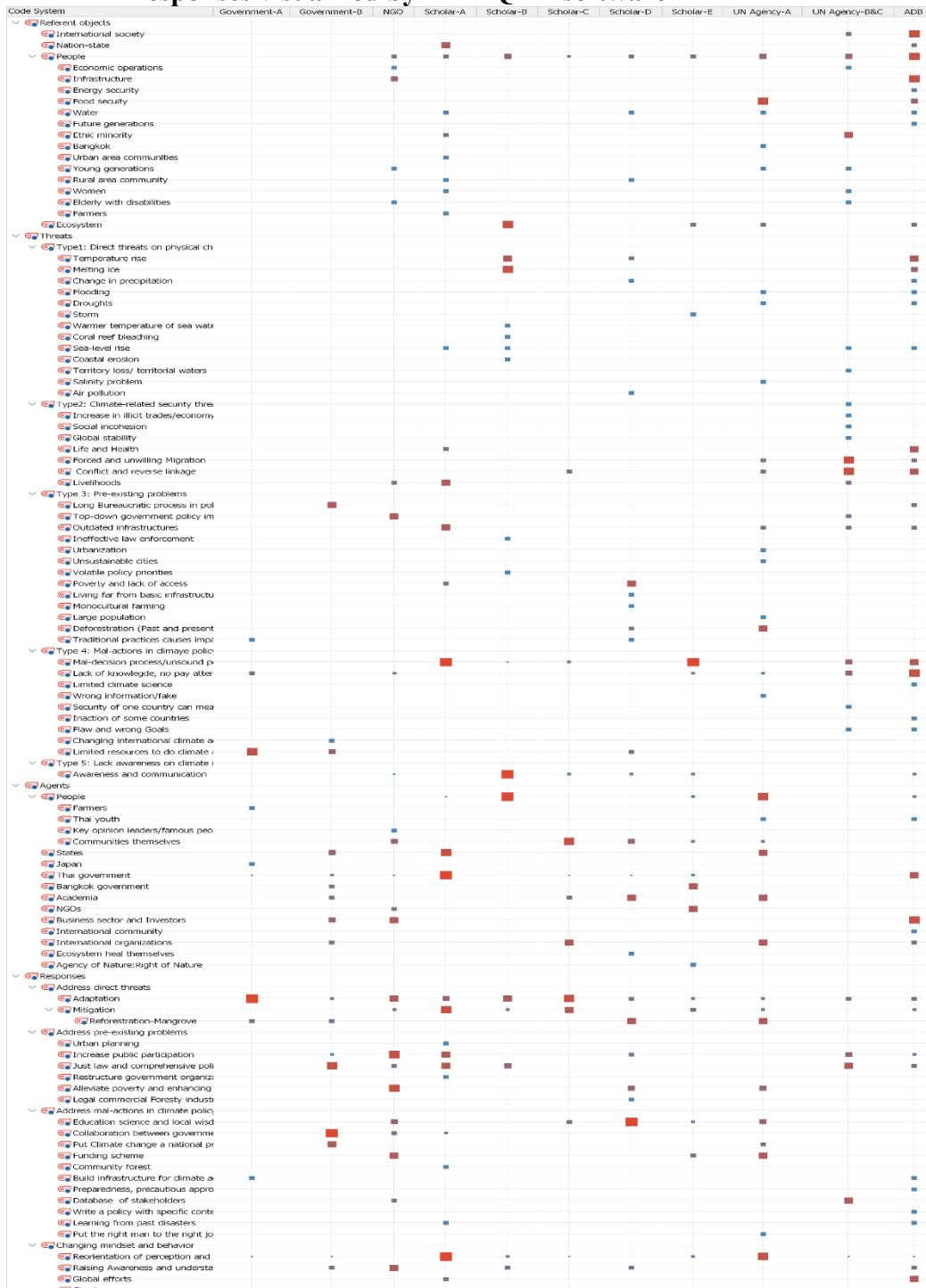
4.1 Referent objects

The four main referent objects mentioned by Thai interviewees were people, the nation-state, the international community, and the ecosystem. “People” was the most frequently coded word, followed by “ecosystem.” Interviewees perceived that climate change affected human security the most. However, people are not equally affected by climate change. Vulnerable groups, such as farmers, women, children, older people with disabilities, rural communities, and the urban poor in Bangkok, were perceived as being left behind relative to the country’s development in general and climate change policy.

An ADB interviewee highlighted the interconnection between the international community and nation-states. He stated, “what one country did, has an implication for the security of other countries. Chiang Mai, Thailand, cannot survive alone. If Cambodia is burning, Laos is burning, and Myanmar is burning. It is important to recognize that the whole idea of security should be ideally thought in the bigger picture for transboundary security. Even though you do your best, even if you do the maximum, like reducing to zero-emission... tomorrow Thailand becomes a net zero emitter. Still, it does not mean climate change impact will not happen in Thailand” (ADB interviewee, personal communication, 7 April 2021).

Climate change as a security issue thus cannot be understood as a single country’s responsibility whereby all climate risks will be removed. Instead, it must be an ongoing effort at local, national, and international levels to cope with evolving and changing climates. The interviewees’ ideas imply that a division of referent objects of climate change may not be optimal because climate change affects all, and no one can be entirely shielded from the impact.

Figure 1: Coding results on referent objects, nature of threats, agents, and responses visualized by MAXQDA software



Source: The authors' own analysis, conducted using MAXQDA software.

The concept of the “ecosystem” as a referent object of climate change was mentioned by various interviewees (Scholar-B and E, UN Agency-A, and ADB). All interviewees believe that the ecosystem has profound implications for the human-nature relationship. Scholar-E stated, “You have to accept that nature has its own right to be here, not to serve humans only. Although I mentioned the term ecosystem services before, that service is for human use. At the same time, environmental components should have their own right to exist in the world. And you don't have to think of them in terms of what value they can give to humans.” (Scholar-E, personal communication, 28 January 2021). She also highlighted education as a means for people to realize and accept the “right of nature.” Furthermore, the concept of a “sufficiency economy,” along with the teachings of all major religions—Judaism, Christianity, Islam, Buddhism, Hinduism, Taoism, Confucianism (UN Agency-A), and Thai culture and Buddhism (ADB interviewee)—is perceived to promote coexistence and a sustainable relationship between humans and nature.

4.2 *The nature of threats*

Concerning the premise that climate change is a threat multiplier exacerbating social, political, and economic drivers of conflicts and fragility (UNDP, 2020a), the study found that the threats are multi-layered. With open coding on interview transcripts, threats can be grouped into five types. They are: 1) the direct threat from climate change, 2) climate-related security threats, 3) pre-existing socio-economic and political problems, 4) erroneous actions in climate policies, and 5) limited awareness, indifference, and ignorance about climate change.

4.2.1 Direct threats

The direct physical and biophysical threats of climate change have been well-covered by the IPCC report on the physical science basis of climate change (IPCC, 2013). Interviewees in the study referred to the physical impacts of climate change in Thailand, for example, natural disasters, namely, flooding, droughts, change in precipitation, temperature rise, coral reef bleaching, air pollution, the salinity problem in low-lying coastal areas such as Bangkok, and coastal erosion due to sea-level rise causing the loss of territory and having implications for territorial waters. The key messages from the interviews concerning direct threats from climate change to Thailand include the referent objects or those affected by the threats. The interviewee’s comment on climate change in Thailand revealed that the urban poor are excluded from the national climate policy. Critically reviewing Thailand’s Climate Change Master Plan (2015–2050), Scholar-A pointed out that people living in urban areas are vulnerable to climate change impacts such as flooding and heat waves. However, the CCMP (2015–2050) does not acknowledge these risks for urban populations but points out that climate change is an environmental problem for people in rural areas (Scholar-A, personal

communication, 20 January 2021). Besides, women and younger generations are not mentioned by the CCMP, meaning that the national climate master plan lacks gender and inter-generational perspectives. An ADB interviewee proposed that each region of Thailand should have its own plan because not all parts of Thailand are equally vulnerable, and not all have equal opportunities to mitigate greenhouse gas emissions (ADB interviewee, personal communication, 7 April 2021).

4.2.2 Climate-related security threats

The second type of threat was mentioned by interviewees UN-Agency A, B, and C, but with less emphasis on the severity for Thailand. Climate-related security risks are based on the concept that climate change or climate variability causes conflict between groups of people or nation-states over scarce resources. They are understood as “the adverse impacts of climate change on human security—the freedom from fear and want, but also as they relate to the security of the state, and the maintenance of international peace and security, under the United Nations Charter” (UNDP, 2020b). UN Secretary-General Ban Ki-moon, the United Nations Environment Program, and the Stern Review on the Economics of Climate Change supported by the UK government claimed that climate change causes competition between states over scarce resources and leads to tensions and even violent conflicts, mass displacement or migration intra-and inter-states, posing threats to regional and international stability (Stern, 2006; UNEP 2007). Infamous examples are the civil war in Syria and the ethnic armed conflict in Darfur (dubbed the “first climate war”) (Mazo, 2009; Gleick, 2014). Those conflicts had knock-on effects on other regions as many displaced people sought refuge in Europe, causing crises of climate migrants or climate refugees (Baker, 2015). However, some studies challenge a linear and direct connection between climate change and conflict, stating that violence has multiple causes and it is impossible to isolate any of them as being the most influential (Hangen & Kaiser, 2011, Adger et al., 2014).

An interview with UN Agency-C on 2 February 2021 revealed that up to the present, she had not seen Thailand experience mass migration caused by climate change and that Thailand does not have internal clashes between people from two different provinces due to (im)migration. UN Agency-A commented that Bangkok, Thailand’s capital city, located a few meters above sea level, could see massive climate migration due to sea-level rise, salinity water, flooding, air pollution, and food insecurity in the next few decades (UN Agency-A, personal communication, 30 January 2021). This prospective climate migration is of concern given that Thailand has recorded migration from rural areas to cities, especially Bangkok, for decades. Marks (2011) found that climate stress caused average rice yields to fall by around 45%, causing farmers to lose a substantial proportion of their income and forcing them to migrate to cities for work. A number of young adults with higher education have moved from rural areas to big cities like Bangkok to find better-paid jobs, while many have gone abroad to work

in more developed countries such as East Asia, Europe, the Middle East, and the US (Marks, 2011).

UN Agency-B expressed the opinion that for Thailand, the impact of climate-related security risks may not be violent domestic conflicts among migrants and host populations but a long-term mobility trend with an increase in illicit economic activity and social incoherence. He further explained, “we must consider other manifestations, not just violent conflict. If you lose climate-sensitive livelihoods, there are other cases of illicit livelihoods, and we may see an increase in those as well. Blue economy-based livelihoods, tourism, and, in another context, we see illicit crop production, and there is a whole economy around that as well. My point here is probably the kind of conflict that is not necessarily violent. However, it would still impact social cohesion and illicit economies, which I think might be important here in Thailand as well. Human mobility is also a kind of broad umbrella concept like security” (UN Agency-B, personal communication, 2 February 2021). That Thai people migrate to big cities or abroad to adapt to climate change impacts on their livelihood aligns with the argument that climate-related drought or scarcity of natural resources alone cannot lead to conflicts and violence (Selby et al., 2017; Sunga, 2011; Verhoeven, 2011). Instead, conflicts are attributed to weak state capacity in distributing resources, absence of reliable dispute resolution mechanism, social inequality due to the systematic exclusion of some groups, lack of the rule of law, poverty, and even high population density (Hagan & Kaiser, 2011; Sunga, 2011; Adger et al., 2014). UN-Agency B pointed out that climate change does not always induce conflict. This interviewee cited conflict between an ethnic minority and a local authority due to an attempt to reduce greenhouse gas emissions by increasing a forest area. Another example they cited was the forced relocation of villages due to development projects related to water resources and energy (i.e., dam construction). Moreover, natural resource scarcity only sometimes threatens security. Scholar-A proposed that the decreasing water supply in Mekong River, critical for the Greater Mekong Sub-region (GMS), i.e., China, Thailand, Laos, Myanmar, Vietnam, and Cambodia, creates opportunities for more rather than less cooperation. “Countries in GMS have a shared threat which is climate change. The countries have thus mutual benefits and seek cooperation to manage diminishing water resources resulting from climate change. This includes sharing information about water release from upstream dams to downstream ones, reducing hydropower capacity of upstream dams so that the countries downstream can have sufficient water and countries participating in energy trades”, said Scholar-A (personal communication, 20 January 2021).

4.2.3 Pre-existing socio-economic and political problems

The third type of threat originates from existing socio-economic and political challenges that heighten the vulnerability of specific populations. Harrison et al. (2015) indicated that non-climatic pressures might contribute more to uncertainty than climate change. Therefore, policymakers should consider these non-climatic pressures and cross-sectoral interactions to fully understand and address climate change's impacts.

The interviewees emphasized a wide range of pre-existing non-climatic problems in Thailand requiring comprehensive policy solutions. Scholar-C gave an opinion on this issue, "... just one thing that I'd like to stress is that whatever you call this idea of climate policy, it needs to be more than climate. Understood? It needs to be wider than just addressing climate issues. Wider than, I mean more than just about reducing greenhouse gases. More than carbon trading. Climate policy is perhaps more modern—another version of sustainable development. It must address the issue of inequality. It needs to address the issues of rights, property, access, and even capitalism. And that are the root causes of unsustainable developments" (Scholar-C, personal communication, 27 January 2021).

Poverty caused by deficiencies in capital, social, financial, and natural resources is perceived as a fundamental cause of vulnerability (Scholar-A, C, and D). Inequality due to economic status, gender, race, and ethnicity causes specific populations to be more vulnerable than others. UN Agency-A said that population growth jeopardizing the planet's carrying capacity was another demographic contributing to vulnerability.

UN Agency-A interviewee stated, "Of course, climate change exists. But the reality is that they have resource issues or issues of providing food. The population dynamics are at least equally as important as the climate change issues. We exceeded 7.8 billion in June 2020 and are aiming at 10.9 billion by 2050. Especially here in the Pacific, most countries will continue to grow significantly until 2085. Thailand is an exception, as are China and Sri Lanka. However, most countries will still grow, meaning the population will become younger. Additionally, there is a trend of urbanization. People will move into the cities, consuming more products and becoming more wasteful" (UN Agency-A, personal communication, 30 January 2021). Besides socio-economic problems, political factors are critical. Many interviewees commented on government practices as the most influential factor for vulnerability. One major problem concerns the "red tape" in the state administration and legislation. For example, Government-B, who works in the department in charge of climate policy planning, explained the process of revising the Climate Change Master Plan (CCMP:2015–2050), "we are in the process of drafting and revising, we invite line ministries, stakeholders from education, from academia, from the private sector, from the expert, the national expert, local expert to involve in the drafting and revising process. Then, after the

first draft was done, we went to five regions to hold a public participatory meeting to introduce and present the draft revision. Then, we collect feedback and comments. Then, we submit it to the sub-national board committees for their approval. After it gets approved by the sub-national committees, we submit it to the National Committee on Climate Change. The sub-national one is chaired by our permanent secretariat. Then, the national one was chaired by the Prime Minister. Now, the process I described is already over. Now, it is in line with the cabinet consideration. We have had it since, like, a couple of months ago. However, since the committee has many issues to be considered, we hope that within this month or next, it will be overturned for the revised master plan to be considered by the cabinet" (Government-B, personal communication, 5 April 2021).

Apart from the red tape issue, which causes delayed action in essential matters, the NGO interviewee, UN Agency-B, Scholar-A, and Scholar-C also mentioned other problems. These included insufficiently inclusive policy-making processes, for instance, stakeholders' lack of public participation in policy design and an overly top-down approach to policy implementation. Scholar-A suggested that introducing a level of deliberative democracy where the government brings data and evidence to present to multi-stakeholders for collective discussion on policy options would help achieve more just and sustainable public policies.

4.2.4 Erroneous actions in climate policy

The fourth type of threat is erroneous actions in climate policy responses. Government practices and attempts to address climate change are perceived as a significant cause of vulnerability and can become a threat. The Climate Change Master Plan (2015-2050) is the national climate policy that provides overarching goals for mitigation, adaptation, and enabling the environment for climate actions. Figure 2 presents a summary of goals, which are divided into three phases: short-term (2015–2016), medium-term (2017–2020), and long-term (2021–2050). Interviewees were asked to comment on the CCMP (2015–2050) during the interview in April 2021. The government office that issued the CCMP should be appreciative of its effort in drafting the first Thailand master plan on climate change, said the ADB interviewee. However, he suggested that Thailand's revised CCMP should set more specific actions applicable to Thailand. He believes the current CCMP goals are too general and could be applied by any country with slightly different target numbers.

Figure 2: Summary of goals of Thailand Climate Change Master Plan 2015–2050



Source: adapted from ONEP (2015)

Regarding the claim that Thailand's CCMP is not country-specific, this could be because the country needs international funding for climate actions. Government-B said the CCMP was released before the Paris Agreement was approved (Government-B, personal communication, 2 April 2021). Consequently, some indicators and measures might not be current, and many features have changed, such as the Monitoring, Reporting and Verification (MRV) system and the Green Climate Fund (GCF). In his perspective, they aim to ensure that their measures within the master plan align with international agreements, as this alignment facilitates access to funding from international sources. Additionally, the country's key priorities for development will be reflected in its master plan. It should be noted that the Paris Agreement allows parties to submit their Nationally Determined Contributions (NDCs) every five years starting in 2020 (UNFCCC, 2015). However, because Thailand requires international funding, climate actions must be aligned with funders' requirements.

Nearly all interviewees commented that the CCMP had yet to meet various goals in the short-term and even the medium-term phases. The missed goals include: "all stakeholders must develop their own implementation strategies for climate change," "create a "national fund for climate change," "increase

consumption of renewable energy in the national energy grid,” and institute a “climate-based agricultural insurance scheme.” One CCMP goal deemed erroneous was the target to increase the forest area to 40% of Thailand’s total land area (Scholar-A and E and UN Agency-C). Scholar-A pointed out that this has been a problem in Thailand for 30–40 years. Thai farmers lose their land rights due to claims that their holdings are forested land under the management of the Royal Forest Department. Such practices have created forced relocation and are thus a cause of insecurity.

Several interviewees acknowledged that climate change is difficult to understand, predict, and cope with (ADB, Scholar-A, Government-A). One major cause of faulty government policy on climate change is the need for more knowledge and understanding. Government-A said that he did not know how climate change would affect water resources in Thailand and could not predict how the country’s water resources would change. He explained that, when building irrigation systems, his office received technical assistance from the Japanese government to run water-forecast models. Thai government officials who are occupied with full-time work cannot do research and need assistance from external actors. Scholar-A explained during an interview on 20 January 2021 that addressing climate change requires long-term predictions of greenhouse gas emissions in the next 30–40 years. In his view, Thailand shares a problem with its neighbors regarding uncertain futures, “even senior bureaucrats with much experience in dealing with macroeconomic trends and trade relations and things like that still struggle with the idea of projections versus forecasts of climate change” (Scholar-A, personal communication, 20 January 2021).

Scholar-B pointed out that policymakers must rely on climate science to make sound climate policy. However, a challenge arises when scientists are required to provide definitive answers. According to her, scientists are trained to offer conclusive responses only when the data demonstrates more than 95% significance. She stated, “And I think that is the big point. When scientists do not affirm that something should be a certain way, policymakers are left seeking definitive answers. They want scientists to say yes or no. Unfortunately, many scientists cannot provide such clear-cut answers, which leaves policymakers unable to make decisions and prevents others from moving forward.” (Scholar-B, personal communication, 23 January 2021).

4.2.5 Limited awareness, indifference, and ignorance about climate change

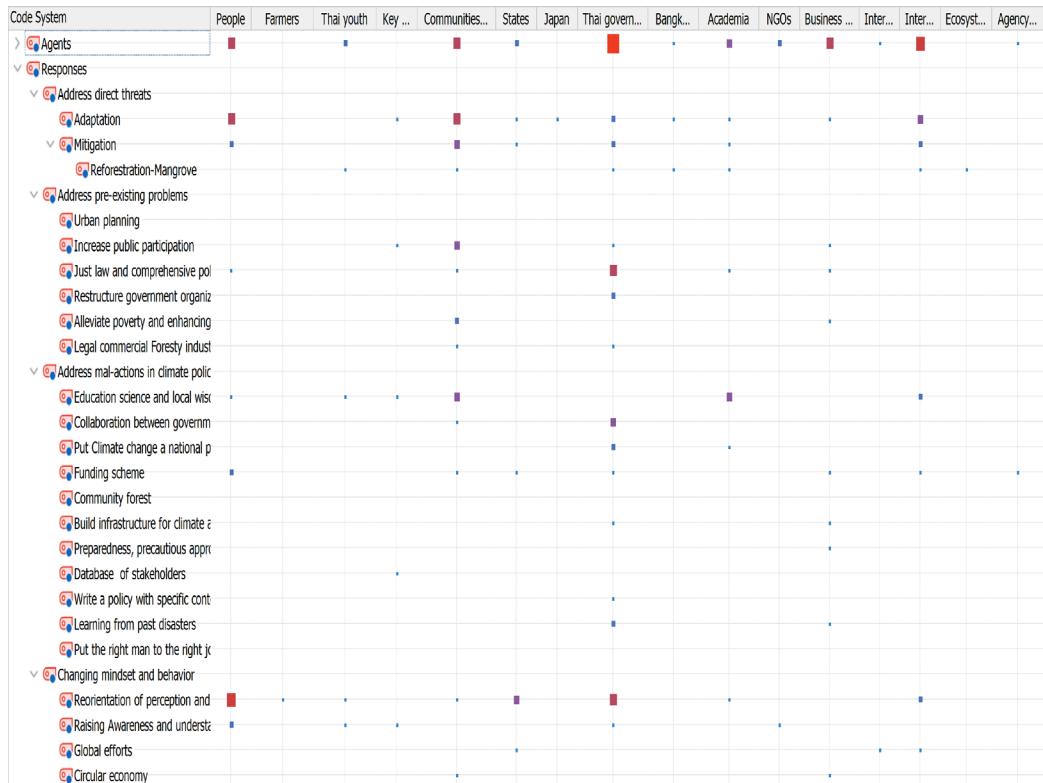
Limited awareness, indifference, and ignorance about climate change are threats. Almost all interviewees voiced concerns about low public awareness and perception of climate change (NGO, ADB, Scholar-B, C, D, and E). Scholar-B explained that human nature dictates that people only consider the risks before them. Nowadays, the COVID-19 pandemic is a clear threat, but not climate change. Scholar-A shared his experience teaching undergraduate students and

found that more than half thought only about polar bears and melting ice when hearing the term “climate change.” The students could not name examples of climate change impacts in Thailand or nearby countries. Moreover, Thailand suffers from coastal erosion caused by changes in water currents and sea-level rise due to sea-ice melting. However, according to Scholar-B, people in Thailand do not link this coastal erosion with climate change as they think this problem happens naturally. The ADB interviewee said that throughout his work at the ADB, he has seen that many countries have limited awareness of climate change, which is a fundamental constraint on climate actions. Furthermore, he commented that few businesses had integrated climate risks into their decision-making and strategic planning (ADB interviewee, personal communication, 7 April 2021). The findings of this research revealed that limited awareness occurs in two ways; 1) people do not know that they are victims, and 2) that they are also the cause of climate change. Scholar-D commented that local villagers must know that some of their traditional agricultural practices contribute to climate change. The harmful practices include, for example, burning forests in the northern provinces to harvest mushrooms, slashing and burning agricultural waste to clear land for new crops, and growing rice in wet paddy fields.

4.3 Agents and Responses

The interviewees’ perceptions varied concerning the agents responsible for climate change actions and the responses those agents should make. This was because there are multiple climate-related threats to security. Figure 3 presents the code relation browser result portraying interviewees’ perceptions of the agents that should be involved in the various responses. The figure is visualized by MAXQDA software, with a square symbol representing the relationship between agents and responses. The size of the square relates to the point where the relationship is found in the transcripts. Blank spaces without squares exist because the interviewees have not mentioned agents when discussing responses. The study identified various responses and categorized them as solutions to threats, as shown in Figure 3. It is noted that responses to direct threats, pre-existing problems, errors in climate policy, and limited awareness are beneficial in addressing climate-related security risks. Thus, the study does not explicitly categorize responses to these threats.

Figure 3: Code relation browser presents the relation between agents and responses, visualized by MAXQDA software



Source: The authors' own analysis, conducted using MAXQDA software.

According to Figure 3, agents recognized as critical actors in climate responses are the Thai government, people, communities, academia, business sector, and international organizations. The Thai government was perceived to be responsible for or at least should be involved in resolving all threats identified in this research. It was perceived that the most critical role for communities was in adaptation. Thus, the interviewees widely acknowledged community-based adaptation. Moreover, it was generally agreed that reorientating public perception and behavior is a vital response to climate change-related problems. The challenge is raising awareness that climate change issues are part of their daily lives. The NGO interviewee asserted that public awareness is vital to create bottom-up change, “once you have that kind of awareness, hopefully, we can garner support, energy from like a mass public, to pressure governments and businesses to do their part.” (NGO interviewee, personal communication, 27 January 2021).

Scholar-C explained that through his work with local villagers, he found that they do not know what climate change means scientifically but can tell how their communities and the surrounding environment have changed during their

lives. He observed that most international and local NGO missions and governmental climate education projects failed once they showed villagers “graphs and diagrams of incoming and outgoing radiation. ...At the end of the presentation, the villagers had no idea what they talked about. And that doesn't make climate change, and that's not a good education. It doesn't translate to better decision-making or responsibility at all.” (Scholar-C, personal communication, 27 January 2021). Scholar-B proposed during the interview on 23 January 2021 that the scientific community must have more contact with the public and tell people what they discover. In her opinion, writing excellent journal papers is not the best form of public engagement.

Interviewees suggested inclusive policymaking through deliberative democracy as a promising way to address pre-existing socio-economic and political problems. This approach would enhance public participation at all stages of the policy cycle. Poverty alleviation was perceived as another critical response. Scholar-D stated on 27 January 2021 that local villages with better livelihoods are usually more willing to participate in climate change-related projects than those struggling to meet basic needs. UN Agency-A highlighted the necessity for an economic and political system that would integrate the concept of peace and human togetherness in development policies and leave no one behind. The NGO interviewee suggested education and birth control as solutions to overpopulation, which is one cause of poverty.

Regarding the responses to erroneous climate policies, the interviewees mostly agreed on combining climate science and scientific evidence with local wisdom to achieve progressive and inclusive climate action. Scholar-D commented that the CCMP (2015–2050) did not integrate traditional knowledge into the plan. In his opinion, villagers have traditional knowledge of the best use of natural resources. Thus, the government should combine local knowledge with scientific knowledge to make policies and practices more sustainable. Collaboration among all government departments and ministries is another way to avoid inappropriate climate policies. However, this must be done alongside an agenda that makes climate change a national priority. Government-B described recent progress on mainstreaming climate policy into all ministries and administrative levels. In his view, “it's a good start to integrate into the Social Development Plan at a national level since the NESDP or national social and economic development plan for Thailand is the keystone for the country. So, all ministries and administrative level at all level have to follow once it got approved by the cabinet. If the ministry follows or refers its work to the NESDP, it will be certain that it will get funded by the national budget. ... So, our idea is to integrate into other ministerial, national, or local plan actions and activities to make sure that the continuity of the work.” (Government-B, personal communication, 2 April 2021)

5. Conclusion

The present study adopted an analytical framework for climate security discourse proposed by McDonald (2013) to investigate Thailand's climate change and security issues. The findings reveal that climate change is complex as it causes not only direct threats but also multiplies pre-existing socio-economic and political problems that exacerbate the vulnerability of some populations. The study uncovered five natures of the threats specific to Thailand: direct threats, climate-related security risks, pre-existing problems, erroneous climate policies, and limited awareness of, indifference to, and ignorance about climate change. The referent objects, agents, and responses varied accordingly. Understanding the climatic and non-climatic factors that account for the security of all entities would facilitate sound and inclusive policymaking.

Given the multifaceted threats posed by climate change to Thailand's security, the Thai government must adopt a comprehensive and integrated approach to climate governance. To effectively address these diverse security threats, the following policy recommendations are proposed for implementation:

Human Security: Enhancing public awareness and education is crucial, particularly focusing on vulnerable populations such as farmers, women, children, the elderly, and the urban poor. Integrating climate change education into school curriculums will help build a climate-literate future generation. Strengthening healthcare infrastructure to cope with climate-induced health issues, promoting climate-resilient agricultural practices, and developing alternative livelihoods will ensure economic stability and reduce vulnerability. An integrated climate security task force should be established to coordinate efforts across all levels of government and sectors and streamline bureaucratic processes to expedite the implementation of climate policies and actions.

National Security: The government should invest in disaster preparedness and response, including resilient infrastructure, early warning systems, and comprehensive disaster response plans. Regular training and simulation exercises will ensure effective disaster management for government officials and communities.

International Security: Strengthening regional cooperation and diplomatic relations with neighboring countries is essential to address transboundary climate issues like water resource management in the Mekong River basin. Aligning national climate policies with international frameworks such as the Paris Agreement will facilitate access to global funding and technical support. Active participation in regional climate initiatives and international forums will allow Thailand to advocate for climate security and share best practices.

Ecological Security: Protecting and restoring critical ecosystems is vital for ecological security. Policies should be implemented to safeguard forests, wetlands, and coastal areas, promoting reforestation and community-driven

conservation efforts. Integrating traditional ecological knowledge with modern scientific research will develop sustainable environmental management practices.

Lastly, the study had limited access to some interviewees, particularly government officials whose roles are critical in implementing climate policy. These include officials from the Department of Forestry, Department of Lands, Department of Disaster Prevention and Mitigation, Office of National Security Council, and Ministry of Social Development and Human Security. One significant limitation was the language barrier, as the interviews were conducted in English. This deterred many potential participants, especially government officials, due to the difficulty in finding officials with proficient English-speaking skills. Consequently, the number of government official interviewees was small. For future research, finding a suitable translator to assist with interviews or conducting them in Thai to improve participation rates is recommended. An increased number of interviewees would greatly benefit the identification of recurring themes regarding climate change as a security issue. Moreover, the authors propose that further research using this approach should be conducted in other countries or in collaboration with Thailand. Comparative studies between countries vulnerable to climate change will illuminate the complexity of climate change and security, emphasizing the necessity of considering all types of threats when designing climate policy.

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MERCOSUR: Challenges and Opportunities in the Regional and Global Order

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Abstract

Over the course of its 30 years, Mercosur (Southern Common Market) has undergone various political, economic and social transformations, which have had repercussions on its institutional configuration, enduring periods of progress, expansion, stagnation and setbacks. The bloc has certainly not been immune to challenges in the intra- and extra-regional relations of its member states. The present work seeks to analyze, from a critical and realistic approach, the evolution and development of MERCOSUR as a regional institution in the face of regional and global geopolitical challenges. Geopolitical uncertainties and economic difficulties show a tendency towards centrifugal forces in the regional organization, in which intra-regional trade and the joint insertion of member states show a propensity towards disarrangement and distancing. The study is justified by the need to investigate the ongoing challenges faced by MERCOSUR, first by delving into its historical background its institutional development and second by analyzing how it has evolved over the 1990s, the 2000s and the 2010s. We aim at identifying the current economic and geopolitical obstacles and adversities for the bloc to act as a radiator of South American integration.

Keywords Geopolitics, South America, Regional Integration, MERCOSUR, Integration Crisis

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1. Introduction

The post-Cold War international system has brought about a rearrangement of the correlation of global power. The end of the bipolar conflict led to the emergence of new players and new regional configurations that changed political and economic phenomena, above all due to the strengthening of multilateralism and regional and global governance mechanisms. The rise of developing countries has been accompanied by this process, reinforced by the emergence of a new global geopolitical and economic epicenter, Asia, and by the upsurge in cooperation efforts and interdependence among states. The unipolarity of the United States in the first decade after the Cold War was gradually followed by a trend towards multipolarity, especially in the economic and political spheres, although US geostrategic and military supremacy was preserved. In this trend, South American countries have also risen and its regional organization have been part of the process of cooperation within the Global South. In this paper, we seek to analyze the evolution of MERCOSUR (Southern Common Market) as a regional institution since its origins in 1991, by exploring the relations of conflict and cooperation related to its development. We highlight the political, economic and social aspects of MERCOSUR and their impact on its institutional configuration, which has gone through phases of expansion, stagnation and setbacks over the three decades of its existence.

A robust literature about South American regional integration and MERCOSUR already exists. Nonetheless, notwithstanding these important studies available in its most relevant aspects – geopolitical, regional, economic, social, institutional, political, cultural and environmental – a great deal remains to be explored about the complex interplay between the changing regional scene in South America and the rapidly changing global geopolitical order. Here the role played in South American affairs by its regional institutions needs to be examined through different lenses and with different horizons in sight, in light of the recent years of acute economic and political crisis and the reversal of the mechanisms of cooperation and integration that have had a sharp impact on the countries and the region as a whole. There are few analysts who have examined in depth the causes and consequences of this crisis and its impact on future scenarios. Recently we have witnessed a myriad of changes and new events that have severely affected the regional integration process. According to Costa (2022), the most emblematic example of what he calls an “ongoing process of deconstruction” is the annihilation of the Union of South American Nations (UNASUR) in 2019, a bloc that had brought together every country in the region since 2008.

By the same token, the Bolivarian Alliance for the Peoples of Our America (ALBA), created in 2004 is virtually defunct as it was spearheaded by Venezuela, which has undergone a massive economic and political crisis. Besides, the Pacific Alliance, formed in 2013, is purely a free trade area and cannot match the

institutional complexity of other South American regional organizations. The Andean Community, by its turn, has lost its relevance since Venezuela has left the bloc and Bolivia has decided to join MERCOSUR. Despite being the most consolidated and successful of the regional arrangements in South America, MERCOSUR has also been affected by the environment of institutional breakdown, since it receives scant political priority by the national governments of its member countries, especially Brazil (Costa, 2022). Thinking geographically, only MERCOSUR and the Andean Community include exclusively South American countries, since ALBA and the Pacific Alliance are made up by other extra-regional members².

MERCOSUR was founded in 1991 with the aim of creating a common market, inducing development and strengthening democracy in its member states. The bloc, made up of Argentina, Brazil, Paraguay and Uruguay, functions as a political and economic organization. Venezuela joined the bloc in 2012, but has been suspended since 2016 for not incorporating the economic, human rights and immigration agreements that govern the group. Importantly, even though the country is suspended, it is still a full member of MERCOSUR³. All the other countries in the region - Chile, Colombia, Ecuador, Guyana, Peru and Suriname - are associate members of MERCOSUR and Bolivia has been recently accepted as new permanent member in 2024 but has not yet completed the entry process, as the country still needs to adjust and adapt its national legislation to the bloc's agreements⁴. In total, MERCOSUR represents the world's 5th largest economy and its total trade with the world reached US\$ 752 billion in 2022 (MERCOSUR, 2023). In fact, it is the most advanced and ambitious regional arrangement in South America. However, the bloc faces a myriad of challenges arising from economic recessions, political instabilities, geopolitical changes and external shocks, which have been sources of institutional deterioration. Currently, many experts consider the bloc to be in a period of uncertainty, as it faces a growing risk of fragmentation at a time of crisis and decline (Onuki, 2022; Saraiva, 2022; Simões & Garcia, 2022).

² The Andean Community member countries are Colombia, Peru, Ecuador and Bolivia; ALBA member countries are Venezuela, Bolivia, Nicaragua, Cuba Dominica and Saint Vincent and the Grenadines (the last three are Caribbean nations and Nicaragua is a Central American nation); the Pacific Alliance members are Peru, Colombia, Chile and Mexico (the latter is a North American country).

³ According to the Secretary of Latin America and the Caribbean of the Ministry of Foreign Affairs of Brazil, Gisela Padovan, Mercosur countries are resuming dialogues with Venezuela in order to reintegrate the country into the grouping (Carta Capital, 2023). This is more seemingly to occur following Venezuela's presidential elections on July 28, 2024.

⁴ Bolivia's full membership implies adjusting and adapting national legislation to most Mercosur agreements. The other member countries have pledged to provide technical support for Bolivia's incorporation, in accordance with the provisions of the accession protocol. The Andean country's entry is an important achievement for Mercosur and the integrationist process in South America.

Since the 2010s, the bloc has faced endemic problems, including macroeconomic volatility and political conflicts, which have eroded the countries' internal order and their international projections. The deterioration of the international economic environment has also seriously affected the integration process. Recent tensions between the bloc's members include growing development gaps and economic asymmetries, a trend towards "re-primarization" of their exports, a decline in intra-regional trade, calls for a relaxation of its rules to give individual members more room to negotiate trade agreements with third parties. In view of this situation, we discuss the problems affecting MERCOSUR, the sensitive issues and the challenges for the continuity of the governance system and the strengthening of regionalism in South America.

In order to understand these challenges, this article is divided into two main sections. The first one presents the historical background of the bloc and its institutional development. The second part looks at its evolution, analyzing three periods that characterize the grouping. Each one corresponds to a specific decade of the 30 year-long trajectory of the grouping: a) "The neoliberal MERCOSUR" (1991-2002); b) "The pink tide" (2003-2011); and c) "Frictions and impasses" (2012-2022). By examining these three decades, we try to understand the obstacles to achieving a cohesive and harmonious regionalism in MERCOSUR and South America as a whole.

2. MERCOSUR in retrospect

MERCOSUR is one of Latin America's most ambitious regional integration projects. Throughout its development, there have been auspicious periods, with great achievements, and periods of uncertainty, in which the grouping has been on the verge of fragmentation. To understand its development over the decades, it is important to analyze the geopolitical and economic environment of the period leading up to its foundation. In the context of the Cold War, South America was involved in a complex and bitter experience of overlapping conflicts that spanned local, regional and global arenas. According to Hal Brands (2010), East-West tensions, the Cuban Revolution and domestic turbulence and polarization gave rise to different changes in the region, which led to the militarization of internal conflicts and the stifling of democracy when authoritarian military regimes took power, especially from the 1960s onwards. Argentina, Brazil, Uruguay, Paraguay and the majority of South American countries fell under the yoke of dictatorial regimes. Regional affairs were negatively affected by the rise of the military, as rivalries and suspicions between neighbors intensified. The possibility of a military conflict constantly loomed over the countries due to territorial disputes, frictions over influence and other geopolitical and geostrategic differences.

In the mid-1980s, when the military dictatorships began to be dismantled, these countries began to return to the path of democracy. The feeling of mistrust was quickly dispelled when Brazil and Argentina began bilateral dialogues and a series of trade agreements that enabled a dynamic chain of cooperation and coordination. Faced with the economic quagmire bequeathed by the military regimes - which included hyperinflation and debt crises - combined with an unfavorable external environment of rising interest rates from developed countries, Brazil and Argentina relied on their own abilities to set long-term development goals. The period following the end of the Cold War witnessed greater international cooperation. In fact, globalization and regionalism were key words on the international agenda at that time. Both countries demonstrated an extraordinary capacity to understand this political dynamic and integration emerged as a fruitful alternative path to boost regional ties and increase their insertion in global governance mechanisms and decision-making processes (Cervo & Bueno, 2008).

The post-Cold War environment favored the development of a considerable number of regional institutions with the aim of promoting cooperation in a multitude of spheres of mutual interest. Brazil and Argentina worked hard to reduce trade barriers and increase complementarity through various agreements to integrate their economies. In 1991, a new regional integration mechanism was launched under the name MERCOSUR (the Southern Common Market). The mutual approach launched by Brazil and Argentina was accompanied by their smaller neighbors, Uruguay and Paraguay, who were looking to increase their participation in global trade and perceived MERCOSUR as a skillful mechanism to increase their competitiveness in the international market through trade and investment as well as an important platform to increase their presence in the global order with greater room for negotiation and maneuver. In short, MERCOSUR would not only have increased the level of trust, but would also have forged an unprecedented economic partnership between former geopolitical rivals (Mello, 2001).

This rapprochement was consolidated in the Treaty of Asunción on March 26, 1991, which created MERCOSUR, a sub-regional integration mechanism. It established the legal framework and stipulated the principles for the creation of a common market in order to allow the free movement of goods, services and factors of production among member states, along with a common trade policy towards third parties and the coordination of macroeconomic policies. In 1994, the Ouro Preto Protocol improved and extended specific policies of the Treaty of Asunción and gave MERCOSUR the status of an international organization with legal personality. It also outlined the bloc's institutional structure, with the creation of three decision-making bodies: The Common Market Council (CMC), the Common Market Group (CMG) and the MERCOSUR Trade Commission

(CCM), along with a set of additional secondary bodies with different attributions and agendas.

In addition, the Ouro Preto Protocol distinguished other representative and consultative bodies. The Joint Parliamentary Commission, later succeeded by the MERCOSUR Parliament, the Economic and Social Consultative Forum and the MERCOSUR Secretariat are illustrative examples. Complementary bodies, such as the Permanent Court of Review, the MERCOSUR Social Institute and the Public Policy Institute, are equally important for its full operation. The Ouro Preto Protocol also provided that the bloc is an intergovernmental integration process and that its decisions must be taken by consensus, based on the rule of one vote per member state. Other important documents came into force in the following years. In 1998, the Ushuaia Protocol on Democratic Commitment in MERCOSUR was adopted, also signed by its associate members, and in 2002, the Olivos Protocol, which regulated the dispute settlement system and paved the way for the creation of the Permanent Review Tribunal in 2004.

Figure 1: MERCOSUR's members as of 2024



Source: The author

However, despite the implementation of a legal structure and a complex set of institutions, MERCOSUR never reached the status of a common market, as

was intended in 1991. In fact, the bloc remained only an incomplete customs union. Strictly speaking, the elimination of customs tariffs and the adoption of a 35% common external tariff (CET) on imports from third parties were supposed to increase trade between its members, attract investment and encourage industrial development (Simões & Garcia, 2022). But a list of exceptions was applied, leading to different import rates than those provided for by the CET. The gradual plan for economic integration and progressive liberalization of trade was constantly undermined by the numerous exceptions. Thus, progress towards the realization of a common market for goods, services, capital and labor is considered a distant and unlikely possibility, although the bloc has made important achievements in other areas.

Nonetheless, it is telling that, since its consolidation as a political and economic actor, MERCOSUR has been a driving force behind other regionalist experiences in South America and even Latin America, contributing to broader and stronger regional integration initiatives, which should be praised, given that the world is inexorably progressing towards multipolarity, multilateralism and the renewal of global governance mechanisms, in which developing and emerging countries are willing to play a leading role (Costa, 2022). In order to understand MERCOSUR's constant transition between advances and setbacks, in the following section we analyze three periods that characterize its evolution over the decades, pointing out its achievements and failures in the search for cooperation and development as well as the current challenges faced in strengthening the bloc.

3. The evolution of MERCOSUR over the decades

3.1 "The neoliberal MERCOSUR" (1991-2002)

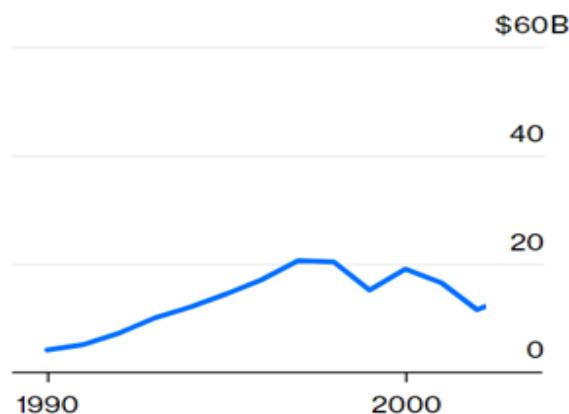
In its first decade, MERCOSUR was initially marked by a period of commercial success and ended with a profound institutional, economic and political crisis. Intra-regional trade was multiplied tenfold, reaching an unprecedented level of cooperation between its member states and a considerable expansion in foreign investment (Figure 1). The bloc also became a platform for the exchange of goods with higher added value, thus creating a large-scale market for the development of national industries. Despite the aforementioned list of exceptions, which prevented full trade liberalization, the regional integration process slowly began to have a broad and positive impact on production and trade between its partners.

During the 1990s, most of the bloc's countries emphatically adopted a new economic ideology known as the "Washington Consensus". This consensus outlined a set of neoliberal policies considered to be the only alternative for achieving growth and prosperity in the globalized world, including market opening, privatization and the deregulation of markets, especially financial markets. Cervo (2003) characterizes the period from 1990 to 2002 as the

"paradigm of the normal state", in which the dominance of neoliberal thought showed its ubiquity to such an extent that even the Economic Commission for Latin America and the Caribbean (ECLAC) – who had long been an ardent supporter of the import substitution industrialization (ISI) in the region – sought to adapt to its precepts, having formulated the doctrine of "open regionalism" to advocate trade opening and other recipes from the neoliberal program.

In South America, where the economic crises of the previous decade led to hyperinflation and poverty, adherence to these policies implied austerity, spending restriction and the curtailment of labor rights. Initially, the measures taken to solve the problem of inflation and foreign debt were very successful due to the monetary stabilization of their economies after giving in to the demands of creditors and multilateral financial agencies, along with the financial opening of their economies⁵. However, the long-term effects of the globalizing neoliberal project proved to be adverse and asymmetrical in South America, due to its vulnerability to global competition and the fluctuating prices of its products on the global market after the elimination of trade barriers, which led to economic recessions and even depressions.

Figure 2: MERCOSUR Intraregional Trade (1990-2002)



Source: ECLAC (2002)

⁵ The 1980s in Latin America became known as "the lost decade" in economic terms. From GDP growth rates to accelerating inflation, industrial production, the purchasing power of wages, employment levels, the balance of payments and other indicators, the results of the period were contemptible. The enormous foreign debt crisis of the 1980s was caused by rising interest rates in developed countries, especially the US, with whom Latin American countries had borrowed heavily to finance their economic growth in the previous decade. The economic crisis, especially hyperinflation and the foreign debt, could only be resolved in the 1990s (Giambiagi et. al, 2011).

The serious economic and financial crisis that hit the economies of the MERCOSUR countries had clear repercussions on their institutional performance. Trade disputes between Brazil and Argentina could only be resolved through the dispute settlement mechanism of the World Trade Organization (WTO)⁶. The bloc's malfunctioning was exacerbated by a sharp decrease in intraregional trade flows, increasing asymmetries and growing frustration of its members. The tension in diplomatic and economic relations between MERCOSUR's partners and the possibility of its fragmentation had a profound impact on them. In short, after freeing itself from its military dictatorships in the mid-1980s and achieving unprecedented successes in its first decade, at the turn of the century MERCOSUR was facing the risk of losing its relevance and, more ominously, of being fragmented by the will of its own member states.

3.2 "The pink tide and the resumption of MERCOSUR" (2003-2011)

The failure of the neoliberal policies adopted throughout the 1990s led to an increase in poverty, social inequality and unemployment in South America. As a result, during the first decade of the 21st century, governments emerged to power with political platforms far removed from the "Washington Consensus" recommendations of austerity and trade openness. They advocated, in particular, the adoption of social inclusion and an increase in the state's presence in the economy. The specialized literature called this period of the rise of progressive governments in the region, which differed, however, in their ideologies, the "pink tide" (Levitsky & Roberts, 2011). In the wake of the "pink tide", countries such as Brazil, Argentina, Uruguay, Bolivia, Ecuador and Venezuela took advantage of the crisis at the end of the 1990s to challenge the neoliberal political and economic projects. The realignment of national strategies, focused on nationalist proposals and socio-economic development policies, represented a substantial change in regional dynamics. South America began to incorporate different alternatives to the construction of regional initiatives, whether centered on trade, hostile rhetoric to U.S. hegemony or political coordination and development cooperation. According to Riggiozzi (2012), projects such as Unasur – and even ALBA – should be seen as political spaces in which, at the same time, the outlines of the Washington Consensus are revised and new understandings of issues such as democracy, inclusion and economic management are structured. They would

⁶ According to the Olivos Protocol for the Settlement of Disputes in Mercosur (2002), the parties to the dispute can submit it to an Ad Hoc Arbitral Tribunal or directly to the Permanent Court of Review (PPR). Disputes can also be submitted to the WTO, which means it is not compulsory to resolve them firstly within Mercosur. Three cases of trade disputes between Brazil and Argentina are paradigmatic: 1) DS190, on the application of transitional safeguard measures to certain imports of cotton fabrics and their blends from Brazil; 2) DS241, on definitive anti-dumping duties on poultry from Brazil; and 3) DS355, on anti-dumping measures on imports of certain resins from Argentina. In the latter, the WTO was used directly, i.e. the Mercosur system was not used. In the first two cases, both systems were activated (Chain et. al, 2014).

therefore be political arenas for the convergence of interests and practices between the countries of the region. A glaring example is the political articulation of Brazil, Argentina and Venezuela to prevent the US from moving forward with its long-held dream of creating a continent-wide free trade area, the Free Trade Area of the Americas (FTAA) in 2005. In the previous year, in 2004, based on explicitly anti-American rhetoric, Venezuela had spearheaded the formation of ALBA (Bolivarian Alternative for the Peoples of Our America), a sub-regional organization that opposed the FTAA and often held unfriendly positions towards the US.

The MERCOSUR countries have been favored by the changes in regional and global geopolitics, with the strong rise of China and the relative decline of US hegemony. In this scenario, they were able to benefit from China's booming economic growth and its desire for agricultural and mineral products exported by South Americans. The influx of large sums of money from exports allowed the MERCOSUR states to adopt more developmental economic models, focused on social welfare, with policies to combat famine and poverty and generate employment and income. This process was promptly reflected in the international insertion of the region's countries, resulting in what Riggiozzi (2012) called the "repoliticization" of MERCOSUR, expressed in initiatives aimed at labor and social security rights and at encouraging greater participation by civil society in decision-making processes. Institutionally, the creation of the MERCOSUR Parliament, the MERCOSUR Structural Convergence Fund (FOCEM), the Permanent Review Tribunal and the Olivos Protocol on the settlement of disputes between member states date from this period.

Although concerns about social issues date back to the 1990s, illustrated by initiatives such as the Economic and Social Consultative Forum, the Socio-Labor Declaration, the Multilateral Agreement on Social Security, the Protocol on Cultural Integration and the Ushuaia Protocol on the Commitment to Democracy, the increase in commitments away from the strictly economic and trade agenda intensified in the 2000s. Cooperation between the bloc's countries therefore began to take new steps, with a particular focus on Social MERCOSUR and Institutional MERCOSUR (Saraiva, 2012). This paradigmatic shift in focus towards development and social welfare, to the detriment of the almost exclusive approach towards trade relations of the previous decade, gave rise to the emergence of "post-liberal" regionalism (Sanahuja, 2012) or "post-hegemonic" regionalism (Riggiozzi & Tussie, 2012). Even so, economic and trade issues were not neglected by MERCOSUR throughout the 2000s. On the contrary, the countries made efforts to negotiate and conclude a myriad of trade agreements with their South American neighbors. Following on from the successful agreements with Chile and Bolivia in 1996, MERCOSUR signed Economic Complementation Agreements (ECA) with Peru in 2003 and with Colombia, Ecuador and Venezuela in 2004, and finally with the Andean Community. As a result, bilateral and

regional trade flows in South America, anchored in free trade, increased considerably over the period.

In more specifically geopolitical terms, the international profile of the MERCOSUR states - and South America as a whole - has been boosted by economic strength and changes in international politics at a global level. From the 21st century onwards, a set of constraints on political and economic relations between the US and MERCOSUR, especially due to the sharp increase in trade with Asia, and the country's loss of relative influence after its reaction to bypass multilateral institutions in favor of its agenda against global terrorism, led to growing skepticism towards the hegemonic power. Based on the increase in their strategic autonomy, the policy of diversifying commercial partnerships and the perception that the US was not giving South America the attention it deserved, the South American countries promoted a real transformation in the regional configuration, with the formation of new and multifaceted regional institutions, such as ALBA in 2004, as mentioned above, and the Union of South American Nations (UNASUR) in 2008. Unasur tried to put forward ambitious geopolitical objectives. For the first time in history, an institutional organization had gathered together all twelve South American countries, with the aim of building a space for the integration of their societies and working together on structural issues. This regional arrangement has served as an arena to intensify the development of common policies on various issues, including the political and financial coordination of the implementation of infrastructure projects for regional physical integration in the areas of transport, energy and information. It is clear that it was not focused exclusively on trade, but on advancing dialogue, stimulating peace and security, reducing socio-economic inequalities, achieving social inclusion and strengthening democracy (Briceño Ruiz & Puntigliano, 2017). This is a common characteristic of the regional institutions created during the “pink tide” era. Within this context, it is telling that these ideas have also shaped the direction of MERCOSUR during the 2000s, as it has remained the main axis of integration and institutional development due to its long-standing institutional trajectory.

3.3 "Frictions and deadlocks" (2012-2022)

After a fruitful decade of institutional invigoration and economic growth both within the countries and the region, catalyzed by the adoption of another development model and strong Chinese demand for exports of their primary products, the MERCOSUR countries faced a period of intense instability and turbulence in the 2010s. The emergence of adverse domestic and international scenarios proved detrimental to the continuation of an organizational strengthening project and to bilateral relations between its members. In fact, the multidimensional crisis that befell the bloc raised questions about its *raison d'être* and doubts began to hang over its institutional relevance. The tribulations that hit MERCOSUR affected the political, economic and institutional spheres of its

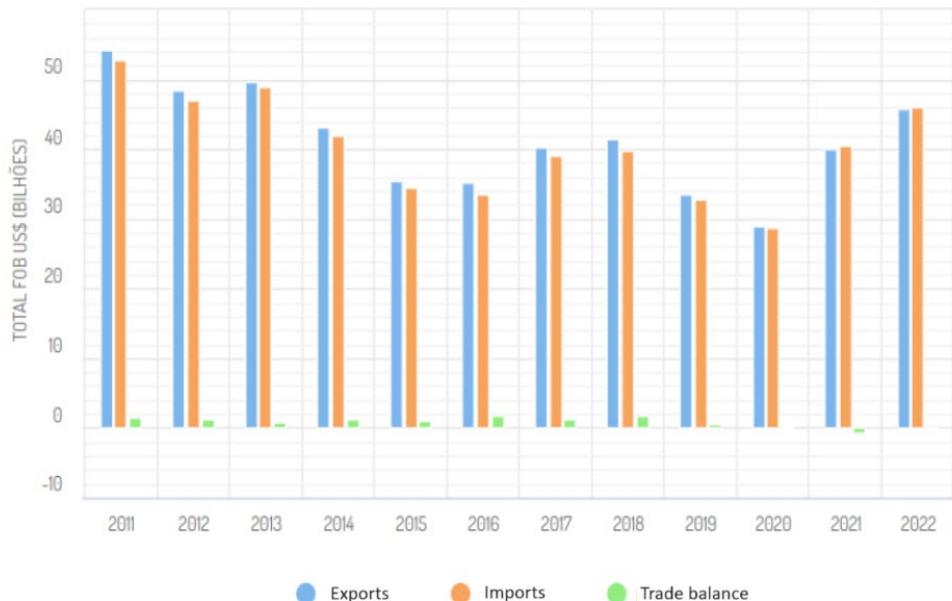
countries, with pernicious effects on the international insertion of the States Parties and on South American regional integration.

In the political sphere, tensions in MERCOSUR began with the 2012 impeachment of Paraguayan President Fernando Lugo, accused of failing to perform his duties after a violent conflict between police and landless peasants. On that occasion, MERCOSUR activated the Ushuaia Protocol of 1998, because it perceived a tendency towards illegitimacy in Lugo's impeachment process, especially due to the fact that the parliamentarians had not presented evidence against the president and the insufficient time for his defense (Soler, 2015). Paraguay was suspended from MERCOSUR until democratic order was re-established in August 2013, following the inauguration of a new president elected by the population. The interruption of Paraguay's participation in 2012 paved the way for the incorporation of Venezuela as a full member of MERCOSUR, since the other members had already approved its accession and only Paraguay's acquiescence was needed. Since Paraguay was suspended, its right to vote was obliterated so that Venezuela could join the bloc.

In the economic sphere, MERCOSUR members were seriously affected by the slowdown in global economic activity, especially after 2012, with the sharp drop in international commodity prices, which negatively affected their exports. Vulnerability to external shocks highlighted the dependence of the bloc's countries on fluctuations in commodity prices, as well as the fall in production complexity and technological distance from developed countries. Intraregional trade suffered negative impacts, with significant decreases in exports and imports between MERCOSUR members (Figure 3). In 2015, for example, the drop in trade flow was around -20% (SECEM, 2023). The weakening of economic activity, which in some cases meant not only low growth but also recession, led to a transformation of the South American political scene. To the extent that the "pink tide" governments were no longer able to provide the social policies that had catapulted them to power, they were replaced by right-wing politicians, elected under the banner of neoliberalism, trade openness and skepticism about regional integration as an inducer of economic development.

In fact, domestic economic crises have accentuated political polarization in the MERCOSUR states. In Brazil, the bloc's largest economy, President Dilma Rousseff was ousted through controversial legal and parliamentary maneuvers, which are still the subject of heated debate in national society. However, unlike what happened in Paraguay when Fernando Lugo was ousted, there was no triggering of the democratic clause or the adoption of sanctions against Brazil by MERCOSUR. The political fragmentation between governments headed by left-wing and right-wing leaders showed the limits of the regional institution's action. The bloc was divided between those who expressed vehement criticism of Rousseff's impeachment process, such as Uruguay and Venezuela, and those who preferred to abstain on the situation, such as Argentina and Paraguay.

Figure 3: MERCOSUR intra-regional trade (2011-2022)



Source: SECEM (2023)

The fraying of the social fabric of the MERCOSUR countries led to a real political shift in the following years. In 2016, the bloc's two largest economies, Brazil and Argentina, joined Paraguay as governments headed by the political right. In this context, they decided to suspend Venezuela from the regional organization, alleging non-compliance with the incorporation of the bloc's trade standards and violation of human rights. The decision was even corroborated by Uruguay, which called for dialogue between the Venezuelan government and the opposition and for the application of human rights (Agência Brasil, 2017). In fact, Venezuela has been facing a rather complex situation since 2013. Throughout the 2000s, resources from the rise in the international price of oil provided the country a large amount of foreign currency to carry out its project of "21st century socialism". Oil exports to China, by way of illustration, grew extraordinarily, jumping from zero in 2004 to 380,000 barrels in 2009 (Raby, 2011). In fact, it has been possible to carry out a program to significantly reduce poverty and economic inequality and even eradicate illiteracy. The Hugo Chávez government also envisioned a high-profile international projection, with a view to shaping new global geopolitics in which multipolarity would prevail over US hegemony. Venezuela presented itself as an alternative to Brazilian leadership in steering the course of South America, using ALBA as a platform for projecting power and influence.

However, the sharp drop in the global value of oil, a resource responsible for two-thirds of the country's budget, has led to the corrosion of the country's international insertion and above all of its domestic economic and financial health. The country's gross domestic product shrank by around two-thirds between 2014 and 2021, amid an environment of hyperinflation, which has led more than five million Venezuelans to leave their territory since 2014 (Cheatham & Labrador, 2021). In addition to overdependence on oil and US sanctions and embargoes on the Venezuelan oil industry, the economic mismanagement and escalating authoritarianism of the Nicolás Maduro government - which came to power in 2013 after Chávez's death - have contributed to Venezuela's economic and geopolitical decline. In this scenario, in 2019, the right-wing governments of Brazil, Argentina and Paraguay asked Maduro to cede power to the opposition, specifically to the self-proclaimed president Juan Guaidó, who has never had control of the government. In the face of Guaidó's recognition, diplomatic relations between Brazil and Venezuela were suspended from 2019, only to be re-established in 2023 with the election of President Luís Inácio Lula da Silva.

In the institutional sphere, the new right-wing governments called for MERCOSUR to be more flexible. The bid was to leave in the background or even dispense with efforts to achieve a political, cultural and social community in favor of strengthening the bloc's commercial and financial activity. Not only was it advocating a halt to progress towards a common market, it was advocating that MERCOSUR should go back to the stage of a free trade area to the detriment of the customs union it had achieved. The rise of Jair Bolsonaro's far-right government in Brazil in 2019 has led to renewed attacks on the formation of a South American regional identity and MERCOSUR integration. In the midst of clashes with the progressive Argentine government of Alberto Fernández, the Brazilian president and his chancellery would seek integration restricted solely to the economic and commercial dimension.

Jair Bolsonaro's (2019-2022) confrontational or neglectful approach towards its South American neighbors reveals in stark terms how regional organizations can fall prey to the domestic political changes in its member states. Casarões & Farias (2021) believe that in contrast to its diplomatic tradition, throughout Bolsonaro's presidency, Brazilian foreign policy was much less pragmatic and more ideological, by seeking to overturn the international and regional order based on a rather heterodox position of promoting "anti-globalism", anti-Communism and religious nationalism. The authors understand that Bolsonaro's diplomacy has embarked on a more combative course with its regional partners by bandwagoning with Donald Trump's United States and joining a conservative international alliance with Hungary, Poland and other far-right governments. Accordingly, not only did he put MERCOSUR on the backburner but he also pulled Brazil out of Unasur and other regional integration mechanisms. According to Saraiva (2022), under Bolsonaro, Brazil no longer

nurtured ambitions to project itself as a rising power within and beyond South America and to secure leadership positions in the regional order. Brazilian regional clout was obfuscated by pernicious extreme ideologies. For instance, Bolsonaro did not attend the inauguration of left-wing presidents such as Bolivia's Luis Arce, Argentina's Alberto Fernández, Chile's Gabriel Boric and Colombia's Gustavo Petro. Even though the MERCOSUR-European Union trade agreement was signed during the Bolsonaro government, it was never ratified by the parties due to the corrosion of relations with European states due to deep concerns about his environmental policies, notably the destruction of the Amazon rainforest. Therefore, by expressing his disdain for regionalism, Bolsonaro has greatly aggravated the regionalist crisis in South America.

It is therefore not surprising that the COVID-19 pandemic has accentuated the countries' economic fragility and highlighted the loss of the capacity for coordination and political and institutional cooperation that had been built up in the first decade of the century, reflected, among other factors, in the unequal access to vaccines and medical care among its members. The insufficient attempts at a joint response illustrated the limits of coordination between the MERCOSUR states (Kerr-Oliveria et al., 2021). The deleterious impacts caused by the war between Ukraine and Russia and the rise in global interest rates added to the tribulations caused by the pandemic in MERCOSUR from 2022 onwards. In this context, one might have expected a call for concertation and cooperation between the countries of the bloc, but the institutional weakening throughout the 2010s prompted deviations that have slowed down rapprochement and the establishment of more fluid dialogues that could help with overcoming difficulties and dealing with common problems. In another move, Bolsonaro's administration decided to reduce the common external tariff by 10% without the approval of other MERCOSUR members, which spurred discontentment among them. This unilateral measure by Brazil could have seriously undermined MERCOSUR's integrity, as its state members have different technological and industrial capacities. In the end, MERCOSUR has decided that all countries should reduce the CET rates by 10% for most of the tariff universe in order to preserve the bloc's commercial cohesion and coordination (Agência Brasil, 2022).

MERCOSUR is currently facing conjunctural and structural challenges. Among the cyclical challenges, in addition to those described in the last section of the article, such as political instability, economic crises, exogenous shocks and the suspension of Venezuela from the bloc, we can include Uruguay's attempts to establish a free trade agreement with China and the insufficient number of trade agreements with other states and international economic organizations. In the case of Uruguay, a strategy to deepen trade openness has recently begun under the leadership of pro-market president Luis Lacalle Pou. At the bloc's summits, the Uruguayan president has expressed his aspiration to negotiate with third countries separately from MERCOSUR. In fact, the country has independently applied to

join the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and began talks with China to negotiate a free trade agreement with the Asian giant. From an institutional point of view, however, these moves by Uruguay could cause serious disruption to MERCOSUR, in view of the violation of Common Market Council Decision 32/2000, which establishes the need for joint negotiation by all members of the group on trade agreements that involve tariff concessions, with damage to the Common External Tariff and the very functioning of the bloc. For this reason, there were categorical reactions from the other members and Uruguay even considered leaving MERCOSUR (Barbon, 2023).

Uruguay's demand has shed light on two important predicaments facing MERCOSUR. The first, of a cyclical nature, concerns the bloc's supposed "isolation" from the global value chains. Over a period of three decades, the grouping has managed to establish a small number of free trade agreements and preferential trade arrangements with other states and regional economic blocs (Figure 4). For an organization that represents the world's fifth largest economy in aggregate⁷, this number seems insufficient to catapult MERCOSUR countries into an adequate position in international trade. The only free trade agreements currently in force have been established with Israel and Egypt; others have been negotiated and signed, but have yet to be ratified, such as agreements with Palestine, the European Free Trade Association (EFTA - group of Switzerland, Norway, Iceland and Liechtenstein), the European Union and Singapore. The trade preference agreements, which are more restrictive than the free trade agreements, include those with India and the Southern African Customs Union (SACU). Although there are agreements under negotiation that would expand MERCOSUR's commercial openness and cooperation with other countries, including the economic complementation agreements within ALADI (Latin American Integration Association), Uruguay's criticism could serve as a warning that some of the concessions to the bloc's smaller states need to be considered, especially given the structural asymmetries between its members, especially those of an economic nature.

⁷ According to the World Bank Data, the top four largest economies in the world in 2023 were: 1) the United States; 2) China; 3) Germany; and 4) Japan.

Figure 4: MERCOSUR Trade Agreements

FREE TRADE AGREEMENTS (FTA)	PREFERENTIAL TRADE AGREEMENTS (PTA)	FRAMEWORK AGREEMENT FOR FTAS	ECONOMIC COMPLEMENTATION AGREEMENTS (ALADI)
Israel (2010)	India (2009)	South Africa	Chile
Egypt (2017)		Turkey	Bolivia*
Palestine		Syria	Mexico
EFTA	SACU (2016)	Morocco	Peru
European Union		Tunisia	Cuba
Singapore		Lebanon	Colombia

- Most important trade agreements in force
- FTA agreements signed but not yet ratified

* According to the Protocol of Accession of the Plurinational State of Bolivia to MERCOSUR, after Bolivia has joined MERCOSUR, the Economic Complementation Agreement signed in 1996 will remain into force for four more years in the latest, that is, until 2027.

Source: Prepared by the author based on data from the official MERCOSUR website.

The case of the negotiations between MERCOSUR and the European Union is quite emblematic of the obstacles and interests involved in agreements of this magnitude. The free trade agreement between the two regional organizations was signed after twenty years of talks between the parties, but its ratification still seems a long way off. According to Roncaglia (2023), the asymmetries in the commercial and technological spheres corroborate the notion that the agreement would be advantageous for the Europeans and pernicious for the South Americans, since it promises to liberalize MERCOSUR's market for European industrial products, but in return there would be few benefits for South American agricultural products in the EU market. In addition, the Europeans presented conditions for allowing MERCOSUR agricultural products to enter, demanding compliance with environmental rules and the possibility of punishments, which was seen as veiled and selective trade protectionism, in which the threat prevails to the detriment of trust between trading partners. Added to this is the fact that the free trade agreement consolidates and expands the specialization

of South American countries in the production and export of primary products, to the detriment of their industrialization and global competitiveness. The center-periphery model would perpetuate neo-colonial relations between developed and developing countries, intensifying the existing asymmetries in the world economic order (Simões & Garcia, 2022).

To some extent, this same criticism can also be directed at the economic and trade relations between MERCOSUR and China. Although there is no free trade agreement on the horizon, China's commercial incursion into the region can be seen as both beneficial and challenging. China is MERCOSUR's main trading partner, but it is gradually displacing and replacing the intra-regional trade flow. Currently, trade between the bloc's countries makes up only 13% of its total (compared to 25% at the end of the 1990s), while the Chinese represent 27.5% of MERCOSUR's commercial composition (ECLAC, 2019). Furthermore, the trade paradigm between the Asian giant and the South Americans is also part of an exchange in which China exports high value-added products and imports primary products, reinforcing the deleterious effects on MERCOSUR's industrialization. If, on the one hand, China's importance for economic growth and the mitigation of social development challenges in South America throughout the 2000s is undeniable, on the other hand, the continued dependence on commodity exports reveals the danger of this economic model.

Finally, it is imperative to point out two other structural challenges facing MERCOSUR. The first one refers to the asymmetries in power and economic development between the members of the grouping. The disproportionality of the two smaller members, Paraguay and Uruguay, in relation to Brazil and Argentina in territorial and population terms and in terms of GDP size is striking, with the notable exception of Uruguay's GDP per capita (Figure 5). Together, Argentina and Brazil make up 96% of the population, 95% of the territory and 95% of the GDP of the bloc. The creation of the MERCOSUR Structural Convergence Fund (FOCEM), in operation since 2007, aimed at financing programs to reduce structural asymmetries and increase competitiveness, social cohesion and institutional strengthening, with clear priority for Paraguay and Uruguay, has shown rather modest results after more than a decade in operation. Costa's (2009) understanding that asymmetries between states are the main factor of regional fragility in South American institutions has proved accurate in the case of MERCOSUR.

Figure 5: MERCOSUR Quantitative Data (2022)

Country	Population (millions)	Area (km ²)	GDP (US\$ bi)	GDP per capita (US\$)
Argentina	45277	2,736,690	631,1	13,650
Brazil	214326	8,358,140	1,920,5	8,917
Paraguay	6704	397,30	41,7	6,153
Uruguay	3426	175,020	71,1	20,795
Venezuela	28353	912, 050	92,1	3,421
Bolivia	12554	1,098,581	44,0	3,600
Total:	96314	13,677,781	2,800,5	

Source: Prepared by the author with 2022 data from the World Bank (2024)

The second structural challenge is the shortage of physical infrastructure in South America as a whole, including the MERCOSUR countries. The implementation of a set of infrastructure projects would allow for territorial contiguity and an increase in the porosity of the territories, in order to improve the conditions for territorial fluidity and allow for an expansion of the process of circulation of inputs and goods, according to Santos (2004). In this way, it would be possible to encourage intra and extra-regional trade and give new dynamics to integration among its members, including contributing to reducing the asymmetries mentioned above. The institutional arrangements responsible for implementing physical infrastructure have not, however, been categorically expressed by MERCOSUR. The Initiative for the Integration of South American Regional Infrastructure (IIRSA), created in 2000 to interconnect the main economic regions of South America, was responsible for expanding territorial policies among its members, and was later incorporated by the Infrastructure and Planning Council of the Union of South American Nations (UNASUR) in 2008.

IIRSA's agenda was subdivided into ten integration axes. The MERCOSUR-Chile Axis, which seeks to connect the Atlantic and Pacific Oceans, is one of the most attractive, as it constitutes a geographical space with a greater density of circulation and developed trade flows (Figure 6). Although it has presented a fruitful portfolio of projects and has made progress on several of its axes, the difficulties in obtaining funding for its projects as a result of the economic difficulties faced throughout the 2010s and the dismantling of UNASUR in 2019 have considerably limited the construction of infrastructure as a policy that induces socio-economic development and political consultation between the countries of the region. When comparing MERCOSUR's rail and road connections, energy networks and pipelines with those existing in more developed

integration areas, such as the European Union, or even with those being promoted by China within the framework of the New Silk Road initiative, a scenario of great challenge for South American countries becomes evident.

Figure 6: IIRSA/COSIPLAN Integration and Development Hubs



Source: IIRSA (n.d., p. 44)

4. Conclusion

The presentation of the challenges and opportunities facing MERCOSUR, particularly in the last decade, calls for a closer look at the development of the regional organization in the global geopolitical order. Since the end of the Cold War, and particularly since the beginning of the 21st century, the transformations in power relations, the movements of rapprochement and distancing between states and the renewal of the territorial scales of geopolitics at regional and global level represent phenomena that demand rigorous analysis by the specialized literature. An understanding of the global geopolitical reality would be incomplete

and inaccurate without detailed interpretations of the regional arrangements and institutions formed by developing countries. The case of MERCOSUR is particularly important because of its longevity and its relevance in economic, social and geopolitical terms in South America, through its actions and multidimensional relations in contemporary international relations.

In general, MERCOSUR suffers from a myriad of interpretations restricted to the economic-commercial sphere, which disregard its considerable geopolitical contribution to South American interstate dynamics. In line with our arguments throughout the article, we seek to demonstrate that the need to mitigate tensions arising from Argentine-Brazilian geopolitical rivalries and to give new impetus to the harmonious development of relations between states during the period of re-democratization preceded economic and commercial interests. The latter, however, came to prevail in MERCOSUR's institutional functioning throughout the 1990s, amid the volatility of its members' domestic economic environment, which reached its paroxysm at the end of the 20th century and gave rise to a new era of closer relations and institutional development that transcended the commercial sphere in favor of an agenda focused on the political, social, cultural and institutional spheres. It was during this period, in the 2000s, that MERCOSUR showed its capacity to recycle itself and to boost the autonomy and international profile of the States Parties, which passed with a few bumps, but without major upheavals.

In the last decade, however, MERCOSUR's (geo)political value has once again been eclipsed by the short-sighted and short-term economic values adopted by the governments of the day, which have taken a short-sighted view of the South American regional institutions and their crucial role in strengthening the demands of its members on the international stage and in developing a broad and dynamic integration that really strengthens the ties between the countries and their societies. The grouping's conjunctural and structural challenges, listed and discussed throughout the text, have been intensified by the deliberate desire of political leaders to relegate regional integration to second place, to the detriment of the possibility of giving new impetus to integrationist dynamics. These, in turn, could contribute to boosting the socio-economic development of their countries through consultation, cooperation and coordination in the political, economic, social and cultural spheres. From now on, the governments of Brazil, Argentina, Uruguay, Paraguay and Venezuela must deal with the Herculean task of resuming the promotion of effective regional governance, which will allow them to deal with the adversities facing MERCOSUR, in order to overcome mere coexistence relations and to achieve a significant degree of cooperation and interdependence, with benefits for their peoples and for a high-profile geopolitical role in international politics.

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Calibrating Climate Conflict and Poverty in South Asia

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Abstract

South Asia faces multi-dimensional vulnerabilities. The region is one of the densely populated region housing 23 percent of world's population on barely 3 percent of the land area. It accounts for world's 24 percent population living in extreme poverty. Multi-dimensional Poverty which is based on deprivation in terms of health, living standard and education also features South Asia in its lowest. The region is also one of the worst affected by climate change. Adverse effects of climate change are visible in the region in terms of increase in sea level, reduction in agricultural productivity, increase in floods and droughts. Therefore, the primary objective of this article is to show that the combination of the adverse effects of climate change and existing poverty can act as an accelerant of conflict or instability in the countries of the region which can be source of inter-state conflict. This article is based on secondary sources like articles in book, journals, policy reviews and internet sources of relevant international organizations to analyze the same. The paper identifies that the problem of climate refugees and hydrological war is the most pressing source of inter-state conflict in the region. The paper suggests that pan South Asian institutional mechanism like South Asian Association of Regional Cooperation (SAARC) should be utilized for fighting climate change and associated vulnerabilities. Though SAARC has been rifted due to political difference yet climate change can be a common point of convergence to revive the organization. In the end the paper provides some policy recommendations in context to SAARC that can be included to manage the problem.

Keywords Climate Change, South Asia, Conflict, Poverty

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1. Introduction

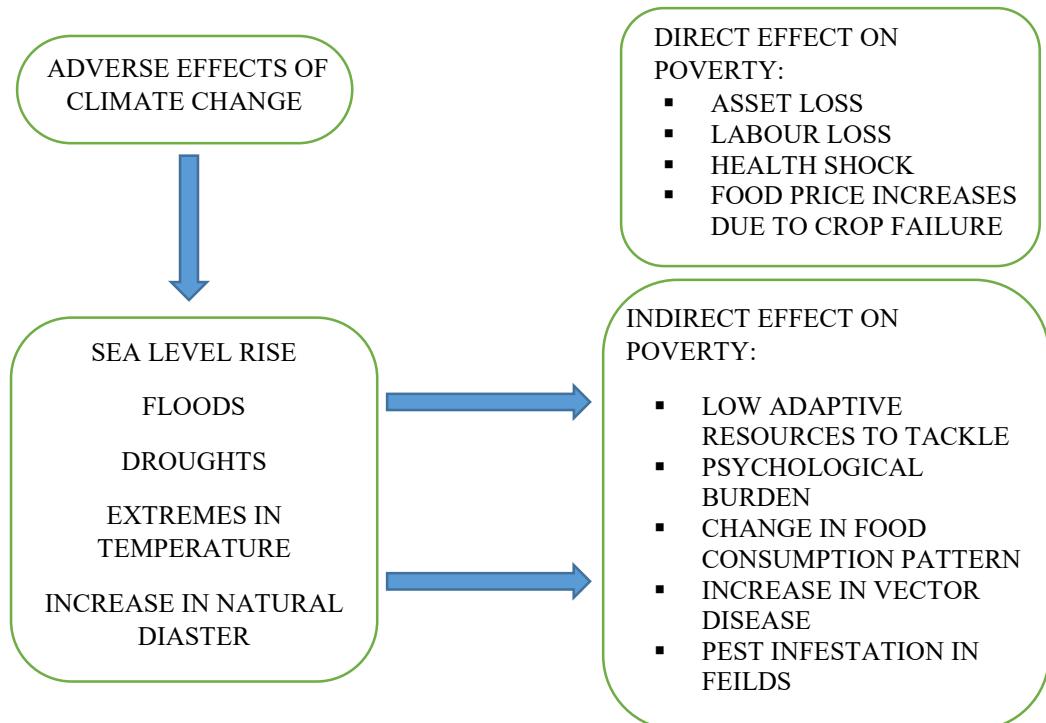
South Asian region comprises of eight countries (India, Pakistan, Bangladesh, Nepal, Bhutan, Sri Lanka, Maldives and Afghanistan) which constitute 1.9 billion people (World Bank, 2023a), roughly translating to 23% of the world's population on 3 % of world's land area. The member countries of South Asia share a common colonial past and similarity of emergence as independent countries. The common colonial past has been also responsible for their economic framework which was based on import substitution growth model. In the early nineties the waves of globalization brought structural economic changes in the countries at a similar juncture, yet this has benefited only a small percentage of its huge population. The region is still shrouded in poverty. It has 24 % of the population which is extremely poor which means that they live below the international poverty line of US 2.15 \$. In terms of multi-dimensional poverty the region performs low on the indicators. Besides poverty, the region is exposed to adverse effects of climate change like sea level rise, increase in droughts, flood and reduction in agricultural productivity the combination of the adverse effects of climate change and existing poverty can act as an accelerant of conflict or instability in the countries of the region and be a source of inter-state conflict.

2. Climate Change, Poverty and Conflict: Identifying the Relational Dimensions

There is considerable amount of literature concentrating on how climatic shocks and stresses including increased events of drought, extreme rainfall, changes in sea level, storms etc are affecting resource-based livelihoods of populations (Barua, Katyaini, Mili, & Gooch, 2014), (Benessaiah, 2012). Rayor and Malone (2001) points out that climate change and poverty is linked by the issues of vulnerability. Equity issues arises due to qualitative difference in the nature of climate change and policy adopted. These policies impact the poor and the better off differently. Food and Agriculture Organization of United Nations (2015) states that climate change is 'profoundly modifying' conditions under which agriculture has been conducted since ages. Climate change has direct and indirect impact on agricultural production. Changes like increase or decrease in rainfall, temperature can directly effect in reducing the production of agricultural crops. Indirectly changes related to pest infestation, vector and invasive species can also reduce the yield. Both direct and Indirect effects of climate change on agriculture can significantly reduce farmers income and thus jeopardize food security. When income become unstable it can push a significant portion of population into poverty and also be the reason for intra-generational transmission of poverty. When agricultural fields are destroyed due to flood or natural disaster it also leads to loss of labour which could have been a source of income. Similarly, while analyzing climate-change and poverty, Leichenko and

Saliva (2014) has brought about the direct and indirect effects on poverty. Food prices and agricultural production channels are the most direct channels through which climate change can affect poverty. The rural and as well as the urban poor are the most vulnerable sections that are directly affected by vulnerabilities of climate change. While all human systems are integrally dependent upon ecosystem services, poor individuals in developing countries are more directly dependent on these services than wealthier individuals and those living in developed countries who are able to substitute manufactured capital for natural capital and who rely on fossil fuel (Fisher et al., 2013). Impacts on physical and mental health represent another avenue through which climate change can indirectly contribute to impoverishment. Due to excess rainfall and precipitation clean drinking water may be affected in rural areas due to contamination, rising temperature may also lead to deadly pathogen in the freshwater sources. (UNICEF, 2023b). Diseases that like malaria, dengue, dysentery is expected to increase which can lead to lower the improvement in poverty by increasing the spending on healthcare. Therefore climate change is an obstacle to eradicate poverty. Also the fact that poor sections have low safety net in society makes them less adaptive to the vulnerabilities of any sort.

Figure 1: Direct and Indirect effect of climate change on poverty.



Source: Author's own representation

While there is considerable work done to depict the effect of climate change on poverty, there remains a sufficient gap in identifying the way climate change can cause conflicts. Homer-Dixon (1994) presents an analysis of the causal relationship between social effects of environmental changes and conflict. He identifies that four principal social effects may in single or in combination substantially increase the probability of acute conflict in developing countries. The social effects which have the possibility of producing conflict are--decrease in agricultural productivity, economic decline, population displacement and disruption in authoritative institutions. According to Department of Defense (2010), climate change could have 'significant geopolitical impacts around the world', this can happen by contributing to increased poverty, environmental degradation and weakening of fragile government systems around the world. It can jeopardize human security in totality. While climate change alone does not cause conflict, it 'may act as an accelerant of instability or conflict' placing a burden to respond on various civilian institutions and militaries around the world to address the needs. For International Committee of Red Cross Society (2023), in places like Somalia, which has been weakened by decades of conflict people have been forced to be displaced. Coupled with the conflict and instability repeated droughts and floods have added to the miseries. Climate shocks have had a severe effect on the livestock of the local communities. In the Sahel region, an unpredictable climate and environmental degradation make the survival of remote and impoverished communities more difficult. In these regions coping mechanisms are drastically reduced by the violence and instability. According to Conflict and Environment Observatory (2022), "Conflicts generate pollution, create the conditions where polluting practices can flourish, and impede the ability of states to address the harm it causes." Thus the term conflict-pollution is widely used to signify anthropogenic pollution from the direct and indirect consequences of war. Pollution can result from ways that wars are fought and also because of the worsening economic and societal situations associated with the conflicts or war. Institutional collapses and the low priority given to environmental matters in conflict prone areas accentuate pollution and its effect on people and livelihood (UNEP, 2017). Conflict pollution can also inflict physical, psychological and cultural harm on individuals and communities. Direct consequences of conflict pollution is still evident in countries like France and Belgium where some regions suffer from heavy metal contamination due to use of conventional munitions during World War I (Ibid). During the Gulf war in 1990s more than 700 oil fields in Kuwait were burned and smoke engulfed the sky for days creating dense fume. Also more than 11 million barrel of crude oil were poured into the Persian Gulf creating 9 mile long slick. The incident directly contributed for pollution which adds to worries of climate change (The Guardian, 2021). Similarly in conflict affected regions of Syria makeshift oil refineries are operated for income generation and fuel requirement. In these refineries most of the work is done by

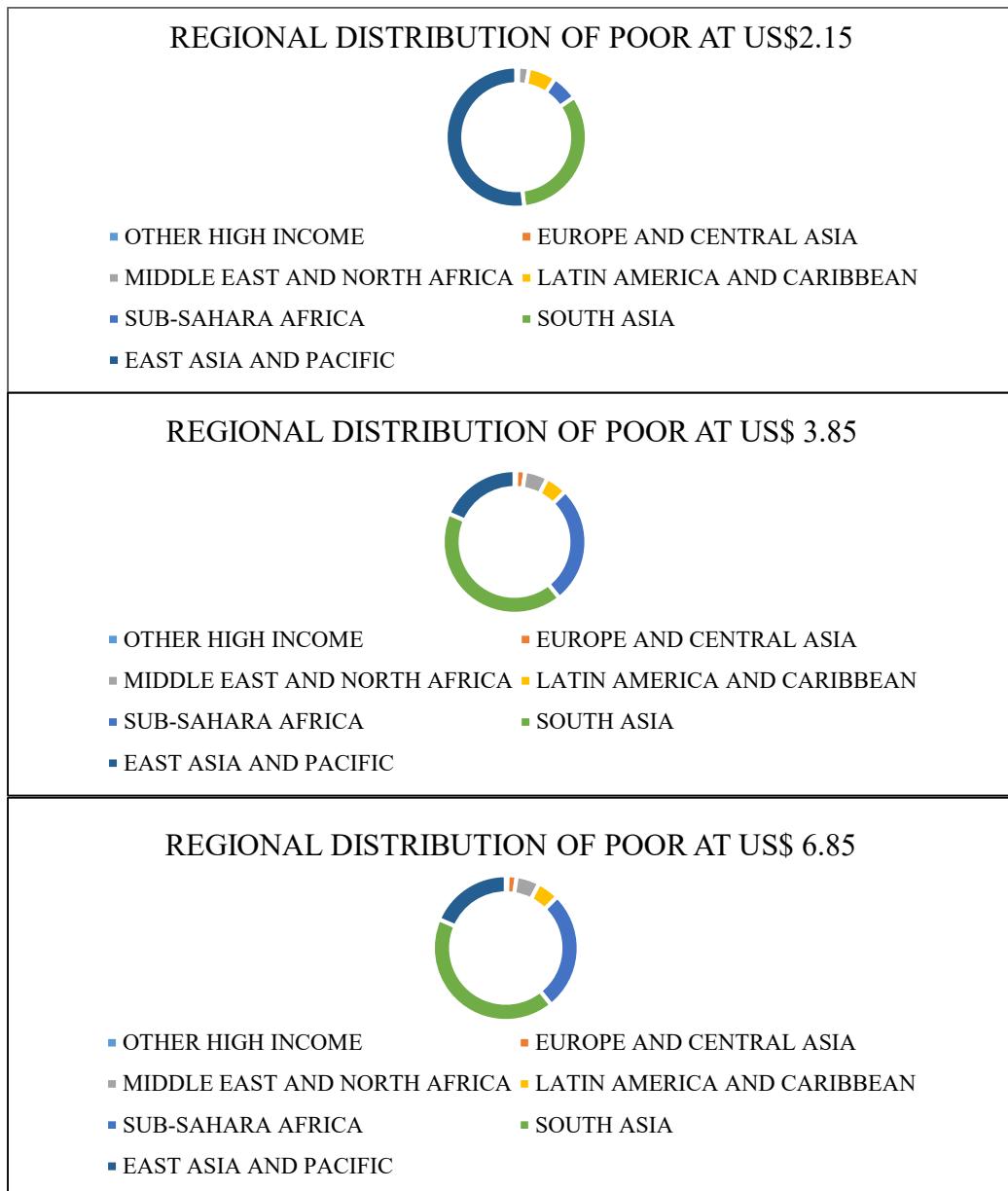
children and the refining process creates fumes and smoke dangerous to health and environment. (UNEP, 2017). Climate change is often seen as a multiplier of conflict in areas with vulnerabilities of various sort. For example, in already conflict prone countries like Afghanistan, The New York Times (2021), reports that warming resulting from global climate change acts as a significant trigger that can amplify conflicts over water and other natural resources thereby affecting earning and income. Is it also estimated that Afghanistan will face severe water shortage not because of less precipitation but increasing temperature which will raise the rate of evapotranspiration leading to water stress and diminished ground water resources. (Stockholm International Peace Research Institute, 2022). This in general will affect the Afghan society which is highly depended on agriculture based on irrigation. Parenti (2015) shows that the water stress and drought has led to a remarkable shift in the cultivation pattern in Afghanistan. Poppy seed cultivation which requires much less water has come to replace most of the crops in vast areas of Afghanistan as farmers are left with little choices of alternative earnings. The money which comes from selling of poppy seed is used in funding various terrorist outfits. According to United Nations Office of Drugs and Crime (UNODC) the areas under cultivation of poppy seeds in Afghanistan increased by over 32% in 2022 but at the same time the yield per hectare declined by 10% due to drought conditions. (United Nations Office of Drugs and Crime, 2022). In the above case it is not difficult to co-relate that drought and water stress is causing a shift in the pattern of cultivation as alternative crops are more difficult and costly to produce but at the same time poppy yields per hectare have declined due to water shortage. It will not be so difficult to predict that if this trend continues along with Taliban's ban on poppy cultivation, conflict will be evident due to socio-economic and environmental factors.

3. Poverty in South Asia

According to Intergovernmental Panel on Climate Change (2023), in regions like South Asia the per capita emission of Green House Gases (GHG) is one of the lowest in comparison to the global average yet the region has high vulnerability to climatic hazards. Also the report notes that the continued rate of warming climate related changes in food availability and diet quality is going to be impacted. Nutrition related disease and number of undernourished people will increase in the region. Agarwal, Balasundharam, Blagrave, Cerutti, Gudmundsson, and Moussa (2021) notes that with high population density and high level of poverty, South Asia is considered one of the most vulnerable regions of the world affected by climate change. According to World Bank (2021), The region is living through a "new climate normal" in which intensifying heat waves, cyclones, droughts, and floods are opening new challenges to the institutional structures of the concerned countries. More than 750 million people in the eight

countries in South Asia is effected by one or more climate related disasters. The region which is already reeling under poverty adverse impacts of climate change will make things worse. In Figure 2, the regional distribution of global poor is shown at three levels of International Poverty Lines.

Figure 2: Regional Distribution of Poor:



Source: World Bank (2023b)

In the below figure 2, data shows that 160.94 million people lived below US\$ 2.15 in South Asia, the figure reaches to 840.41 million people if poverty is taken at US\$3.65, while for US\$6.85 it is 1527.24 million. Below table 1 gives the profile of individual countries of South Asia with total population along and the percentage of people living below the income level of US\$ 2.15, US\$ 3.65 and US\$ 6.85.

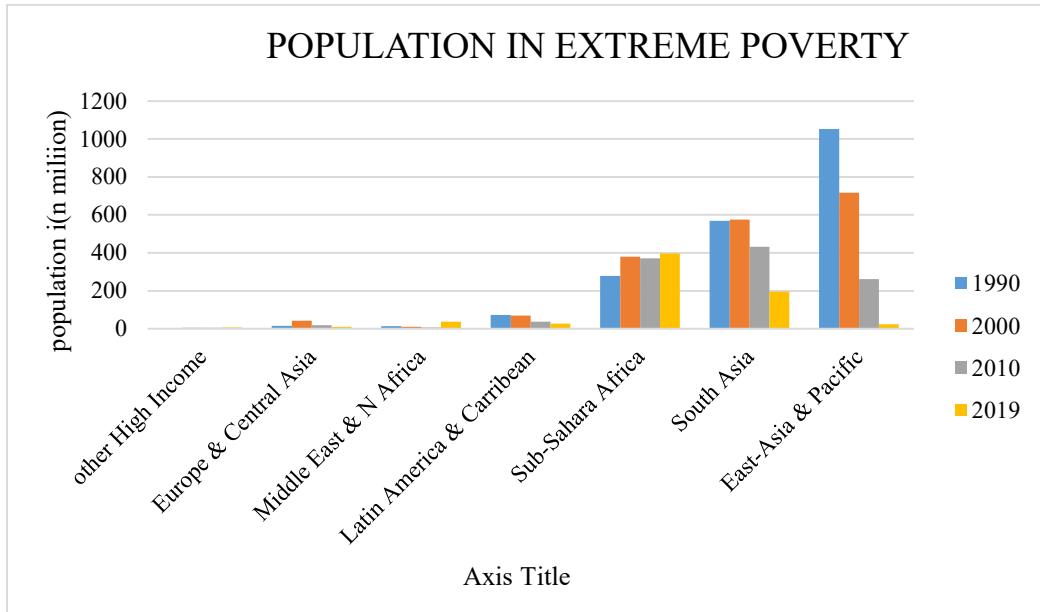
Table 1: Poverty Percent of South Asian Countries at Different International Poverty Lines:

Countries	Total population (In million)	Poverty rate at US\$ 2.15 (% of population)	Poverty rate at US\$ 3.85 (% of population)	Poverty rate at US\$ 6.85 (% of population)
Bangladesh	169.36	15.99	50.46	87.13
Bhutan	0.78	1.26	11.30	39.54
Nepal	30.04	9.80	37.94	80.03
India	1407.56	8.32	42.52	84.31
Maldives	0.52	0	0	4.31
Pakistan	231.40	6.40	42.44	85.16
Sri Lanka	22.16	1.21	10.73	50.35
Afghanistan				

Note: Blank space indicates that data for Afghanistan was not available.

Source: World Bank (2023b)

Table 1 shows the distribution of percentage of population at three different international poverty lines. Bangladesh figures out having the highest percentage of population who lives at US \$2.15, followed by India and Nepal. The category of population who lives below the level of US \$ 2.15 is counted as extremely poor. From figure 3, the regional distribution of population living below US\$ 2.15 is shown on a decadal basis from 1990. South Asia accounts for 156.28 million people who lives below US\$ 2.15, this makes up to about 24% of the world's population. (For 2019)

Figure 3: Region Wise Population Living in Extreme Poverty

Source: World Bank (2023b)

Poverty erodes or nullifies economic and social rights such as the right to health, adequate housing, food and safe water, and the right to education. The same is true for civil and political rights, such as the right to a fair trial, political participation and security of the person. For the better understanding of poverty it becomes important to include the aspect of Multi-dimensional Poverty (MDP). The Multi-dimensional Poverty Index (MPI) takes into account health, education and living standards to measure the deprivation that otherwise cannot be just measured by monetary considerations. MPI was developed by Oxford Poverty and Human Development Initiative (OPHDI) along with UNDP and is published regularly in UNDP's Human Development Reports ever since 2010.

The measures represent the deprivation that make the lives of poor more vulnerable. People who are multi-dimensionally poor are already vulnerable and on top of its climate shocks and degradation make them more vulnerable. For example, apart from putting large number of people at risk due to food availability and livelihood changes, nutrition and quality of food is also affected due to climate shock. Years of schooling and school attendance can also be seriously impacted due to climate change. According to World Economic Forum (2023) the education of more than 40 million children is being disrupted each year due to effects of climate change. Directly climate change related disaster can lead to destruction of education infrastructure and degrading of learning environment, while indirectly it can reduce physical and mental strength.

Migration due to climatic disaster and extremes can also affect education. Similarly, use of traditional cooking fuel especially in rural areas are impacted due to climate change. As forests dries up, people are often forced to travel long distances to collect their fuel (like woods and leaves) which adds to their vulnerability. Availability of reliable and affordable energy sources are jeopardized when traditional use of energy impacts climate and is best reflected in instable supply and increased price which affects the poor. Often heavy rain contaminates drinking water leading to disease spread and search for safer options. Costal erosion, floods, landslides effect housing especially in the rural areas. Out-migration from rural to urban areas also lead to development of slum cluster with little or no basic facilities. Table 2, shows the regional share of population deprived in indicators of-educational attainment, educational enrollment, electricity, sanitation and drinking water, while table 3 give the individual profile of each South Asian countries.

Table 2: Share of Population Deprived in Each Indicators:

Region	Educational attainment (%)	Educational enrollment (%)	Electricity (%)	Sanitation (%)	Drinking water (%)
East Asia & Pacific	7.6	2.4	2.4	15.3	7.5
Europe and Central Asia	0.9	1.6	1.7	7.1	4.5
Latin America and Caribbean	9.4	1.6	1.0	16.6	3.0
Middle East & North Africa	8.2	2.6	0.3	2.7	1.1
South Asia	20.5	19.2	14.6	35.6	5.2
Sub-Saharan Africa	35.9	19.5	48.0	65.6	30.5
Rest of the world	0.9	0.3	0.0	0.2	0.2
All region	12.7	8.9	12.1	23.1	10.5

Source: Multi-dimensional Poverty Index (Diaz-Bonilla, Sabatino Gonzalez, Wu, & Nguyen, 2023)

Table 3: MDP of the South Asian Countries:

Countries	Population in Severe MDP (IN %)	Population Vulnerable to MDP (In %)	Contribution to Deprivation to Overall MDPI (% of MDPI attributed to deprivation in each dimension)		
			Health	Education	Living standard
Bangladesh	6.5	18.2	17.3	37.6	45.1
Bhutan					
Nepal	4.9	17.8	23.2	33.9	43.0
Pakistan	21.5	12.9	27.6	41.3	31.1
India	4.2	18.7	32.2	28.2	39.7
Afghanistan	24.9	18.1	10.0	45.0	45.0
Sri Lanka	0.3	14.3	32.5	24.4	43.0
Maldives	0.0	4.8	80.7	15.1	4.2

Source: Statistical Table, Oxford Poverty and Human Development Initiative, 2023.

Blank space indicates no data available.

From the above table 2 and 3 a picture of MDP for the South Asian countries can be drawn. In table, the comparison of the South Asian region in terms of share of population deprived is drawn. In all the indicators South Asia as region comes in the bottom two. When table 3 is Standard of living emerges as one of the prominent areas of deprivation in all the South Asian countries except Maldives.

In the given context, if the effects of climate change are taken into consideration, it can be safely asserted that the region will face tremendous pressure in dealing with adverse effects of climate change. For example, nutrition amongst the children in the region is poor, according to UNICEF more than 64 million children in the region suffers from severe food poverty as their diet do not include bare minimum that is needed for proper growth (UNICEF, 2023a). Therefore, if climate change effects the growth of crops especially the food crop it will lead to a spiral of reduce production, less availability and price rise which has the potential to further harm the nutrition levels in the children. In South Asia public health infrastructure is overwhelmed and under-resourced. It is far from sufficient to tackle the existing burden of diseases in the society, climate change related health risk affects healthy people and thus adds to the burden. It is also important to note that 35.6% (from table 2) share of population in the South Asian region is deprived of proper sanitation. This can further increase with water scarcity through climate change. The result is the increase in the cost of water leading to inequitable access. This may deprive households of opportunities to collect the amount of safe water needed for proper handwashing and hygiene thereby

limiting children's ability to grow up healthy and strong. Also reduced water availability impacts piped sewer systems, as these systems rely on adequate water to remove waste. Limited water availability due to drought can increase pollutant concentration resulting in more contaminated wastewater which when discharged untreated can be more harmful.

The next section of the paper will highlight on the challenges of climate change in South Asian region.

4. Challenges of Climate Change in South Asia

The symptoms of climate change are multi-faceted, which includes sea-level rise, retreating glaciers, changes in temperature and precipitation patterns, and increasing frequency of events such as storms and droughts. The future of many South Asian countries like that of Maldives, southern coastal areas of Bangladesh, coastal areas of India and Sri Lanka are uncertain. Maldives and Bangladesh especially deserve special mention as they are the most affected parts of South Asia. German Watch (2021), list three South Asian countries in its list of top ten countries in the world which are most effected by weather events as shown in table 4.

Table 4: Countries Most Effected by Weather Events (2000-2019)

Rank	Countries affected by extreme weather events (2000-2019)
1	Puerto Rico
2	Myanmar
3	Haiti
4	Phillipines
5	Mozambique
6	The Bahamas
7	Bangladesh
8	Pakistan
9	Thailand
10	Nepal

Source: German Watch (2021)

The above table 4 indicates that Bangladesh, Pakistan and Nepal from the South Asian region were worst affected countries and only if 2019 extreme weather events is taken into account India and Afghanistan has been the most effected one. (German Watch, 2021)

Let's now identify the challenges of climate change in South Asia.

Sea-level rise and melting of glacier: GHGs which have resulted in global warming are significant cause for sea-level rise and melting of glaciers.

Sea-level rise is the increase in the level of the oceans around the world due to the effect of global warming. In South Asia, the coastal regions are heavily populated and settlement has grown there since centuries. In Bangladesh and India, it is estimated that by 2050, the sea-level will rise of 45 centimeter (cm) and 15-38 cm respectively. Major cities like that of Kolkata, Mumbai, Chennai, and Dhaka will be facing the existential threat. In Sri Lanka high proportion of coastal land is less than 1 meter above the sea-level and in Maldives the highest point is less than 2 meters above sea level and this could submerge with the rising tides and lead to erosion and damage to property and habitat loss. (Asian Development Bank, 2010).

Himalayan glaciers are important for the South Asian region as it feeds its rivers. However with the rising temperature, ice sheets of Himalayas are retreating faster than that of the global average. Increased warming might result in increased flows of water in the rivers initially, but in course of time the flow of rivers will start diminishing as the glacier diminishes. According to the International Centre for Integrated Mountain Development (ICIMOD) depending on the rate of global warming two-third glaciers over Himalayas, Hindu Kush, Karakoram and the Pamir Knot which forms an arc over vast areas of Pakistan, Afghanistan, Nepal, Bhutan and India will disappear by 2100.

Floods: Floods are nothing new for the South Asian countries. Significant portions of India, Bangladesh, Sri Lanka, and Nepal have seen regular floods. The incidence of glacier melting, sea level rise and changes in the weather extremes has led to the increasing incidence of flood in the region. Even some of the driest parts of the region are experiencing flood like in Rajasthan India. Due to the geographical reasons, flood in Bangladesh can last up to nine months a year. One of the most devastating floods was in 2007 in the region which affected 30 million people of the region. In the recent year, the intensity of tropical cyclones has increased due to climate change resulting in large scale destruction and flood. The 2020 incidence of Amphan in West Bengal and Bangladesh, 1999 super cyclone in Odisha is relatable to the havoc that cyclones can bring in.

Droughts: While some parts of South Asia may be flooded the other parts faces the problem of drought. Increasingly new areas are coming under the areas of drought in South Asia. Due to the climate change weather in some of the areas has changed and so have the precipitation level. The incidences of drought significantly affect the agricultural activities of mainly agriculture.

Changes in the pattern of rainfall: Parts of South Asia have already seen a slow but prominent change in the rate of rainfall and this is likely to increase in the near future. Due to the effect of climate change the monsoon which is the most important source of water in the region, gets either delayed or comes earlier and affects agriculture. As agriculture in South Asia is highly dependent on monsoons any change in the rate of rainfall and timing can affect

the productivity of agriculture and related livelihood of the people. Due to changes in the rate of precipitation groundwater levels in many areas of South Asia will be depleted while other parts will be over-flooded. If there is less rainfall, it will push the people to pump more groundwater for agriculture and other uses; this will significantly bring down the level of ground water in the region.

Adverse effect on Agricultural production and ecosystem: Due to changes in the temperature, rainfall will increase the vulnerability of agricultural production. The changes in the geographical conditions can lead to crop failure. It is also predicted severe consequences particularly its agricultural sectors will have negative impact on the income of the people as agriculture employs more than 60 percent of the region's labour force.

Incidence of Increased diseases: Changes in climate may alter the distribution of important vector species (for example, mosquitoes) and may increase the spread of disease to new areas that lack a strong public health infrastructure. Warmer and wetter conditions will increase the potential for a higher incidence of heat-related and infectious diseases. Climate change may increase the possibility of malaria, dengue, Kala-azar and encephalitis. (Rocklov and Dubrow 2020; WHO, 2014) In the aftermath of flood the possibility of such diseases increases due to stagnated water, availability of clean water, lack of medicines. Contamination of water due to flood may also lead to epidemics to cholera, diarrhea. Every year hundreds of lives are lost across the region due to incidence of malaria and dengue which are predominant in the tropical region. These have a direct effect on mental and social health of the people of the region.

5. Identifying Challenges of Climate Change on Poverty and Conflict in South Asia

The primary effect of climate change on poverty is through the decrease in agricultural productivity and hence the resulting food insecurity. Overall, the agriculture sector contributes 18% of the South Asian regional GDP and provides 42% of total employment, constituting the largest source of regional employment (World Bank, 2021). Moreover, sea level increases in the South Asian region threaten low-lying coastal areas such as the Maldives, Sri Lanka, Bangladesh, and India thereby decreasing the arable land due to flooding and water logging. Given this current state of affair agriculturally dependent South Asian economies are at grave risk from climate change impacts on their socio-economic structure. In South Asia region it is predicted that the annual average maximum temperature may increase by 1.4–1.8 °C in 2030 and 2.1–2.6 °C in 2050, thereby increasing the heat stress in the region by 12% in 2030 and 21% in 2050 (Tesfaye et al. 2017). It is also estimated that the Indo-Gangetic plains

which is the major wheat producer will become inappropriate for wheat cultivation by 2050 (Ortiz et al. 2008). It is also estimated that in India and Bangladesh there will be devastating effect on the rice cultivation. In Bangladesh the impact on rice cultivation in terms of yield will be between 6-14 percent less, as substantial areas will remain flooded. In Nepal and Bhutan climate change is expected to result in increasing weather extremes which will increase occurrence of landslides. In India production of wheat might drop by 3 percent in the event of extreme climatic changes in the wheat growing regions of northern India. (The Times of India, 2022). In already arid areas of Afghanistan due to further decrease in rainfall water intensive crops will be less attractive to the farmers and there might be more attention towards those crops which can withstand droughts including those of poppy seed from which opium is produced. In Sri Lanka most of the crops like coarse grain, legumes, vegetables, and potato are likely to be affected. Importantly the yield of tea in Sri Lanka which is world famous is likely to get affected impacting foreign exchange earnings and employment. In Pakistan changes in the flow of river Indus is likely to affect the cotton producing areas thereby affecting peoples' income level.

Apart from effect on food security, climate change can also aggravate the problems of availability of clean drinking water, energy resources and housing. For example, in Maldives which is facing a survival issue due to climate change, the right to housing is challenged due to inundation and scarcity of land, approximately one-third of the population of Maldives is concentrated in the city of Male, as there has been huge migration from the other atolls. As necessary resources become scarce poor people will be the worst affected as the fight for diminishing resources.

The secondary effect of climate change on poverty in South Asia are the more indirect effect which occurs due to impact that climate change has on environment and ecology. The increase in the vector-borne diseases due to rising rainfall and humidity is one of the health hazards on the people of South Asia. Vector-borne diseases also have wider socioeconomic impacts like increasing health inequities amongst the poor and the rich. The increase in spending also acts as a brake on socioeconomic development. Frequency of dengue, malaria and chikungunya in the region is a testimony to this fact. Since the region has a high rate of poverty it is expected that this section of population will be out of the social safety net. Large section of population which are poor have housing in places with low sanitation and close to breeding site of the vector-borne diseases that makes them more susceptible to diseases.

The other significant secondary effect of climate change on poverty is through the increase in natural disasters. It is the increased frequency of natural disasters that negatively impacts the economy, for example natural disaster can lead to labour loss, crop failures, destruction of supply system such as roads

and railways. Managing the loss and reconstruction after the disaster requires funds which puts an extra pressure on the system. Table 5, shows the loss in PPP and GDP of the South Asian countries due to natural disasters while Table 6 shows the most notable natural disasters in the South Asian countries along with projection of loss in GDP by 2100 AD.

Table 5: Effect of Climate Change on Loss of Ppp and Gdp in South Asia:

CRI Rank	Country	Fatalities 2019 rank	Fatalities per 100000 inhabitants rank	Loss in PPP (In million US\$)	Loss per unit GDP (%) rank
13	Bangladesh	7	29	20	28
130	Bhutan	106	106	130	130
12	India	1	36	1	13
7	Nepal	10	7	42	27
111	Maldives	106	106	114	76
15	Pakistan	8	39	14	25
30	Sri Lanka	33	24	48	61
6	Afghanistan	11	11	33	15

Source: German Watch (2021)

Table 6: Natural Hazards and Loss in Gdp by 2100 Ad

Countries	Most Notable Natural Disaster Due To Climate Change	Gdp Loss by 2100 Ad (In Percent)
Bangladesh	Increase in tropical cyclones Coastal flooding due to sea level rise	9
Bhutan	Landslides Flash floods	6.6
India	Increase in tropical cyclones Heatwaves Landslides, floods	10
Nepal	Landslides and floods	13
Maldives	Floods and inundation of land due to sea level rise	12
Afghanistan	Cold waves Floods and droughts	-
Pakistan	Landslides Heatwaves Floods	10
Sri Lanka	Floods and landslides	10

Source: World Bank (2021)

As the impact from climate change intensifies, the primary and secondary effect of climate change on poverty is likely to increase as well. Therefore a substantial portion of population will be associated with migration-whether internally or externally. Increase in frequency of natural disasters will also add to the volume of internally displaced people in the region. For example, according to Internal Displacement Monitoring Centre (IDMC) India records the highest number of internally displaced persons due to natural disasters (Internal Displacement Monitoring Centre, 2023). While in Afghanistan desertification has affected 75% of the land area in the country's north, south and western provinces resulting in internal displacement of people. However it is challenging and an arduous proposition to draw a linear line between the internally displaced person or migrations to be only contributed by climate change. Yet climate change affects the mobility of the people by affecting public health, livelihood opportunities and food security. UNCHR acknowledges the fact that climate change germinates the seed of conflict and causes human displacement much more worse as it occurs. (UNCHR, 2016)

Since South Asia is an integrated landmass with porous borders along with historical, familial and cultural ties amongst the countries, migration across the border takes place due to climate induced factors. Often labelled as the 'climate refugees' this category of migrants creates conflictual situations. Specific attention can be drawn to Bangladesh and its shared border with Northeast India, a region with a long history of insurgency and terrorism. Cross-border migration from Bangladesh into India threatens to escalate existing tensions between Indians and Bangladeshi migrants, particularly based on identity. Violent identity movements within Northeast India are already common and a key grievance has been Bangladeshi presence in the region. These grievances have historically given rise to multiple separatist and terrorist organizations threatening the security of the region. Similar is the case with the Nepali migrants in India particularly in the states of West Bengal and Assam, most of which have left their original home because of the increased number of natural disasters and crop failure which the countries have faced. Similarly there are hundreds of Afghans who have infiltrated into Pakistan to escape long standing droughts that are more frequent in the country. In cross-border migration, usually the migrants move to big cities for jobs however not all manage to get a decent living and therefore potentially offers insurgents fertile recruiting grounds. The migrants in cross-border migration faces hardship in their place of destination. Usually they take up petty work with no legal protection and the wages are highly discriminated (Jolly & Ahmad 2019).

Apart from Refugee crisis, the region is also vulnerable to trans-boundary water conflict. Major rivers in South Asia are cross border in nature and the sharing of water between or amongst state has been a contentious issue. For example the sharing of Indus water between Pakistan and India has seen major

disputes over the years. It is true that the Indus water treaty has been upheld even in the times of extreme political tensions yet the climate extremes shown in the region by frequent droughts and floods may question the endurance of the treaty. Irrigation and energy demand in the region has gone up and there are also plans to build 70 major hydro-electric projects particularly on Chenab river which will spread across India and Pakistan. The construction of dams has already been a source of conflict between India and Pakistan, especially with the flow regarding the western rivers that are under Pakistan. The change in waterflow in the river basin due to climate change is likely to set the ball rolling for a long future conflict. Similar is the also the case with river Brahmaputra, which flows through China, India and Bangladesh. The challenges for cooperatively managing the Brahmaputra are heightened by a changing monsoon season and melting glaciers, the complete absence of formal water sharing agreements, a limited history of even basic hydrologic data exchange and strained diplomatic relations. In addition, China has shown little interest in cooperative transboundary water management in the Brahmaputra or elsewhere. As the upstream state, China controls more than half the Brahmaputra basin's area and is building infrastructure — in particular dams — to control water without consultation with downstream neighbours (Giodano & Wahal, 2022). The Mahakali river treaty signed between India and Nepal signed in 1996 has not yet been implemented as there are apprehensions that upstream country might use the flow of water to its advantages. India also shares water with Bhutan, there are many rivers from Bhutan which flow downstream to Assam to meet Brahmaputra. While on the Bhutan sides the hills are lush green but on the Indian side of the border there are dry patches of land depending on the flow of water from Bhutan. The flow in these rivers have changed dramatically due to climate change resulting in flash floods, siltation and dryness. Also there are no formal agreement between India and Bhutan regarding water sharing which makes the situation more precarious and unpredictable.

6. Can SAARC find a Way?

Climate change is a trans-boundary problem, which requires joint efforts of the countries in the region. Though SAARC has acknowledged the effects of climate change and has taken some important steps like-SAARC Environment Action Plan, (1997), SAARC Declaration on Climate Change (2007), Thimpu Statement on Climate Change (2010), SAARC Convention on Cooperation on Environment (2010), SAARC Agreement on Rapid Response to Natural Disasters (2011). The working of SAARC has been disrupted due to the conflictual relations amongst the states of the region. Even after a quarter-century when it came into existence, SAARC still remains an under-performing regional association. As climate change mitigation depends on robust capacities

across the governments, this remains unfortunately missing. There is also lack of proper understanding of the effects of climate change on the region. For example, South Asian region has produced and received refugees from one country to another, yet the SAARC countries are slow in recognizing the role of climate change in migration and displacement. Climate change is still absent in the human displacement discourse in South Asia and most of the studies on climate change come from the Maldives and Bangladesh, which do not adequately document empirical evidence and address the climate factors in human displacement in entire South Asia. (Jolly & Ahmad, 2019). This raises lot of questions which can affect the stability of South Asia by leading to inter-state conflict. Questions like who will take the responsibility for the climate refugees? Would climate refugees ever be recognized as refugees under the international law?, how to identify the hot-spot of climate change refugees remains to be identified. Similarly SAARC do not have any action plan on regional water sharing or a body to monitor the effects of climate change on the riparian health of the region. The region which is sustained by income generated by agricultural income, river water sharing and river health has not found any special place in the conscience of the SAARC's action on climate change. The sharing of information, data and technologies for the management of water resources in the region have to be prioritized within a mutually agreed frameworks of co-operation. Also South Asia being one of the poorest region needs an urgent framework of action because there will be direct and indirect effects of climate change on poverty. SAARC Plan of Action on Poverty Alleviation do talk about strategies and programmes for tackling poverty in the region and SAARC Social Charter Reports of Individual member countries can serve as a major guidance. The charter also indicates that implementation of the Social Charter shall be facilitated by a national coordination committee as decided by the member country. Information on such mechanisms will be exchanged amongst the states through SAARC secretariat (SAARC Secretariate, 2024).

7. Policy Recommendations to Tackle the Effect of Climate Change on Poverty and Conflict

South Asia needs a strong regional cooperation mechanism where climate change mitigation and adoptive strategies should be given utmost importance. Therefore South Asia urgently needs a regional environmental governance. The very starting point of such governance is to de-securitize climate change. It is natural that the years of conflict have produced mistrust and suspicion in the region yet small but concrete takes can be taken for meaningful change. It is the urgent nature of climate change problem that securitization in the region should pave the way for disaster-diplomacy, which examine evidence

on why disaster-response activities creates increased cooperation among countries that otherwise may not engage in constructive cooperation. The glaring example is the 2001 and 2005 earthquake mutual assistance given by India and Pakistan. In 2005 Kashmir earthquake even restrictions were lessened along the Line of Control to enables families to contact each other. In 2010 when devastating floods happened in Pakistan, India offered assistance of US \$ 25 million for food relief. (Government of India, 2010). In 2022 when Pakistan again faced a devastating flood India came forward to send help.

A corpus of climate fund should be set up by the countries in the region under SAARC. It should be based on equitable contribution based on the size of the economy. Once a fund is earmarked it can be utilized for adaptive and mitigative strategies -like building shelters for climate refugees and investment in climate smart agricultural strategies. The countries of the region should identify cross -border areas which has high intensity of destruction due to cyclones, landslides, droughts and floods as those will see maximum displacement of population across the border. Initially bilateral or trilateral cooperation based on such natural disaster can take place which will serve as the stepping stone to build up a regional framework. Risk identification, risk awareness, risk mitigation and improving institutional capacity and awareness among people in disaster-prone areas should be prioritized.

Since the region is agriculturally dependent for income generation any change in the agricultural production can jeopardize the economic and food security, therefore alternative form of employment opportunity should be created. A good example can be agroforestry which can contribute to climate change adaptive strategies. SAARC environment assessment report which has been talked in the SAARC Action Plan 1997 should be meticulously formulated to prudently manage the effects of climate change on agriculture. Imparting education and training of climate smart agriculture and adaptive strategies including collaboration between technical experts and public administrators and Non-Governmental Organizations should be endorsed. Climate change policies should be de-centralized to an extent that local authorities should be in a position to tackle the issues of climate change themselves.

In managing the adverse effects of climate change help from other regional organization's approach can be taken. Like that of European Union and ASEAN. EU's constant effort to adopt climate neutral policies and strategies as reflected in the latest EU Green Deal Communication can serve the purpose of guidance. The 'protected area' strategy of EU can be also followed to emphasize special attention to vulnerable areas.

8. Conclusion

The existing poverty and the adverse effect of climate change in the region has made South Asia one of the most vulnerable regions of the world. The inter-state conflicts in the region resulting from climate change will have repercussions in the long term for peace and stability of the already volatile region. Instead South Asian countries should come together to realize that climate change and the problems associated with it will not respect national boundaries and hence they should find a regional solution. SAARC in that case is an excellent form to work for adaptive and mitigative strategies. Once the platform and framework in the regional level becomes robust, it can pitch together for a common agenda in the bargaining of world environmental governance.

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The Evaluation Practices of ODA Providers in Assessing the Effectiveness of Climate Change Adaptation and Mitigation Projects in Vietnam

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Abstract

Vietnam is at the forefront of the environmental, social and health challenges posed by global warming, requiring robust climate change adaptation and mitigation strategies. Official Development Assistance (ODA) is emerging as a potential solution, providing financial support from developed countries to less favoured countries. However, the effectiveness of ODA in addressing climate issues remains uncertain, with criticism mounting over its mixed results and the continued existence of asymmetrical donor-recipient relationships. Through the lens of the Support Programme to Respond to Climate Change (SP-RCC), a joint budget programme launched in 2009 by the French Development Agency (AFD) and the Japan International Cooperation Agency (JICA) and supported by the World Bank, this article examines ODA's commitment to international environmental governance by supporting Vietnam's development of an environmental institutional framework. Focusing on the SP-RCC's evaluation system, which is based on internationally established aid effectiveness criteria, the article shows that the evaluation framework struggles to capture the SP-RCC's contribution to coherent environmental governance in Vietnam. The study highlights the failure of the evaluation to explain and address the lack of cooperation between the different actors involved in the SP-RCC, the problems of the programme's alignment with the Vietnamese government's objectives, and the programme's impact at the local level. The analysis highlights the challenges of aligning international recommendations with national strategies and the complexity of assessing the impact of aid on climate change adaptation and mitigation. The paper contributes to research on aid effectiveness in climate change adaptation and mitigation by taking an original approach: examining the role of international aid effectiveness criteria in guiding ODA targets and the impact this can have on recipient countries. Recommendations include the refinement of evaluation methodologies to improve understanding of aid impacts, the need to emphasise context specificity, and to promote the inclusion of NGOs and academics in donor evaluation systems.

Keywords AFD, JICA, ODA, SDGs, Vietnam

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1. Introduction

Michael R. Greenberg, in his book Environmental Policy Analysis (2007, p. 177), quotes the writer and critic H. L. Mencken to illustrate his point about the conundrum that is environmental policy formulation and implementation: "For every complex problem there is an answer that is clear, simple, and wrong." (Columbia Encyclopedia, 2001). Put in the context of economic development and poverty, and the only solution offered for a long time by Official Development Assistance (ODA): "the Big Push", this quote has a slightly satirical resonance. The Big Push is part of the classic narrative of economic development theories and supports the idea that the way out of poverty is through increased foreign aid and investment (Easterly, 2006). Developed in the 1950s and then sidelined in favour of other approaches to development - to name but a few, human capital theories (Schultz, 1961) and the capabilities approach (Sen, 1985) - this discourse made a comeback in the early 2000s with the promulgation of the Millennium Development Goals (MDGs). If the Big Push approach has returned in the early twenty-first century, it is because its ideas are seductive. The problems of poverty or greenhouse gas emissions could be solved by large-scale investment, partly financed by foreign aid, leading to economic growth: the clear and simple answer. In the case of reducing CO₂ emissions, the Environmental Kuznets Curve tends to support this hypothesis (Jobert & Karanfil, 2012), although as with the Big Push, this assumption has been strongly challenged, particularly concerning ASEAN member countries (Nasir, Duc Huynh & Xuan Tram, 2019). These theories, presented here in a simplified form, are partly at the root of the debate on the effectiveness of development aid in supporting economic growth and breaking the poverty trap. This debate is fuelled by two opposing camps: scholars who are pessimistic about aid effectiveness (Bossuat, 2013; Carbonnier, 2010; Chavagneux, 2001; Madaule 2021; Marchesin 2021; Mélonio, Naudet & Rioux 2022; Severino, 2001; Severino & Ray, 2009) and scholars who have observed a link between aid and development only under certain conditions (Stokke, 1995; Reardon, 1997; Scholl, 2009; Huang & Pascual, 2017). I describe the arguments and contributions between these two camps later in this article. Since aid effectiveness is the central theme of this article, it is important to note that this concept can only be understood and studied in the light of the international system of which it is a part. Research on ODA is thus embedded in the study of international relations (IR). According to liberalism and neoliberalism perspectives on IR (Malacalza, 2019), ODA is an instrument of global governance that can contribute to the achievement of the Sustainable Development Goals (SDGs) and is also a tool of diplomacy, an idea also defended by theories of international political economy.

While the impact of ODA on economic development and poverty reduction in recipient countries has been the subject of much research, the

redirection of funds to climate change adaptation and mitigation (CCAM) remains a less studied topic (Huang & Pascual 2017). However, the proliferation of major international meetings, such as the Earth Summit in Rio in 1992, and international climate agreements, notably the Kyoto Protocol in 1997, have led to the gradual integration of environmental issues into ODA. This shift in the purpose of ODA was accelerated by the promulgation of the MDGs, the Bali Road Map and the Bali Action Plan in 2007, which strengthened action on climate change, and later the 17 Sustainable Development Goals. The international meetings and reports on climate change mentioned above highlight the particular vulnerability of developing countries to the impacts of unpredictable weather and climate. At a time when poverty reduction and economic growth are priorities for developing countries, their populations, especially the poorest, are more vulnerable to climate change because of their heavy dependence on agriculture and ecosystem services, rapid population growth and concentration, and poor health services. Without adequate infrastructure and capacity to adapt, developing countries are unable to cope with climate change, which threatens food security and traditional agricultural practices, increases extreme weather events, degrades water quality and availability, and undermines the incomes of the poorest populations (Dar, 2012).

The case of Vietnam illustrates the interconnected nature of the climate and economic issues facing low- and lower-middle-income countries. Vietnam is one of the ten countries most vulnerable to climate change (Bal, Burck, Hagen, Höhne & Nascimento, 2020). Rising sea levels, melting glaciers altering the course of the Mekong River and heavy rainfall are currently affecting Vietnam and, if left unaddressed, will have catastrophic consequences such as population displacement, loss of arable land and a reduction in gross domestic product. In addition, as Vietnam's population grows, so does its demand for energy and electricity. If this electricity is produced using fossil fuels, it will contribute to the release of large amounts of greenhouse gases into the atmosphere (Espagne, Huynh Thi Phuong, Lagrée, & Drogoul, 2022). There is therefore an urgent need to help Vietnam develop appropriate mitigation and adaptation actions. To address these many challenges, the World Bank has calculated that Vietnam will need approximately US\$368 billion between 2022 and 2040 to finance climate change adaptation and decarbonization (World Bank, 2022). “In 2015, Vietnam was among the top three global recipients of ODA (in terms of disbursements) after Afghanistan and India”² (Carrillo, Thenint & Baye, 2018, p. 4). As Vietnam has moved from a low-income country to a lower-middle income country, aid disbursements to Vietnam have decreased (Chopiton & Ambassade de France au

² Original quote in French: “En 2015, le Vietnam comptait parmi les trois plus gros pays bénéficiaires de l’APD mondiale (en termes de versements), se classant après l’Afghanistan et l’Inde.”

Vietnam, 2020). Nonetheless, in 2020 it still received US\$1,167 million (Organization for Economic Co-operation and Development & Development Assistance Committee, 2023). Vietnam's top bilateral donors³ are, in order, Japan, Germany, France, South Korea, and the United States (Organisation for Economic Co-operation and Development & Development Assistance Committee, 2023). While the primary objectives of ODA in Vietnam were economic growth and poverty alleviation, which explains the drop in aid when Vietnam entered the lower-middle-income group, the remaining donors, whether bilateral or multilateral, cannot continue their activities in Vietnam without taking into account the environmental problems that the country faces and will face in the future. Vietnam is therefore a well-chosen case study to examine the reorientation of ODA.

The Development Assistance Committee (DAC), in an approach very similar to the Big Push, advocates increasing aid for climate change adaptation and mitigation to finance the transformation of partner countries, the term referring to ODA recipient countries (Organization for Economic Co-operation and Development & United Nations Development Programme, 2019). ODA seeks to internationalise strategic parts of the apparatus of targeted states, enabling them to flesh out international agendas (Hameiri & Scarpello, 2018). For Vietnam, a signatory to the United Nations Framework Convention on Climate Change (1992) and the United Nations Framework Convention on Climate Change (2015), its commitments to international environmental agendas take the form of implementing nationally appropriate mitigation actions (NAMAs) and regularly submitting its nationally determined contribution (NDC). Vietnam's engagements imply that it is part of global environmental governance. Through the development of the Support Programme to Respond to Climate Change (SP-RCC), initiated by the French Development Agency (AFD) and the Japan International Cooperation Agency (JICA) and supported by three other bilateral donors, Korea EximBank, the Australian Agency for International Development, the Canadian International Development Agency (CIDA), and one multilateral donor, the World Bank, ODA providers are influencing environmental governance in Vietnam.

According to liberal and neoliberal perspectives on international relations, ODA is a tool used by actors (international institutions and states) to develop international governance. "However, little attention has been paid to how IR theories can explain the ways in which states and other actors seek to shape aid policies and politics" (Malacalza, 2019, p. 11). By examining ODA's participation in global environmental governance through a study of the SP-RCC's evaluation system, which is based on internationally established aid effectiveness criteria,

³ Official development assistance can be delivered by a state, which is called bilateral aid, or by a regional or international organization, which is called multilateral aid. If we consider these two types of aid, the main ODA providers in Vietnam are: the World Bank, Japan, the Asian Development Bank, Germany and France.

this article explores the ways IR theories can explain how development agencies shape and evaluate aid for climate change adaptation and mitigation. It is hypothesised that by basing the aid evaluation system on aid effectiveness criteria, the evaluation struggles to assess the SP-RCC's contribution to the development of coherent Vietnamese environmental governance and to analyse the programme's shortcomings.

Part 1 focuses on the evolution of ODA and introduces the case of ODA in Vietnam and the SP-RCC. Part 2 is devoted to the literature review on ODA's main criticisms and debates about aid effectiveness and presents the criteria established by the international community and researchers to evaluate it. Part 3 describes the methodology. The results of the study are reported in Part 4 and discussed in Part 5. Part 6 is devoted to recommendations. Part 7 concludes the article.

2. Part 1: About ODA and the SP-RCC

Official Development Assistance is the financial assistance provided by developed countries to low- and lower-middle-income countries. This aid can take the form of low-interest loans, grants or technical assistance. ODA, in its current form, was conceived in 1969 by the Development Assistance Committee of the OECD (Chavagneux, 2001). ODA was then divided among food aid, emergency aid, refugee assistance, debt relief and some peacekeeping operations (Bossuat, 2013; Van der Veen, 2011). Donor countries have several reasons for financing the development of the poorest countries. It allows them to promote their foreign trade and economic policies while increasing their political and cultural influence (Calandri, 2014). Reflected in the MDGs and then the SDGs, the climate crisis and its impact on economic growth and poverty has become an international concern. This milestone not only influences the objectives of ODA, but also helps rethink how it works and how to make it more effective (Huang & Pascual, 2017; Pawelczyk, Pincet, & Okabe, 2019; Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019). When the international community agreed on a new agenda for more effective aid in the early 2000s, the programme-based approach was seen as one of the solutions to improve aid effectiveness because it gives the recipient country more freedom of choice. Indeed, the money lent is incorporated into the government's budget (Orth & Schmitt, 2018). The objectives of the programme-based approach are also consistent with the will of ODA donors to promote good environmental governance structures in recipient countries, which means increasing the capacity of recipient governments to make and enforce environmental regulations and deliver environmental services (Fukuda-Parr, 2013; Soeng, Cuyvers, & Sok, 2019; Ortmann, 2017). Stéphane Madaule, former director of AFD, emphasizes the broadening of ODA's objectives which: "are no longer solely economic or

social but also environmental, and [...] go far beyond what made its raison d'être. A gradual shift has taken place: from a North/South solidarity issue, presented as a temporary means to achieve economic catch-up with the North, aid now claims to respond to a collective ambition of a universal nature”⁴ (Madaule, 2021, p. 84).

The establishment of the SP-RCC in 2009 reflects the aforementioned evolutions of ODA targets. The SP-RCC was a multi-year program assistance providing financial and technical support for the implementation of the National Target Program to Respond to Climate Change developed by the government of Vietnam in 2008 (World Bank, 2016). The response of the government of Vietnam to the environmental crisis, before the SP-RCC, is described by Stephan Ortmann in his book, Environmental Governance in Vietnam. He argues that despite repeated attempts to improve the legal framework:

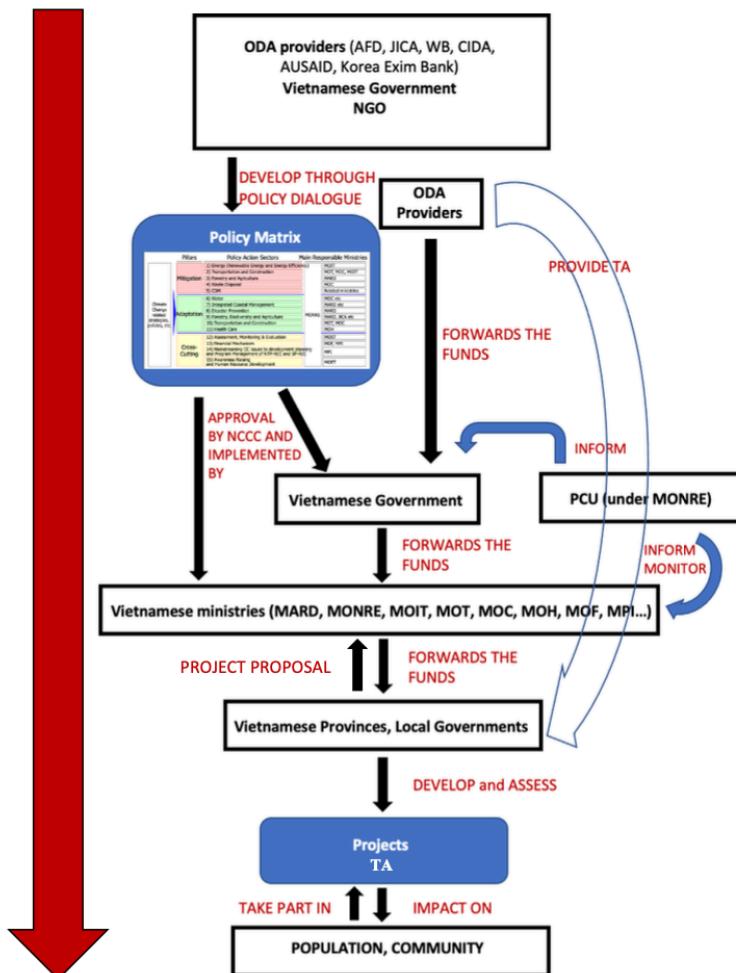
“In 1985, the government passed a formal decision which declared that any development should take environmental protection into consideration. In 1986, the government worked on [...] a National Resources and Environment Research Program. [...] In 1991, the government released its first National Plan for Environment and Sustainable Development. [...] The government passed its first environmental law in 1992 [and] elevated its environmental institution to ministerial level in 1992” (Ortmann, 2017, p. 24-26).

The implementation of environmental legislation, because it happens rarely, remains a problem. Moreover, the relative youthfulness of the Ministry of Natural Resources and Environment (MONRE), established in 2002, seven years before the initiation of the SP-RCC, presents challenges in developing a robust legal framework for environmental governance due to its relatively low position within the ministry hierarchy (Ortmann, 2017). The SP-RCC was therefore established by Japan and France to support the efforts of the government of Vietnam and to serve as a forum where various Vietnamese ministries and donors meet. The programme was later joined by the World Bank, the Canadian International Development Agency, Korea EximBank and the Australian International Aid Agency. Money from donor loans was pooled in a central budget that was used to finance “the adoption of laws and regulations, the conduct of studies, but also the effective implementation of financial mechanisms or operations” (Agence Française de Développement, n.d.) (Figure 1). The three main priorities of the SP-RCC were mitigation, adaptation, and cross-sectoral

⁴ Original quote in French: “Ils [les objectifs] ne sont plus uniquement économiques ou sociaux mais également environnementaux, et débordent aujourd’hui de beaucoup ce qui a fait sa raison d’être. Un basculement progressif a eu lieu: d’un enjeu de solidarité Nord/Sud, présentée comme le moyen temporaire d’accomplir un rattrapage économique avec le Nord, l’aide prétend maintenant répondre à une ambition collective à caractère universel.”

issues related to climate change (Japanese International Cooperation Agency, 2009). Each policy area in which the program intervenes was linked to one or more Vietnamese ministries (Table 1). The program was divided into seven phases, each of which had specific objectives to be met to move on to the next phase.

Figure 1: SP-RCC operations and stakeholder involvement



Source: Authors based on SP-RCC ex-ante and ex-post evaluations and interviews with AFD and JICA employees.

Table 1: SP-RCC areas of focus and line ministries for the program

Field	Line Ministries
1. Disaster preparedness and climate monitoring	Ministry of Natural Resource and Environment (hereinafter, "MONRE"), Ministry of Agriculture and Rural Development (hereinafter, "MARD"), Ministry of Transport (hereinafter "MOT"), Ministry of Construction (hereinafter "MOC")
2. Food and water security	MONRE, MARD, MOC
3. Proactive responses to sea level rise	MONRE, MARD
4. Sustainable forest management and development	MONRE, MARD
5. Reducing GHG emissions	MONRE, MARD, MOT, MOC, Ministry of Finance (hereinafter "MOF"), Ministry of Planning and Investment (hereinafter "MPI"), Ministry of Industry and Trade (hereinafter "MOIT"), Ministry of Science and Technology (hereinafter "MOST")
6. Mainstreaming climate change	MONRE, MOF, MPI, MARD, Ministry of Education and Training (hereinafter "MOET")
7. Community capacity development	MOET, Ministry of Health (hereinafter "MOH")
8. Financial mechanism	MONRE, MOF, MPI

Note: Ministries underlined in the table above are those that were interviewed or who responded to the questionnaires.

Source: Iida (2019, p. 5)

The SP-RCC was a large-scale programme designed to assist Vietnam in its environmental transition and was unique in terms of its duration, the large number of multilateral and bilateral donors involved, and the amount of money committed (US\$ 1269 million). The interest in studying this budget support programme and its evaluation system also stems from the fact that the SP-RCC aligns with the environmental aid agenda and highlights the difficulty of transitioning from the international to the national and local levels in the context of environmental governance. Before examining the results and impact of this program in more detail, the following section reviews the main debates on aid effectiveness and the evolution of the criteria for measuring it.

3. Part 2: Criticisms of ODA and international criteria for measuring its effectiveness

The arguments put forward by academics against foreign aid are numerous. One of the problems with ODA is its origins. Indeed, it can be seen as a tool used by ex-colonial empires to maintain their influence in their former colonies (Balleix, 2013; Hugon, 2013; Malacalza, 2019; Servet, 2010). This aspect can be argued in the case of the SP-RCC, as it was initiated by Japan and France, of which Vietnam was a former colony. This fact leads several ODA specialists to say that aid reinforces asymmetrical relationships between donors and recipients (Chavagneux, 2001). Another frequently voiced criticism is that ODA favors the indebtedness (Wang, Guo & Dong, 2021) of the recipient country, since most forms of ODA are loans. In addition, the projects funded would largely involve outward-looking activities, such as the extraction of raw materials, which would have little or no positive impact on the local population (Easterly & Pfutze, 2008; Madaule, 2021). These criticisms are directed at ODA as a system. Despite its evolution in recent years and its alignment with the SDGs (Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019), negative comments persist. Thomas Mélonio executive director of innovation, strategy and research at AFD highlights its potential, while recalling that “it lags behind its time and is inadequate in the face of future challenges” (2022, p. 3). Moreover, although ODA continues to be supported and financed, the amounts spent are derisory and no longer seem capable of making a difference in terms of sustainable development (Mélonio, Naudet & Rioux, 2022). Aid has also been criticised for its negative impact on the quality of governance in the recipient country (Soeng, Cuyvers, & Sok, 2019). Aid monopolises public sector personnel, undermines institutions, encourages rent-seeking behaviour, and creates donor dependency. While development agencies are regularly evaluated according to international criteria, described in detail in this article, project evaluation continues to be criticised for its inability to capture the impact of budget programmes at the country level (Grey & Morris, 2018) and for the lack of a mechanism to communicate the beneficiaries' point of view to the sponsors (Martens, 2005). These shortcomings are partly due to poor management of aid data by members of the Development Assistance Committee (Alsayyad, 2020). The true impact of ODA is therefore unknown or poorly understood (Severino, 2001), which led the literature on aid effectiveness to flourish in the 1990s (Baliamoune-Lutz, 2017; Huang & Pascual, 2017).

The main arguments of the aid pessimists have been presented. Another group of scholars provides counterarguments by considering that aid can be effective under certain conditions (Stokke, 1995; Radelet, 2006; Reardon, 1997; Scholl, 2009; Huang & Pascual, 2017). In addition to arguments about the role of foreign aid in reducing poverty and promoting economic growth (Nguyen, Huynh,

Reisach & Kim, 2022), some point to the link between ODA and the promotion of good governance. Foreign aid provides funds to the recipient government to enable it to:

“[...] Develop agendas for improving public services, enhancing effective policy formulation and its implementations, and establishing strong, effective institutions. [...] foreign aid can be utilized for enhancing state capacity through training and technical assistance [...]. This could lead to the enhancement of the quality of public administration and the use of public resources, thus boosting the effectiveness of governance and institutions. [...] it can be used to strengthen procedures and institutions for state-society linkages, which includes support for judicial reforms and the rule of law, [...] some foreign aid is directly made to empower non-governmental organizations and civil society organizations with truly genuine development agendas in their missions, so that they can engage more productively with their host governments for the benefit of the general public.” (Cuyvers, Soeng & Soken, 2019, p. 134)

Studies on aid effectiveness related to climate issues are recent and few in number. The factors underlying the effectiveness of ODA for climate change adaptation and mitigation have not been identified (Radelet, 2006), leading Yongfu Huang and Unai Pascual to say that “systematic research on aid effectiveness for environmental sustainability is hugely lacking” (Huang & Pascual 2017, p. 3). Holger Rogner and Kei-Kit Leung state that “review confirmed that without ODA and other forms of development assistance, many renewable and efficiency projects would not have been implemented in developing countries, with resultant higher GHG emissions”. (Rogner & Leung, 2017, p. 116). Using three different indicators: real savings, ecological footprint/biocapacity ratio, and sustainability-adjusted Human Development Index (HDI), Yongfu Huang and Muhammad Ghulam Quibria found that foreign aid promotes sustainable development in recipient countries (Huang & Quibria, 2017). Research that takes a more optimistic view of ODA has in common that it makes the effectiveness of aid conditional on the fulfilment of several criteria (Radelet, 2006), in particular, country ownership and consideration of the social, political and economic context of the recipient country (Grey & Morris, 2018). Indeed, this is one of the criticisms that can be levelled at them, namely that they merely list potential criteria for effectiveness without testing them. However, the introduction of aid effectiveness criteria is the method widely used by international organisations to persuade ODA providers to change their practices. The construction of the international governance of (sustainable) development aid is also based on these criteria. According to Malacalza (2019), foreign aid can be

considered an international regime or semi-regime because it is based on rules that take the form of criteria.

Since 2002 and the Monterrey Consensus, ODA providers and in particular members of the DAC have been trying to elaborate criteria on which donors should base themselves to have good practices that would increase the effectiveness of aid. Thus, in 2005, the Paris Declaration established five partnership commitments between donors and developing countries: ownership, alignment, harmonization, managing for results, and mutual accountability. The Paris Declaration also identifies the following different actions to strengthen aid effectiveness (Owa, 2011):

- 1- Align aid flows with national priorities
- 2- Strengthening capacity through coordinated support
- 3- Use of country public financial management systems
- 4- Use country procurement systems
- 5- Avoidance of parallel implementation
- 6- Predictability of the aid
- 7- Use of common agreements or procedures
- 8- Joint missions
- 9- Joint country analytical work

Three years later, the Accra Agenda for Action is established as a roadmap that ideally both donors and recipient countries should follow to make ODA more effective. In particular, it highlights the main areas that need to be improved in order to promote aid effectiveness, such as the involvement of civil society organizations (CSOs), the use of the recipient country's fiduciary system by donors, the strengthening of this system by recipient countries, the fight against aid fragmentation, the reduction of tied aid in favour of untied aid, better accounting by donors and recipients, coordination between donors and recipient countries to set conditions for the receipt of aid, and improved predictability of aid, in particular through better budget planning (Organisation for Economic Co-operation and Development, 2008). However, little detail is provided on how donors and recipients can concretely improve their practices or measure their progress or regression. In 2011, a new document focusing on aid effectiveness, the Busan Partnership for Effective Development Cooperation, was launched. The Busan Declaration lists four common general principles (Bigsten & Tengstam 2015):

- Ownership of development priorities by developing countries.
- Focus on results: learning from experience is important.
- Inclusive development partnerships: including reducing aid fragmentation.
- Transparency and accountability.

Based on these principles of aid effectiveness, the Global Partnership for Effective Development Cooperation, a multi-stakeholder organization on development effectiveness created in 2012 following the Busan High Level Forum

on Aid Effectiveness, has developed a list of aid effectiveness criteria (Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019) (Table 2).

Table 2: Criteria for ODA effectiveness proposed by the Global Partnership for Effective Development Cooperation

Number	Indicator
1	Quality of National Development Strategies and National Results Frameworks
2	Creating an enabling environment for CSOs
3	Quality of public-private dialogue
4	Transparent information on development cooperation
5a	Predictability of development cooperation
5b	Medium-term predictability of aid
6	Development cooperation is included in budgets subjects to parliamentary oversight
7	Development partners' perspective on mutual accountability mechanisms at country level
8	Countries have systems in place to track and report on budget allocations for gender equality and women's empowerment
9a	The partner country is strengthening its public financial management systems
9b	Development partners use partner country systems
10	Untied aid

Source: Created by the author based on OECD/UNDP report (Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019)

All the above criteria (Tables 2) are non-binding and were developed at major international meetings, mostly by OECD and DAC members. Other stakeholders, such as NGOs, have sometimes been involved in their formulation, notably through the Global Partnership. Despite the elaboration of these indicators and the fact that they are reiterated at every meeting on aid effectiveness or in reports on the subject, many researchers continue to question ODA and point to the failure of donors to respect them (see the authors of the pessimist group above). This raises the question of the real impact of these principles on the effectiveness of ODA, as these criteria are largely donor-driven and do little to develop the central role of recipient countries in ensuring aid effectiveness.

Following the promulgation of the various criteria mentioned above, authors have attempted to rate donor and recipient countries. In 2012, the OECD produced a report on progress in implementing the Paris Declaration and monitoring its criteria. To this end, 12 indicators have been developed to assess progress in the broad categories defined in the Busan Declaration. The results are

mediocre, and the document highlights a lack of commitment by donor countries, particularly in the areas of donor coordination, alignment with partner countries' priorities, aid predictability and mutual accountability. In addition, aid fragmentation has increased. However, there have been improvements in the number of partner countries with strong national development strategies and in the progressive integration of the Millennium Development Goals. (Organisation for Economic Co-operation and Development, 2012). The promulgation of the MDGs and then the SDGs is good news for improving aid effectiveness, as the adoption of these goals has led to positive changes among donors. Moreover, as the Global Partnership points out, the more effective ODA is, the more it will contribute to achieving the Sustainable Development Goals (OECD/UNDP, 2019). The OECD report also provides an evaluation of partner and donor countries. The idea behind this report is that the better the scores are, the more likely it is that ODA will be effective. Six years later, the Global Partnership reused and slightly modified the indicators and assessed their evolution. The results are the same as in the OECD report from 2012. Positive developments have been made by recipient countries in strengthening national development planning. On the other hand, the alignment of development partners with partner countries' priorities and country-owned results frameworks is declining, the visibility of development cooperation at the country level is weakening, and the strengthening of public financial management systems has not been matched by a significant increase in their use by development partners. The enabling environment for civil society organizations is deteriorating, and there is mixed progress in making development cooperation more transparent (Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019).

Before the 2012 OECD report on aid effectiveness, several authors attempted to assess donor practices and propose a ranking. These include David Roodman (2006), William Easterly and Tobias Pfutze (2008), Nancy Birdsall, Homi Kharas, Ayah Mahgoub, and Perakiss Rita (2010), and Stephen Knack, Rogers Halsey and Nicholas Eubank (2011). However, it is difficult to assess donors' practices because "most indicators of donor performance are based on plausible but largely untested beliefs about best practices in aid management" (Knack et al., 2011). In addition, the data used for this assessment are derived from data provided by donors to the OECD and are sometimes incomplete or difficult to interpret. The research conducted to evaluate donors has only looked at their overall practice, i.e. all regions and all sectors of activity taken together. The work done by different researchers to rank donors based on OECD data has produced very different results because the evaluation of donors' practices depends on the aid effectiveness criteria used and the methods chosen by researchers. The study of donor practices and their classification according to aid effectiveness criteria produces results that make it difficult to analyse the impact of aid on a recipient country. This article takes a different approach, looking at

how these same criteria have influenced the aid evaluation system and focuses on national and local levels.

4. Part 3: Methodology

Parts 1 and 2 of this article emphasize that Official Development Assistance operates within the framework of an international aid regime aimed at fostering international environmental governance. Development agencies function as key actors within this regime, employing effectiveness criteria that mirror the norms established by it (Malacalza, 2019). This article delves into the utilization of these effectiveness criteria by development agencies in evaluating their aid within the context of a specific project implemented in Vietnam. The methodology used consists of two stages. First, a content analysis of the SP-RCC evaluation documents was carried out to analyze their content through the prism of aid effectiveness criteria. The aim of this content analysis is to explore how donors take these criteria into account, which criteria are used and how they influence the way the evaluation is conducted and the results it highlights. The AFD, JICA and World Bank evaluations were selected for this study because they were available for consultation. In addition, these three donors are not only the initiators and main financiers of the SP-RCC but also the main donors in Vietnam. With a long history in Vietnam, they have a permanent office in Hanoi and a team of Vietnamese and donor country staff, as well as environmental specialists from Vietnam and abroad. Their knowledge of the country's political institutions is important. It is therefore interesting to analyse their assessments of the SP-RCC through this perspective. In contrast, the Australian and Canadian development agencies and the Korean development bank have had little involvement in the SP-RCC and have not evaluated the project or made their evaluations available.

Once this initial selection was made, the documents needed for content analysis were collected. The amount of information provided by the three major donors is uneven. JICA makes its ex-ante and ex-post evaluations of the SP-RCC available on its website. The final evaluation of the project, which was carried out by an external evaluator, Iida Toshihisa (2019), from OPMAC Corporation, a Tokyo-based consultancy firm specializing in development projects in developing countries, is also available on JICA website. For AFD, the evaluation of the SP-RCC was conducted by Ecorys, a Netherlands-based economic research and consulting firm (Ecorys, 2018). The document is not freely available on the AFD website but can be obtained upon request from former members of the SP-RCC Program Coordination Unit. Less information is available from the World Bank on the SP-RCC. The evaluation of the program is part of an evaluation report conducted in 2016 on the implementation and results of a series of development policy loans (DPO) to Vietnam for climate change development policy operations World Bank. (2016). This document is also available online. Each document

undergoes multiple readings to ensure a comprehensive understanding of its content. Subsequently, the documents are meticulously sorted and categorized based on 11 effectiveness criteria. This systematic analysis enables the identification of the criteria utilized by each development agency and their corresponding outcomes.

The content analysis conducted as part of this research examines the use of aid effectiveness criteria by ODA evaluators. After collecting the SP-RCC evaluation documents, the list of criteria on which this analysis is based was compiled. The effectiveness criteria have evolved since the Paris Agreement (see Part 2). Some criteria have been added by the OECD or the Global Partnership. Other criteria are more implicit and linked to international environmental commitments, such as the 2030 Agenda. The selection of criteria used for this study is summarised below. First, the aid effectiveness criteria developed by the OECD and the Global Partnership (Table 2) were grouped and sorted to avoid redundant criteria. Second, because the SP-RCC operates as budget support, it is highly dependent on the Vietnamese government as the primary entity responsible for establishing and funding the environmental governance structure. As a result, the success of the SP-RCC depends largely on the actions of the recipient country. According to aid effectiveness criteria, this includes promoting greater accountability, facilitating improved donor-recipient coordination, strengthening the fiduciary system, promoting engagement with civil society organisations, and improving the quality of strategies and results frameworks. It is important to note, however, that the primary objective of the SP-RCC evaluation is not to examine how the Vietnamese government is meeting these criteria, but rather to assess how technical assistance and donor support are helping Vietnam to do so. Consequently, in this study the criteria have been slightly adjusted to focus on assessing this enabling role. Third, given the nature and objectives of the SP-RCC, it is not useful to examine whether the evaluators considered the following criteria: untied aid, promotion of public-private partnerships, and harmonization of aid. The SP-RCC was designed as untied aid for the Vietnamese government. Therefore, it is not necessary to include this criterion in this analysis. Strengthening public-private partnerships was not an objective of this project, so this criterion is not included in the evaluation of ODA providers. In terms of harmonization, this indicator refers to avoiding the concentration of numerous donors in the same country or sector and promoting joint projects. Since the SP-RCC is already a joint project, there is no need to assess harmonization. The sorting process produces a list of 8 criteria (Table 3).

Table 3: Aid effectiveness criteria obtained after sorting

Number	Criterion
1	Alignment with partner country objectives and needs
2	Strengthening partner countries' national development strategies
3	Build on the recipient country's public financial management and procurement systems.
4	Predictability and transparency of aid (annual predictability).
5	Strong coordination with partner country (use of common agreements and/or procedures)
6	Coordinating among donors (when working on a joint project)
7	Transparent and monitorable performance assessment frameworks
8	Promote the participation of civil society organizations (NGO, citizens, local government).

Source: Created by the author.

The part 1 of this article reminded that ODA donors, especially DAC members (among them AFD, JICA, and WB), are committed to advancing the SDGs through their aid. Given that the SP-RCC aims to adapt to and mitigate climate change and covers Goals 2, 6, 7, 9, 11, 13, 15 and 17⁵, this research also questions the inclusion of these issues in donors' assessment of this program. According to Gabriela Ileana Iacobuță (Iacobuță, Höhne, Van Soest, & Leemans, 2021), SDGs have a positive impact on CCAM. Taking these objectives into account by donors could therefore have a positive impact on aid effectiveness. Thus, SDGs could be considered as criteria for ODA effectiveness. Holger Rogner and Kei-Kit Leung (2017) used the OECD effectiveness criteria and demonstrated their positive impact on aid in the renewable energy sector. Their research tends to show that most ODA effectiveness criteria are relevant regardless of the ODA (CCAM) sector, but also suggests that it is important to develop specific effectiveness criteria for ODA in the CCAM domain. They consider technology transfer and greenhouse gas reduction as criteria for assessing the effectiveness of ODA in the area of CCAM. This article does the same. Taking into account recent academic work on the effectiveness of ODA in the field of CCAM, three new criteria emerge: SDGs consideration, technology transfer, and GHG reduction. The 11 effectiveness criteria presented in this section and summarized in Table 4 were then applied to the content analysis of the SP-RCC evaluations conducted by JICA, AFD, and WB. The results are presented in Part 4.

⁵ The SP-RCC was launched before 2015, so there is no direct mention of the SDGs. However, the objectives of the program as defined by the donors are aligned with SDGs 2 (zero hunger), 6 (clean water and sanitation), 7 (affordable and clean energy), 9 (innovation, industry and infrastructure), 11 (sustainable cities and communities), 13 (climate action), 15 (life on land) and 17 (partnerships for the Goals).

Table 4: Criteria for ODA effectiveness for climate change adaptation and mitigation

Number	Criterion
1	Alignment with partner country objectives and needs
2	Strengthening partner countries' national development strategies
3	Build on the recipient country's public financial management and procurement systems
4	Predictability and transparency of aid (annual predictability)
5	Strong coordination with partner country (use of common agreements and/or procedures)
6	Coordination between donors (when working on a joint project)
7	Transparent and monitorable performance assessment frameworks
8	Promote the participation of civil society organizations (NGO, citizens, local government)
9	Relate to sustainable development goals
10	Facilitate the transfer of sustainable technologies
11	Positive impact on greenhouse gas reduction

Source: Created by the author based on OECD/UNDP report (Organisation for Economic Co-operation and Development & United Nations Development Programme, 2019) and Holger Rogner and Kei-Kit Leung (2017)

The second methodological stage involves a framework analysis conducted on transcripts derived from 10 in-depth semi-structured interviews. These interviews were carried out between March 2023 and January 2024, encompassing locations in Tokyo (Japan), Paris (France), Hanoi (Vietnam), and online platforms. Participants included individuals directly engaged in the SP-RCC, such as development agency personnel (AFD, JICA), consultants, and NGO representatives (CARE International and WWF). Searches conducted on the professional networking platform LinkedIn, utilizing keywords such as JICA/SP-RCC, AFD/SP-RCC, and World Bank/SP-RCC, facilitated connections with former JICA personnel. Following introductions about my research, I inquired whether they could facilitate introductions to individuals in Japan, France, or Vietnam who had direct involvement in the programme and/or its evaluation. Subsequently, these contacts were reached out to and requested permission for interviews. Depending on their availability and geographic location, mutually convenient times and venues were arranged. Following each interview, interviewees were asked if they could facilitate connections with other individuals involved in the programme. Simultaneously, requests for interviews were dispatched via email to AFD, JICA, and the World Bank. Each interview lasted between 45 minutes and 2 hours and was recorded. One of the interviews was conducted by e-mail. The interviews were then transcribed using MacWhisper

software and, for those conducted in French (AFD) or Japanese (JICA)⁶, translated into English by myself. Respondents were provided with and subsequently signed a consent form, which included a comprehensive presentation of the research, the objectives of the interview, the anticipated utilization and retention of data, a reminder of their rights during and subsequent to the interview, as well as the option for partial or complete anonymization of responses. The questionnaire was designed around 4 themes:

- The SP-RCC process and the role of the interview within the programme.
- Difficulties encountered in the implementation of the programme.
- The evaluation system.
- The impact of the programme on the objectives set.

To analyze the transcripts, a framework analysis was conducted, following a systematic five-step approach: familiarization with the data, framework identification, indexing, charting, and interpretation. This method was selected for its adaptability to tailor-fit the specific objectives of the research (Ritchie & Spencer, 1994). Moreover, it is known for being 'essentially independent of theory and epistemology' (Braun & Clarke, 2006, p. 78), making it a pragmatic choice for data analysis in the context of an explorative approach. Framework analysis is particularly recommended for studies focused on evaluative research questions, such as exploring stakeholders' experiences of an event or program (Parkinson, Eatough, Holmes, Stapley, & Midgley, 2016). Another advantage of this method, pertinent to this article, is its efficiency in handling data collected and transcribed by the same researcher (myself), enabling a swift and simultaneous process of data familiarization and framework identification. The results of the framework analysis are presented in Part 4: results.

5. Part 4: Results

The results section is structured as follows: first, the results of the SP-RCC are examined using the aid effectiveness criteria as a framework. Second, the main unanswered questions about the results and impacts of the SP-RCC, as identified in the evaluation documents, are presented. Finally, the third section presents the results of the framework analysis. The content analysis of the SP-RCC evaluations shows that the three donors used the aid effectiveness criteria developed by international organisations to assess the program (Table 5). There is no obligation to use these criteria to evaluate aid. Each donor is free to use them all or to choose

⁶ None of the interviews were conducted entirely in Japanese, and the questions were always asked in English (with the exception of the interviews with AFD staff, which were conducted entirely in French). However, interviewees whose mother tongue was Japanese and who were aware of my understanding of Japanese sometimes answered certain questions in their mother tongue.

to evaluate some but not others. The use of these criteria underscores that development agencies not only follow the guidelines of their home countries but also uphold global development commitments. They are therefore agents of the international aid regime.

In AFD's case, all the effectiveness criteria were mentioned in the evaluation, but only some of them were evaluated. JICA and the World Bank also used some of the aid effectiveness criteria to evaluate the SP-RCC (Table 5). To measure these criteria, the SP-RCC evaluators from OPMAC (JICA) collected quantitative data, such as the number of projects created and environmental policies implemented, and qualitative data through interviews with staff from the various Vietnamese ministries involved in the programme. Similarly, the World Bank has developed a list of indicators to evaluate its participation in the SP-RCC, and the evaluation is based on quantitative data. This methodology closely resembles that used by JICA. Each indicator is a target to be achieved and this is considered to have been achieved according to, for example, the number of projects implemented, or the number of people trained. Each donor has focused its evaluation on the priority themes of the country to which it belongs and the areas in which its technical assistance has been deployed. AFD's evaluation focuses on energy efficiency, JICA's on water and forestry management, and the World Bank's on water management and training of energy auditors and managers. The three evaluations indicate satisfactory outcomes for the program overall.

Table 5: Inclusion of aid effectiveness criteria in AFD, JICA and WB SP-RCC evaluations and assessment results

Criterion	(1) Alignment with partner country objectives and needs	(2) Strengthening partner countries' strategies	(3) Build on the recipient country's public financial management and procurement systems	(4) Predictability	(5) Coordination with partner country	(6) Coordination between donors	(7) Transparent and monitorable performance assessment frameworks	(8) Participation of civil society organizations	(9) SDGs	(10) Facilitate the transfer of sustainable technologies	(11) Positive impact on GHG reduction
Donor											
AFD											
JICA											
WB											

Table legend

- Criterion evaluated by the donor. The result of the evaluation is considered positive by the donor.
- Criterion evaluated by the donor. The result of the evaluation is considered mitigated or unsatisfactory by the donor.
- Criterion not evaluated by the donor but mentioned by the donor, either directly or indirectly.
- Criterion not included in evaluation.

Source: Created by the author based on SP-RCC evaluations conducted by AFD, JICA and the World Bank.

Examining the criteria used by donors provides a clearer understanding of how the SP-RCC has bolstered Vietnam's environmental goals and assisted in

establishing an environmental institutional framework in accordance with international agreements (such as the United Nations Framework Convention on Climate Change and the Paris Agreements) and supported by global institutions, in particular, OECD, Global Partnership, and UNDP. Vietnam's significant need for financial and technical support in the environmental sector was evident when the SP-RCC started. The evaluations underscore the support for Vietnam's governmental aspirations, as outlined in its Nationally Determined Contribution and National Energy Development Master Plan, along with contributions to the budgets of various Vietnamese ministries. Prioritizing the demonstration of the SP-RCC's alignment with the partner country's objectives and needs, as stipulated by aid effectiveness criterion 1, was a focal point of the evaluations.

The evaluations also underline the role of the SP-RCC in developing and strengthening Vietnam's environmental institutional framework (criterion 2). According to the JICA report, 93% of the policy actions identified in the SP-RCC inception meetings have been successfully completed. The AFD report highlights that the SP-RCC has led to the implementation of several policies related to climate change adaptation and mitigation. It also highlights the establishment of a National Committee on Climate Change (NCCC) chaired by the Prime Minister. At the provincial level, both the JICA and World Bank reports note that all Vietnamese provinces have disaster preparedness plans after the completion of the SP-RCC. Regarding the institutional environmental framework, the World Bank's assessment highlights the SP-RCC's contribution to the development of a new legal framework for integrated water management and the issuance of the Decree on the Implementation of the Water Law. The financial impact of the SP-RCC (criterion 3) was assessed by each donor and was rated as mixed by AFD and JICA, as the contribution of the SP-RCC budget support funds to increasing government spending on climate change (CC) was rather limited, even though a financial mechanism for using ODA for climate finance through budget support is in place. The predictability of the SP-RCC (criterion 4) was rated positively.

Regarding coordination between donors and the partner country (criterion 5), the evaluation carried out on behalf of the AFD presents policy dialogue as an important feature of the SP-RCC but considers it unsatisfactory because it didn't meet donors' expectations. The question of why this has happened remains unanswered. Donor coordination is important for understanding how the SP-RCC works as a joint project (criterion 6). As mentioned in the AFD evaluation, there was a lack of coordination as the various meetings organised during the programme did not serve as a platform for dialogue. Donor coordination also suffered from a lack of focus on fewer issues and a lack of agreement among donors, particularly on certain energy-related issues. The evaluation carried out for AFD does not propose any solutions to remedy this situation. Neither do those carried out for the World Bank or JICA.

Reducing greenhouse gas emissions (criteria 9 & 11) is one of the key commitments made by the signatories to the Paris Agreement. It is one of the indicators of Sustainable Development Goal 13 and also one of the ODA targets. The evaluation of the SP-RCC carried out by Iida Toshihisa uses this criterion to highlight the overall impact of the SP-RCC. It argues that although GHG emissions will increase due to Vietnam's growing energy consumption, the environmental policies introduced during the SP-RCC will have a positive impact and allow emission rates to be achieved that are well below those projected under BAU scenarios. This finding is consistent with the work of optimists in development assistance (Rogner & Leung, 2017). However, in the context of this assessment, it is more an assumption about the potential impact of the SP-RCC rather than an assertion based on indicators and data.

Although each of the aid effectiveness criteria developed by international organisations is mentioned in at least one of the three evaluations, few of them are assessed in depth. Moreover, the use of these criteria, which impose inflexible frameworks on the evaluators, does not provide answers to questions that are essential to understanding the contributions of the SP-RCC. For example, there is no explanation or solution for the declining alignment of the SP-RCC with the needs of the Vietnamese government. With regard to donor involvement in strengthening environmental governance in Vietnam at the central level, the evaluators criticise the SP-RCC's Programme Coordination Unit for its moderately satisfactory performance. The reasons for this and possible solutions are not mentioned in the evaluation. The involvement of NGOs in the programme (criterion 8), one of the main objectives of the SP-RCC, is not mentioned in the evaluation. Similarly, there is no study of the implementation of laws and regulations and their impact on local environmental governance at the provincial, commune and district levels. It is therefore impossible to understand how aid has benefited local people and responded to environmental problems related to poverty, ethnic minorities, women and young people, who are the most vulnerable to climate change (Dar, 2012).

In order to understand the impact of the SP-RCC, its shortcomings and to answer questions ignored or left unanswered by the AFD, JICA and World Bank evaluations, it is necessary to go beyond the results presented in the evaluations and the framework imposed by the effectiveness criteria. To do this, I have drawn on the interviews conducted with SP-RCC stakeholders. As explained in the methodology section, the interview questionnaire was designed to give participants as much freedom as possible to talk about their experiences with SP-RCC. The first two steps of the analysis framework (familiarisation and identification) made it possible to identify 6 response themes into which the interviewees' responses could be classified (step 3 indexing): the origins of the programme, the Vietnamese institutional framework, the scope of the programme, donor behaviour, programme evaluation and the role of NGOs in the project. I

carried out all the steps with pen and paper, as I expected to have the flexibility to quickly rearrange, collapse and split categories as data understanding deepened. These 6 categories were then rearranged (step 4 charting) to address the following 3 themes: the reason for the decline in development partner alignment, the role of civil society and local government in SP-RCC, and the impact of the programme on Vietnamese environmental institutions. The following paragraphs present step 5 of the framework analysis: interpretation.

According to interviewees, the capacity of Vietnamese ministries to implement environmental legislation was limited at the start of the SP-RCC. Climate change adaptation and mitigation were new issues for the Vietnamese government. Similarly, the Ministry of Natural Resources and Environment was a new ministry that lacked the resources and legitimacy to take on the role of coordinator of the SP-RCC. There was no environmental governance at the central level, nor a strong institutional framework to support it. The SP-RCC involved most of Vietnam's ministries and resulted in an extensive list of objectives to be achieved (e.g. creation of several hundred laws), programmes to be implemented (e.g. training and workshops, disaster management plan) and stakeholders to be involved (e.g. NGOs, local governments, community-based organisations). In addition, the SP-RCC funded around sixty local projects set up by the Vietnamese authorities with technical assistance from donors. Interviewees felt that although the SP-RCC's objectives were in line with those of the Vietnamese government, the programme was far too broad and involved far too many government agencies. One example mentioned several times was the fact that the Programme Coordination Unit, which was supposed to act as a link between the Vietnamese ministries involved in the project, liaise with donors, and monitor results, consisted of only six people. The SP-RCC is budget support, which means that donors lend money to the Vietnamese government to help it achieve its environmental goals. The government decides how much money to allocate to each ministry. As Vietnamese ministries are often in competition with each other, this has created tensions that have led some ministries to lose interest in the SP-RCC. These reasons help to explain why, as the SP-RCC progressed, it became increasingly disconnected from the real needs and objectives of the Vietnamese government. In addition, several interviewees felt that the loan was far from sufficient given the scale of the project.

This lack of financial and human resources also helps to explain why civil society organisations were only moderately involved in the SP-RCC. Two people working for two international NGOs present in Vietnam, CARE International and WWF, were interviewed. According to them, although the NGOs were invited to the SP-RCC biannual meetings, their role was only advisory. At no time were they involved in setting up programmes at the local level, while local INGO action is being developed in Vietnam. Although the SP-RCC was intended as a platform for cooperation, it did not provide a framework for involving all stakeholders.

Similarly, Vietnamese NGOs and community-based organisations were not represented, less for lack of will than for lack of resources.

At the central level, local stakeholders were not represented at meetings or in decision-making. However, training and workshops were organised at the provincial level (criterion 10). In addition, local authorities were able to submit CCAM-related projects to the various ministries for SP-RCC funding. About sixty projects were accepted. As they were implemented at the provincial, commune or district level, these programmes necessarily involved local people and civil society organisations such as the Women's Union, the Youth Union and the Farmers' Union. However, there is no documentation or evaluation of these projects. None of the interviewees were able to provide any information about these projects, apart from the assumptions below regarding the involvement of local population and community-based organisations.

Finally, one of the main shortcomings of the programme, according to the interviewees, is its evaluation system (criterion 7). None of the three donors were satisfied with the evaluation, which does not assess the results of the programme, but only its implementation at the central level. As a result, most questions about the impact of the SP-RCC at the local level such as the implementation of laws, the strengthening of institutional frameworks and the outcomes of the sixty projects developed, remain unanswered. Some of these outcomes should have been evaluated by Vietnamese ministries. However, there was no evaluation system in place in Vietnam to allow this. Furthermore, budget programmes were also new instruments on the donor side, especially in the area of climate change adaptation and mitigation. Consequently, according to several interviewees, a tailor-made evaluation system for the SP-RCC should have been developed in advance, but the Vietnamese government should also have been supported in data collection. This was not done due to lack of resources. Standardised criteria were used to evaluate a programme that was anything but standard.

6. Part 5: Discussion

The results of the study of the SP-RCC and its evaluations show that ODA's purpose no longer solely the political and economic interests of donors, although these objectives remain. ODA is now integrated into global environmental governance, evidenced by donors relying on international aid effectiveness criteria to guide and evaluate their assistance. The objectives of the SP-RCC were therefore to establish international standards of governance in Vietnam, through the establishment of an institutional environmental framework and the formulation and implementation of environmental policies. However, the SP-RCC has only partially achieved its objectives. Several explanations are offered in this section.

The inappropriateness of the programme to the Vietnamese political system is part of the answer. Vietnam's political structure, described as a

centralised-decentralised system (Lam, 2020), makes it difficult to transfer international environmental standards from the national to the local level. By encouraging Vietnam to strengthen its institutional framework based on international recommendations, the SP-RCC has tended to complicate matters. As a result, Vietnam now has a very sophisticated environmental legal framework, which unfortunately overwhelms the environmental state, particularly at the local level, due to its complexity and some overlap (Ortmann, 2017). The multiplicity of government agencies within ministries makes the environmental institutional framework very complicated to understand and operate, especially as there is also a lack of communication between the various Vietnamese ministries.

Although the SP-RCC is not the cause of this situation, it has contributed to exacerbating it. In addition, the many limitations of the evaluation system have had the effect of masking the aforementioned problems. Had the SP-RCC evaluation focused on outcomes and issues rather than implementation, it could have been useful for both the Vietnamese government and ODA providers. According to Easton's model, an effective system transforms inputs into outputs and uses the feedback generated from the outputs as new inputs (Ortmann, 2017: 46). By generating a very limited feedback loop, the evaluation of the SP-RCC does not contribute to the development of knowledge on the effectiveness of aid for climate change adaptation and mitigation. The poor quality of the evaluations is also due to the fact that they were designed for the countries that fund ODA, France and Japan, and not for development agencies and recipient countries. These evaluations are designed to show that the project has been implemented according to procedures and that it is in line with the objectives of international environmental agreements, as demonstrated by the evaluators' use of aid effectiveness criteria.

The SP-RCC has also failed to build trust among the development agencies present in Vietnam and between these agencies and the Vietnamese government. The termination of the SP-RCC was triggered by JICA's withdrawal from the programme in 2017 and a change in Vietnam's policy orientation towards ODA. The Vietnamese government decided to reduce the use of loans to avoid over-indebtedness. This change in policy has also increased Vietnam's distrust of ODA providers, although their assistance remains essential. International NGOs are also suffering from this change, as it has become more difficult to develop projects and obtain funding from ODA donors.

7. Recommendations

This article can be used as a basis for further discussion and work on improving ODA assessment. Following the study of the SP-RCC and its evaluations carried out by AFD, JICA and the World Bank, I suggest giving priority to impact evaluations that focus on the results of programmes and projects

rather than their implementation. This means thinking about evaluation in advance and adapting it to the specificities of the project and the field. Aid effectiveness criteria make it possible to assess the general orientations and practices of donors (Birdsall, N., Kharas, H.J., Mahgoub, A., & Perakis, R., 2010; Easterly & Pfutze, 2008; Knack, Halsey & Eubank, 2011; Roodman, 2006), but they are not adapted to the scale of a specific programme, as the case of the SP-RCC illustrates. Establishing mixed evaluation teams composed of both aid and recipient country specialists, including people from academia and civil society organisations, could be one way to improve evaluations. In the case of AFD and JICA, the SP-RCC evaluations were carried out by non-Vietnamese external consultants using the criteria provided by the development agencies. In order to analyse the impact of a programme or project, it is essential to know how the recipient country operates. It is not possible to carry out an in-depth evaluation using only external consultants.

According to Shahar Hameiri and Fabio Scarpello (2018, p. 149), donors should develop strategies and alliances to implement their projects and make their aid more effective. In the case of Vietnam and ODA to CCAM, this means strengthening links with civil society organisations, international and local NGOs, the Vietnamese academic community and other donor agencies. This is currently far from being the case, as evidenced by the coordination problems highlighted by the SP-RCC evaluation and interviewees.

Many conditions need to be met for aid to be effective, as the various research studies on the subject presented in part 2 of this article show. They are sometimes contradictory. For example, Steven Radelet considers that aid works best in countries with good policies and institutions (Radelet, 2006), but Thomas Mélonio advises that aid should be redirected to the poorest countries, which rarely have good environmental policies and institutions (Mélonio, Naudet & Rioux, 2022). In the case of Vietnam, given the country's political functioning and the government's preferences regarding foreign aid, the conditions for increasing the effectiveness and usefulness of aid could be to reduce the size of projects to make them easier to implement and to focus aid on the poorest populations. They are the most vulnerable to the effects of climate change, but they also benefit the least from Vietnamese government aid.

Foreign aid as it exists today can be seen as an international environmental regime with its own norms (effectiveness criteria), its own actors (states and development agencies) and its own goals (tackling environmental crises). Studying aid effectiveness criteria means studying how this regime works, but also its limitations, one of which is its evaluation system. With regard to research on development assistance and its effectiveness in the field of CCAM, one important limitation is that aid and “aid relationships are viewed within the framework of an international system, rather than through a ‘local’ lens” (Malacalza, 2019, p. 18). This limitation means that the ODA analytical framework, particularly in international relations studies, fails to propose a multi-actor approach

focusing on aid recipients. I recommend further research on the relationship between ODA and community-based organisations and NGOs in particular, in order to understand the impact of ODA at both local and regional levels.

8. Part 7: Conclusion

This article examines the impact of internationally defined aid effectiveness criteria on the evaluation of ODA-funded projects using the example of the SP-RCC and Vietnam. The methodology is twofold, based on a content analysis (SP-RCC evaluation document) and a framework analysis based on the transcripts of 10 interviews. The main arguments and findings of this article are as follows:

(1) The international organisations that provide guidelines for the management of development aid also influence the evaluation framework established by donors and the criteria used by these donors to assess their projects.

(2) The evaluation criteria reflect the existence of international aid governance. Despite each donor advocating for its own interests, donors adhere to the international frameworks recommended at the global level.

(3) The use of these evaluation frameworks leads to low-quality evaluations that do not take into account the diverse contexts of recipient countries, as the study of the SP-RCC evaluation system in Vietnam shows.

(4) Donors claim the importance of aid in achieving sustainable development goals, but do not evaluate how their aid contributes to this.

(5) In addition to the weaknesses of the SP-RCC evaluation system, this study highlights that the specific characteristics of Vietnam, its political system and the relationships between the various actors involved in aid have not been considered, resulting in very mixed SP-RCC results.

(6) Even when the international aid regime aims to develop national environmental governance in recipient countries, as was the case in Vietnam, the results are mixed because the national context and complexities are not taken into account.

It is important to note that this study focuses on three donors that are members of the DAC and share many similarities. It is therefore limited in that it does not address the issue of aid effectiveness of donors that are not members of this committee. Furthermore, despite interviews with people who have worked in certain Vietnamese ministries, the Vietnamese government's view of the SP-RCC and its evaluation remains unknown. Finally, this research focuses on the case of Vietnam, but other countries, such as Indonesia, have been the subject of an ODA-based programme in the area of CCAM. Extending the scope of the study to other countries could strengthen the analysis of aid effectiveness in the area of CCAM in Southeast Asia.

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Brewing a Better Future: A Multi-Level Perspective on the Co-Production of the Specialty Coffee Imaginary among Coffee Producers in Northern Thailand¹

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Abstract

In recent years, an increasing number of coffee farmers in the Northern highlands are starting to produce specialty coffee. The objective of the research is to add to the understanding of specialty coffee's impact on the global coffee value chain in general, and on Thai coffee farmers in particular. Building on qualitative empirical research, Northern Thai coffee farmers' responses to this emerging specialty coffee segment are analyzed using the multi-level perspective (MLP) as an analytical framework through the lens of sociotechnical imaginaries. It is found that they are motivated by improved income, but also see specialty coffee as a source of pride, and a way to sustainability, as well as meeting a changing lifestyle trend. To do so, they are using new knowledge to change their way of production, innovating farm management and processing, and using new forms of marketing and organization. They are facing several challenges: a lack of knowledge about specialty coffee, a volatile market with powerful competitors, a regulatory framework perceived as not supporting specialty coffee development, and lack of sustainability. By adopting international knowledge and standards of specialty coffee, but adding local cultural context, practices, and value to their products, they are co-producing a specialty coffee imaginary of socio-economic progress and cultural recognition that is driving this sociotechnical transition. Risks need to be mitigated to continue the trajectory. In addition to the empirical contributions, this study also adds to the theoretical understanding of sociotechnical transitions by linking MLP with sociotechnical imaginaries, highlighting the role of agency.

Keywords Sociotechnical Imaginaries, Co-production, Multi-level-perspective, Sociotechnical Transitions, Specialty Coffee

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1. Introduction

Coffee – this intriguing beverage with its fatigue-battling caffeine contents and rich and complex aromas has since its discovery, presumably somewhere in Southeast Africa (Herrera & Lambot, 2017), taken over the world. It is now one of the most consumed beverages in the world. Millions are turning to this strange brew of the roasted seed of a tropical shrub with the botanic name *Coffea* every day for a caffeine kick that gets them through the day and helps them finish the tasks that today's society throws at them. Up to 80% of the world population uses caffeine daily, making it the most consumed psychoactive drug (Weinberg & Bealer, 2000). And alongside tea, which also contains caffeine, coffee is the main vehicle through which this energizing drug is administered. Every one of the 2.25 billion cups of coffee consumed per day (*ibid.*) sits at the end of a long chain of production and trade, stretching over different continents, affecting the livelihoods of many people along the way.

However, production and consumption of coffee are largely separated between the Global North and the South (Fischer, 2017), with the most consumption happening in the Global North, where production is not possible due to coffee needing specific tropical conditions and altitudes to grow, and the production predominantly happening in the Global South. The unequal distribution of wealth along the value chain of coffee creates persisting poverty issues among coffee producers (Boaventura, Abdalla, Araújo, & Arakelian, 2018; Daviron & Ponte, 2005; Utrilla-Catalan, Rodríguez-Rivero, Narvaez, Díaz-Barcos, Blanco, & Galeano, 2022). Other external factors, such as climate change, are further threatening the long-term viability of the current way of production on a global scale (Bunn, Läderach, Ovalle Rivera, & Kirschke, 2015; Ovalle-Rivera, Läderach, Bunn, Obersteiner, & Schroth, 2015). Despite decade-long development efforts, sustainability and poverty alleviation remain critical development issues that need to be addressed (Daviron & Ponte, 2005). A more recent trend within the coffee market, termed *specialty coffee* has emerged in coffee consuming countries, claiming to address some of these development challenges. By focusing on origin-specific flavor characteristics, production differentiation and storytelling, specialty coffee aims to separate itself from mainstream coffee production. This former niche market has in recent years been drastically growing, affecting producers who are adapting to meet the changing consumer demand.

This trend can also be observed in Thailand, where coffee production was introduced and subsequently extended since 1969 by government and royal development initiatives as part of opium replacement programs for ethnic 'hill tribe' communities in the northern highlands (Angkasith, 2002). Fueled by an increasing demand for locally produced coffee, more and more coffee producers

are now switching to specialty coffee production. The coffee production in Thailand can therefore be considered as *transitioning*.

A popular model to analyze sociotechnical transition processes is the Multi-Level-Perspective (MLP) (Geels, 2002). While this model presents a robust analytical framework for understanding the different levels or scales of society and how they are influencing the dynamics of sociotechnical transitions, it is being criticized for underemphasizing the role of agency and individual perception (Avelino & Wittmayer, 2016). For this paper, this will be addressed by linking MLP with the concept of *sociotechnical imaginaries* (Jasanoff, 2015), taking the visions, values and perceptions of Thai coffee producers at its heart of the analysis. This paper addresses an empirical gap in the literature about specialty coffee production in Thailand by exploring how Thai coffee producers are responding to the specialty coffee trend in study period September 2023 to January 2024. It also contributes theoretically by linking MLP with sociotechnical imaginaries, arguing that emphasizing agency in transition processes provides a more comprehensive understanding about the dynamics at play.

2. Literature Review

In the following section the current literature about the global value chain of coffee and the role of specialty coffee will be presented.

2.1 Coffee: From Commodity to Specialty

The final product of coffee – the brewed beverage – sits at the end of a long value chain. Coffee production encompasses the farming, harvesting, processing, drying, milling, storing, and selling; the final product for most coffee producers being called green coffee. Although there are several coffee species, only *Coffea Arabica* and *Coffea Canephora* (commonly known as *Robusta*) are economically significant and therefore cultivated in significant numbers. Arabica is generally highly regarded for its taste qualities. However, it requires higher altitudes, has higher demands for specific climatic and other environmental growing conditions, is more easily susceptible to pests and diseases, and produces lower yields than Robusta (Wrigley, 1988). Robusta is mainly used for processed coffee products, like instant coffee, or as part of coffee blends, while Arabica is used for general coffee brewing purposes. Several sub-varieties of both coffee species exist with different demanding growing conditions and expressions of flavor in the final product.

Even though the global coffee market is one of the biggest agri-food markets in the world and as such generally lucrative, its economic value is unequally distributed. Producers receive only a minor share of the global value chain of coffee (Boaventura et al., 2018; Utrilla-Catalan et al., 2022). Daviron and Ponte call it *the coffee paradox* that despite the boom of coffee, as well as

sustainability initiatives, changing consumption patterns and decades of development attempts, coffee producing countries are still regularly experiencing market crises and producers continuously receiving low prices with dramatic effects on the livelihoods of coffee farmers (Daviron & Ponte, 2005).

Besides its socioeconomic issues, the coffee sector also faces severe challenges due to climate change. A large body of studies predicts that with increasing global warming, *C. Arabica* growing regions will subsequently be pushed to higher altitudes (Bunn et al., 2015; Ovalle-Rivera et al., 2015). According to these studies, the lower altitudes will become too warm to grow Arabica, the economically more important coffee species, drastically reducing the potential area for its cultivation, reducing the expected production yields. Furthermore, the warmer temperatures also increase the susceptibility of coffee plants to suffer from Coffee Leaf Rust, further challenging consistent yields (Torres Castillo, Melchor-Martínez, Ochoa Sierra, Ramirez-Mendoza, Parra-Saldívar, & Iqbal, 2020). The low genetic variability of *Arabica* is threatening species diversity and at risk for potentially new or mutating diseases (Scalabrin et al., 2020). There is evidence that coffee farmers are already experiencing the adverse effects of climate change (Davis, Gole, Baena, & Moat, 2012).

Observers generally consider the *commodification* of coffee to be responsible for both the persisting economic marginalization of the small-scale coffee producers (Talbot, 2004) and unsustainable farming practices (Bracken, Burgess, & Girkin, 2023; Siles, Cerdán, & Staver, 2022). Commodification describes the transformation of a natural product into an exchangeable, tradeable good – a commodity – entailing a certain way of producing, marketing, and trading. It has generally failed to satisfactorily address the issues ascribed to the coffee market. Initiatives like fairtrade certification have attempted to address the shortcomings of the market, resulting however in mixed results (Jena & Grote, 2022), or even negative effects on household income (Ruben & Fort, 2012). A high volume of certified coffee produce is meeting a low demand, decreasing the price premiums (Grabs, 2020). A key problem that Talbot identifies with most certification schemes is that they are leaning on the C Price, referring to the market price of certain mass-produced coffees defined by their trading based on future contracts. The C Price is considered the benchmark for global coffee prices, but it is criticized as highly fluctuating and generally too low (Talbot, 2004). Since the trade liberalization in the 1990s, large transnational companies located in the Global North have dominated the value chain, concentrating value in the North (Daviron & Ponte, 2005).

A more recent trend within the coffee market has tried to distinct itself from the commodity coffee market. While the commodity coffee market focuses on large quantities, low prices and uniformity and consistency of production in order to make coffee a tradeable good (Talbot, 2004), *specialty coffee* aims to highlight distinct flavor characteristics depending on the *terroir* of the origin of

production. Terroir refers to the growing environment that influences flavor development, such as elevation, location, soil, microclimate, fertilization, sun expose, shading as well as agricultural practices and techniques (Pappo et al., 2023). While the majority of the coffee globally consumed is still sold as blends of coffee from different, mostly undisclosed origins, the specialty coffee sector focuses on so called *single-origins* that can either be specified as coming from a single country, region, or even a *micro-lot* on a farm. Some form of geographical indication is therefore a key interest of specialty coffee (Teuber, 2010). This is accompanied by coffee roasters communicating origin information as well as flavor indicators to end-consumers. With specialty coffee, roasters and producers increasingly engage and decide on prices via *direct trade* (Guimarães, dos Santos, Leme, & Azevedo, 2020), circumventing the commodity market with its C Price attachment. It is expressed by also a drastic diversification of customers for green coffee producers, especially due to the increasing number of micro-roasteries and cafés directly buying from producers. It is estimated that this specific segment of the coffee market now accounts for almost 50% of the total value, although it only makes up for roughly 20% of the global production, demonstrating its significance (Rafael, 2020). The most widely accepted guidelines and standards for specialty coffee quality are developed and provided by the Specialty Coffee Association (SCA). This non-profit membership-based organization, formed in 2017 by the merging of the US American SCAA, founded in 1982, and its European pendant, founded in 1998, is developing tools and protocols for quality evaluation, as well as providing an education and certification system. It is considered as having a key role in defining industry standards. Especially their Cupping Protocol for sensory quality evaluation is considered an industry standard, widely used by coffee producers and consumer alike (Feria-Morales, 2002; The Specialty Coffee Association, 2020). According to SCA protocol, a coffee is considered specialty grade if it achieves a score of 80 or higher out of 100.

The trend for specialty coffee, also called the *third wave of coffee*, is fueled by shifting consumer demand, increasingly asserting value to unique flavor profiles, storytelling and transparency, with a willingness to pay extra for that (Ufer, Lin, & Ortega, 2019; Ut-tha, Lee, & Chung, 2021). Specialty coffee and its distinct consumption patterns are therefore perceived as a drastic shift in the value chain from an exchange pattern, where value is mainly defined by the consumers, to a pattern of *co-creation*, where producers and consumer both contribute to the value of the coffee by their respective input, and in doing so are negotiating the value (Boaventura et al., 2018). Boaventura et al. argue, that producers and consumer are getting closer to each other through transparent communication of information about the impact of the factors contributing to the origin-specific sensory profile of the coffee. Consumers are gaining knowledge about these factors and are interested in innovation, collaborating in the

development of the sector by exchanging preferences and ideas. Therefore, the power distance in the value chain is reduced, resulting in a more equal distribution of value creation between consumers and producers.

Others are viewing the impact of specialty coffee on value re-distribution along its global value chain more critical. Fischer argues that specialty coffee builds on *imaginative value*; and while farmers remain in control of their terroir and production, the power of value creation lies at those who define quality (Fischer, 2017). He argues, coffee roasters and retailers imagine and thereby construct standards for measurements for coffee quality, as well as romanticizing a certain artisanry of production on the coffee farming level, while coffee producers are forced to imagine and anticipate the taste of the consumers at the other end of the value chain. According to him, the current prices for green coffee depend not on objectifiable quality criteria, but social capital, i.e. the power over symbolic value in other parts of the value chain, which many small-scale farmers are lacking (Fischer, 2021). Therefore, they are excluded from accessing the highest values and economic benefits that this market creates. End-consumers would often assume that the high prices they have to pay for specialty coffee would ensure ethical social and environmental conditions, which would not reflect reality (Fischer, 2023).

On the other hand, looking at experiences from the ground, several studies suggest improvements in socio-economic conditions for coffee producers. Schuit et al. have found that specialty coffee has positive impacts on both household income as well as environmental issues, such as forest conservation, in Ethiopia (Schuit et al., 2021). The authors however also pinpoint to regionally disparate resources among their studies areas, where some coffee farmers do not have access to the higher value specialty market. They also criticize a lack of peer-reviewed studies of the effects of specialty coffee on profitability for the farmers. In another example, Rosenberg has observed how Burundian coffee was reconfigured from an inferior commodity product mainly used in coffee blends, to a distinct origin-specific product (Rosenberg, 2023). He argues, that both symbolic and material quality attributes need to be addressed when creating a ‘taste of place’ that can boost the value of the product. According to Rosenberg, the coffee quality is the “*material manifestation of relational spatial production through a sensory experience of flavor and mouth feel*” (Rosenberg, 2023, p. 264), referring to how the terroir of production and controlling all material attributes during the different stages of production is influencing the sensory quality of coffee. It however does not translate into higher prices if it is not accompanied by discursive work, utilizing storytelling and creating trust and transparency to create symbolic value. According to the literature, small-scale farmers may face challenges to access the specialty market segment due to a lack of material and or symbolic resources. However, these can be addressed by introducing intermediary bodies without disturbing the direct

trade between producers and consumer (Borrella, Mataix, & Carrasco-Gallego, 2015). Borella et al. have analyzed different connective businesses working to reduce transactional costs and productive restraints of small-scale farmer to access higher value marker segments and have found that these are beneficial for both parties (*ibid.*). This direct trade is another important factor in bringing producers and consumers closer in the value chain, and an integral part of today's specialty coffee segment (Guimarães et al., 2020).

The existing literature about specialty coffee and its potential in reshaping the global value chain of coffee is indecisive. While experiences from the ground hint towards livelihood improvements, reflected by theoretical discussions about value co-creation shifting power within the value chain towards producers, others are perceiving this dynamic a lot more critical. The research that is presented in this paper will contribute to a better understanding of the role of coffee producers in this co-creation process. It takes the Thai coffee producing sector as a context for the theoretical considerations. The Thai context will be introduced in the following section.

2.2 Context: Thai Coffee Production

Coffee farming was introduced in Thailand at the end of the 1960s and subsequently extended in the 1970s and 1980s through government and Royal development initiatives aimed at providing alternative livelihood practices for predominantly ethnic 'hill tribe' communities in the mountainous regions of Thailand's North, incentivizing them to replace opium production and slash-and-burn agricultural practices that had resulted in severe deforestation. Fueled by the "Crop Replacement and Community Development Project", jointly exercised by UN and the Thai government between 1972 and 1979 through the strategic set-up of Royal Agricultural Research Stations in those indigenous communities, coffee cultivation was extended significantly during that time (Angkasith, 2002). Arabica production in Thailand increased drastically between 1990 and 2015 (Angkasith, 2002; Ut-tha et al., 2021). The introduction of the Arabica variety *Catimor* in 1974 allowed more successful extensions due to its suitability to the regional climate and terroir, promising higher yields and higher resistance against droughts and heat, as well as pests and diseases (Angkasith 2002). Arabica production predominantly takes place in the North, with Chiang Rai and Chiang Mai provinces together accounting for 70% of the country's cultivated land area for Arabica production and more than 75% of the production yield (Table 1). The context of these Northern coffee farmers with predominantly indigenous ethnic identities is therefore distinctively different to Robusta producers in the South and can be linked to the greater topic of continuing political and economic marginalization, and struggles for cultural recognition (Morton, 2023). The people in the northern highlands have been perceived as forest-destroyers, drug producers, and insurgents, and have been

made subject to development efforts through the Thai state (Wu, 2022). They have been termed ‘hill tribes’ to distinct them from the central Thai population. It has shaped a somewhat derogatory image of these communities, neglecting cultural differences between communities, and making them subject of development efforts for many decades. The research therefore focuses on Arabica producers in the northern highlands.

Table 1: Coffee Arabica Production in Thailand 2022, the four most producing provinces.

Region	coffee Species	Cultivated Area (rai)	Cultivated Area (ha)	Production yield (tons)
Thailand (whole country)	<i>Arabica</i>	123,096	19,695	9,135
	<i>Robusta</i>	119,369	19,099	9,554
Chiang Rai Province	<i>Arabica</i>	53,588	8,574	3,185
	<i>Robusta</i>	303	48	12
Chiang Mai Province	<i>Arabica</i>	32,688	5,230	3,790
	<i>Robusta</i>	0	0	0
Mae Hong Son	<i>Arabica</i>	8,823	1,412	685
	<i>Robusta</i>	65	10	2
Nan	<i>Arabica</i>	11,073	1,772	604
	<i>Robusta</i>	1,499	240	78

Source: Summarized data, adapted from Office of Agricultural Economics, Ministry of Agriculture and Cooperatives 2023 (Office of Agricultural Economics, 2023)

Due to long-term low profit, price fluctuations, and urbanization trends, in recent years, the total Arabica coffee production increase has halted and even slightly reversed (Angkasith, 2002). At the same time, domestic demand has drastically increased in recent years. In 2022, the demand for green coffee in Thailand exceeded the domestic production by five times (Chaovanapoonphol, Singvejsakul, & Wiboonpongse, 2023). The domestic market is also the most important for Thai coffee farmers, with protective tariffs on importing green coffee of 90% incentivizing domestic production to fulfill the demand. The global specialty coffee trend has also arrived in Thailand, where it is meeting a changing lifestyle and a burgeoning scene of independent roasteries and cafes (Azavedo & Gogatz, 2021).

Studies about the specialty coffee segment and coffee production in Thailand in general are relatively limited, and mostly concerned with technical aspects of coffee. However, some recent studies address the value chain from a few different perspectives. Geographical indication seems to also be a key concern for academics looking at the Thai coffee sector. Lila-vanichakul has looked at DoiChaang Coffee and its successful marketing of regional identity

(Lilavanichakul, 2019). In a similar way, Suksomboon addressed the challenges of geographical indication when looking at the different registration systems that exist globally (Suksomboon, 2023). Taking DoiTung Coffee as a case study, she emphasized the potential for value-growth of origin-specific coffee, but a critical need for protection of the geo-graphic identification to ensure trust and transparency. Both studies are dealing with coffee enterprises with significant institutional support, as they are part of development projects under state and/or royal patronage. And interestingly, besides geographical identification, both are adopting measures to address the specialty coffee segment by ensuring certain quality criteria, sustainability measures and communication models. Other studies address independent coffee producers. One case study from Northern Thailand shows how a specialty coffee farmer has integrated sustainable farming practices into his farm management, and how he engages with the market to achieve higher prices (Arayawut, 2020). Similarly, in Thailand's Nan province coffee production was linked by Kunsiri-punyo and Sathirakul to other development approaches, such as tourism, showing how by taking a value-chain approach and with government support of community enterprises, synergies can be created to boost regional income and even reversing urbanization trends (Kunsiri-punyo & Sathirakul, 2021). Creating these locally integrated value chains, promoting local production and local consumption, on the one hand contributes to the symbolic value of the territory with potential of geographic identity. However, Pongkijvorasin and McGreevy point out that this origin-specific value and attributed quality of coffee is perceived differently between the local residents on the one side and outsiders like tourist or urban consumers on the other sides (Pongkijvorasin & McGreevy, 2021). They point towards these different perceptions of value and quality; local coffee producers may risk not being able to take advantage of the growing specialty coffee segment. While facing similar challenges, there seems to be drastic differences in Thai coffee farmers' ability to act in the specialty coffee segment. Talerngsri-Teerasuwanajak & Pongkijvorasin describe how some farmers in Nan province are selling beans for low prices to intermediaries because of weak bargaining power (Talerngsri-Teerasuwanajak & Pongkijvorasin, 2021). These are mainly serving the traditional coffee market. On the other side, some farmers are already growing rare Arabica species such as *Java* and *Gesha*, which are highly sought after in the specialty coffee segment. They are selling their coffee to local farmers' groups and social enterprises that run processing facilities and are achieving much higher income while using fewer chemical fertilizers and pesticides.

The insights from the Thai context reflect the general academic debates of how specialty coffee contributes to value creation and value distribution in general. While empirical studies suggest opportunities for higher household income as well improved sustainability through the adoption of specialty coffee,

it is unclear how Thai coffee producers are engaging with the notion of specialty coffee, how they are perceiving the opportunities and challenges, and how they are contributing to the co-creation of value. This research builds on this literature gap and explore how Thai coffee producers are responding to the promises and challenges of specialty coffee. By conceptualizing the specialty coffee trend as a *sociotechnical imaginary* that Thai coffee producers are engaging with, this paper will contribute to understanding of the potential impacts of specialty coffee on value creation and distribution.

3. Research Purpose and Research Questions

The purpose of the research is to empirically explore how coffee producers in the Northern highlands in Thailand are perceiving the specialty coffee trend, what hopes and opportunities they are connecting with it, and what challenges they are facing. This allows to identify potential risks as well as leverage points for support that can inform policymakers or development agents, as well as actors within the industry. The research also adds to the theoretical understanding of value creation and distribution along the global coffee value chain, and the role of the specialty coffee in re-shaping its function. More generally, it also adds to the theoretical understanding of sociotechnical transition processes by highlighting the understudied role of agency within them, and specifically the MLP analytical framework.

This leads to the following research questions.

- How are Northern Thai coffee producers responding to specialty coffee trend?
- How are they perceiving challenges and opportunities?
- How are Thai coffee farmers imagining the future coffee sector development?
- How are they acting upon the specialty coffee trend?

In the following section, the conceptual framework for the analysis will be laid out.

4. Conceptual Framework

The process of specialty coffee emerging as an increasingly dominant market segment is for this research conceptualized as a *sociotechnical transition process*. As a complex topic, performed across different scales from the global to the local, the Multi-Level-Perspective (MLP) as popular model for describing these transition processes is the adopted as a general framework (Geels, 2002).

According to MLP, a transition process describes the change from one relatively stable state of a sociotechnical system, called regime, into a new stable state. The framework highlights the interplay of three analytical levels in transition processes: The *regime* consists of a set of material attributes (e.g.

technology), institutions and organizations, and immaterial attributes, such as the norms and rules that guide perceptions and actions (Geels, 2002). These attributes are keeping it dynamically stable, as they are historically established and performed by a broad community of actors and groups with aligned activities (Geels & Schot, 2007). The *niche* level consists of actors or small networks of actors who develop and test radical sociotechnical innovations (Geels, 2002). They are performed at least to some extent outside the realm of the sociotechnical regime. Niches are similar in structure to the regime, as both have the character of organizational fields, meaning a community of interacting groups sharing certain rules and coordinating action, but differ in size and stability (Geels & Schot, 2007). The *landscape* level refers to macro-level trends and changes exogenous to the regime, such as climate change, the situation of the international economy, political ideological trends, etc. In the account of MLP, landscape attributes are generally beyond the direct sphere of influence of regime or niche actors, but may put pressure on the regime, potentially destabilizing its components (Geels, 2002) and leading to a *dealignment* of its system attributes. This de-stabilization may create a *window of opportunity*, where niche innovations, that under the stable regime had little chance to break through but respond to the landscape pressure and correspond with certain de-aligned properties of the regime, may incorporate into a new configuration of sociotechnical attributes and relations, creating another stable regime. This phase is referred to as *realignment* (Geels & Schot, 2007).

While the MLP offers a comprehensive look into the complex processes of change, some critique it for its underemphasis of actor's *agency* (Avelino & Wittmayer, 2016). This will be addressed by linking MLP with a concept derived from Science & Technology Studies, conceptualizing imagination as the driving force of innovation, and therefore transition processes. Sociotechnical imaginaries as per Jasanoff are "*collectively held, institutionally stabilized, and publicly performed visions of desirable futures, animated by shared understandings of forms of social life and social order attainable through, and supportive of, advance in science and technology.*" (Jasanoff, 2015, p. 6). The global specialty coffee trend can therefore be conceptualized as a sociotechnical imaginary. It is collectively performed by a large number of consumers, roasters, producers who share similar ideas and values about coffee. It is institutionally stabilized, not only by the myriad of consumer-producer relations, but especially by industry organizations like the SCA, producing standards, guidelines, and protocols, and providing an education system based on that. It is also publicly performed through the outlets of the SCA, but also marketing communication of producers and consumers.

Similar to how the MLP describes the sociotechnical regime as dynamically stable, sociotechnical imaginaries dynamically undergo different phases; they emerge, stabilize and are being contested. They draw on the social

construction of knowledge and highlight how different visions about how society ought to be are being negotiated, discussed, materialize, or rejected (Jasanoff & Kim, 2013). Looking at visions and perceptions through the lens of sociotechnical imaginaries captures them not as mere fantasies, but as grounded and resulting in material effects. Sociotechnical imaginaries therefore link the personal experience, perception and imagination with the collective performance of reality. When discussing the empirical findings, it will be argued that they are the ideal conceptual link to MLP as the linking element between all three levels of the MLP, putting agency of the actors at the centre.

5. Methodology and Methods

The research framework builds on a constructivist understanding of the world and therefore calls for a qualitative research approach. Qualitative Content Analysis (QCA) by Kuckartz was adopted as a general framework for the research process (Kuckartz, 2019). The preparation, organization and analysis of the data was aided using MAXQDA software (Kuckartz & Rädiker, 2019). Extensive pre-liminary fieldwork work starting in September 2023 (Caine, Davison, & Stewart, 2009) guided both the development of the research topic, providing insights into the context of the coffee production in Thailand, as well as the sampling. The author visited the Thailand National Aeropress Championship from 15-17th September 2023, Thailand Coffee Hub from 4-10th October and Thailand Coffee Fest from 15-17th December 2023, as well as several smaller coffee events, cafés and roasteries in Bangkok and had conversations with key actors in the industry. The sampling followed the idea of conceptualizing a network of actors with recognized expertise and competence in their field, as well as a certain level of authority within knowledge production and debate, as a *techno-epistemic network* (Ballo, 2015). Through purposive and snowball sampling, key actors within the specialty coffee producer techno-epistemic network were identified. Selection criteria were experience in specialty coffee production, as well as public visibility, for example through presence at national or regional coffee conventions or competitions, engagement with the coffee community through public institutions or social media channels, especially Instagram and Facebook, and successful marketing of their coffee products as specialty coffee. Excluded were producers of only commercial grade coffee and coffee products, or producers without public visibility. While these excluded actors certainly are part of the co-production of (specialty) coffee imaginaries, it can be argued that the core of the techno-epistemic network has more influence on knowledge co-production, and as frontline actors they are also holding a role model function for other coffee farmers, who are potentially following in their footsteps. Due to the natural constraints of the research process, these key actors were therefore considered the most efficient starting

point into the empirical exploration of knowledge co-production within the sociotechnical transition process of specialty coffee development in Thailand, defining the scope of this research.

Due to the resource constraints, the data collection only focused on Chiang Mai and Chiang Rai provinces as the main Arabica growing regions, together accounting for around 70% of total production in Thailand. During field research from December 2023 to January 2024, ten different specialty coffee producers located across seven different villages have been selected. The scales of production ranged from 2-3 mt per year to almost 1000 mt per year, with most of producing between 4-8 mt per year. The duration of involvement with (specialty) coffee ranged from 27 years to only 2 years, with most producers engaging with specialty coffee for 4-6 years. Some of the selected producers are considered as specialty coffee pioneers by others, while others are considered as relative newcomers, which nonetheless had some degree of impact on the specialty coffee market, for example by scoring high in national competitions. A total of 13 semi-structured interviews were conducted. The interviews followed an interview guideline with questions about the perceptions about the challenges and opportunities of doing specialty coffee, the significance of specialty coffee, and visions about its future development. The questions were formulated relatively open to give participants the opportunity to set own priorities. When the interviewees did not speak English, a translator was present. The interviews were transcribed, coded, and analyzed using MAXQDA software. Coding followed an inductive approach, allowing themes to emerge from the data. For the analysis, especially themes that repeatedly emerged were discussed (theoretical saturation) (Kuckartz & Rädiker, 2019). This, as well as the use of the software for organization and coding of interview data ensured consistency and quality of the data preparation.

As the interview participants acted as key informants and experts in their field, some of their information, like their role and affiliation, will remain visible within this presentation of the research (Ellersgaard, Ditlevsen, & Larsen, 2021). Due to the sensitivity of the topic, the participants however remain anonymous. The following table illustrates the affiliation of the interview participants.

Table 2: Interview participants, one representative of each coffee producing company (four representatives of DoiTung Coffee as the largest producer)

Company	Location	Province	Production year 2023, in tons	
			total	specialty grade
Khun Chang Khian Community Enterprise Group (The KCEG)	Baan Khun Chang Khian	Chiang Mai	50	2-3
Nine One Coffee	Mae Ton Luang, Thepsadej	Chiang Mai	6	1-2
First Valley Coffee	Mae Ton Luang, Thepsadej	Chiang Mai	7	5-7
Phupha Estate	Mae Ton Luang, Thepsadej	Chiang Mai	4	4
Toki Coffee Estate	Baan Khun Mae Ruam, Galyani Vadhana	Chiang Mai	2	1-2
Sirinya Farm	Mae Suai, Doi Chang	Chiang Rai	20	12
Yayo Farm	Mae Suai, Doi Chang	Chiang Rai	10	2
Ma Family Farm	Pang Khon	Chiang Rai	10	3
Phu Chee Duen Community Group	Wiang Kaen	Chiang Rai	20	2-3
DoiTung Coffee	Mae Fah Luang	Chiang Rai	200-1000	2-4
Specialty Coffee Association Thailand (SCATH)	Bangkok	Bangkok		

Source: Data collected during field work by the author.

It is important to note that the selection of the participants does not represent all coffee producers in Thailand, but they form a techno-epistemic group of specialty coffee producers. Although niche actors, they are some of the most successful and visible actors in their field possessing a certain level of knowledge and position within the market. While they do not represent all possible perceptions and opinions about specialty coffee, they have a more powerful role in shaping the perceptions of other industry actors due to their influence.

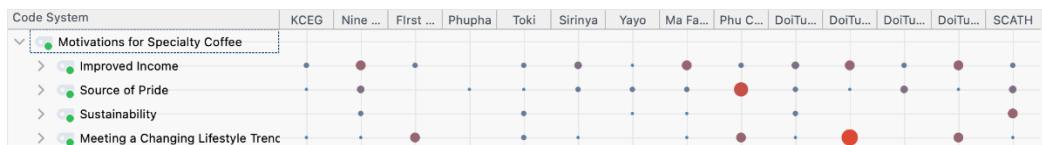
6. Results

The following themes emerged from the analysis in the interviews. They will in this section be presented at first, before being analyzed in the following section. This allows the voices and perceptions of the interview participants to be presented, before being made subject to analysis. A visualization of the

coding theme will be presented, for each theme. The dots in each frame represent the coding frequency. As this research focuses on qualitative analysis, this will only be addressed with minor attention.

6.1 Motivations for Specialty Coffee

Figure 1: Coding System for ‘Motivations for Specialty Coffee’ derived from MAXQDA



Source: Screenshot from MAXQDA

Improved Income

Switching to Specialty Coffee is perceived as a way to generate more income, because it adds value to the coffee product. The added value of specialty production is across all interview participants stated as one of the main reasons to switch to specialty coffee. Small producers find it difficult to compete with the big companies in the commercial market segment, so they are switching to specialty coffee. For small scale producers, “*specialty coffee is the way of the survival of the coffee farmers in Thailand.*” (MaFamily: Pos. 93). The interviewees think that only large companies can compete with commercial grade coffee, so they need to operate in a niche, which they say is focusing on quality instead of quantity of production.

While the commercial coffee market is expected to not be growing in Thailand, referring to limited land area and challenging topography making profitable large scale coffee production impossible, the specialty coffee segment is by all interviewees expected to continue to grow in the future and as the better and more suitable way of coffee production in Thailand.

The profit for specialty coffee producers is believed to be higher, but also the farmers and the pickers receive higher prices for specialty coffee. The prices for fresh coffee cherries were reported to be fluctuating drastically in the recent years, going up to 40 THB/kg last year on average. During the field research period, prices for fresh cherries ranging between 20 – 30 THB were observed which is still higher than a few years ago. Specialty coffee producers reported to pay an additional incentive of at least an additional 2 THB for the higher quality they require.

Source of Pride

While improved income seems like an almost trivial motivation, interview respondents also mentioned other dimensions of pride that go beyond financial dimensions.

“Because usually when we talk about these tribes or villagers, they are not always proud if you ask where they’re from. But this new generation, they became like, okay, I want to go back to my home city, to my home village, and I want to make a name to it. So it’s like a sense of pride a little. That’s one thing. And also to make that happen, it has to be specialty. It has to be prestige on that.” (SCATH: Pos. 10).

Most coffee farmers in Thailand identify as belonging to one of the ethnic hill tribes. For a long time, these communities felt economically, culturally and politically marginalized. In the past, they were subject to development efforts that introduced coffee, but they did not have a choice and it did not result in drastically improved livelihoods. It was therefore not a source of pride. But now with specialty coffee, more farmers are becoming independent producers instead of selling their fresh cherries to big companies. Because the coffee in the communities now is growing in the forests, which was one of the incentives of the Royal Development Projects in the first place, the communities still have little other choices for economic activities. This has led to de-population of younger generation, who were looking to have a career. With specialty coffee, they can now stay or even return to the villages with a perspective to become successful. In addition, many are dreaming of contributing to an increasing recognition of Thai coffee in the international market. And by connecting their coffee products with information about its origin, where it comes from, how it is produced and by whom, they are hoping to create visibility and recognition for their cultural identity.

Sustainability

Coffee is seen as a way to protect forests by the respondents. Because Arabica needs shade to grow, especially to produce high quality specialty coffee, more and more coffee producers are switching to shade grown practices. Existing coffee plantations in the forest that were abandoned are now taken care of again in conjunction with protecting the trees. Specialty coffee is therefore perceived as giving an incentive to not cut down the trees for other cultivation. Farmers are even planning to change vegetable farms to coffee and plant forest on these patches. Besides intrinsic values and the perceived effect on quality, the forest is also seen as a way to mitigate the effects of climate change. The interviewees all viewed specialty coffee as a more sustainable way of producing coffee, and in many ways even more sustainable than other crops.

Meeting a changing lifestyle trend

The coffee farmer interviewed all mentioned that they are responding to a changing demand of specialty coffee, where the consumer trend is to drink more lightly roasted coffee. And for light roasted coffee, the quality of the green beans is viewed to be more important than for darker roasted coffee. They assert health risk to darker roasted coffee and instant coffee products. Besides health reasons, they are also asserting the changing consumer trend to a changing lifestyle, where consumer value story as part of the experience of drinking coffee more. The coffee producers find motivation in meeting this changing demand.

6.2 Ways of Doing Specialty Coffee

Figure 2: Coding System for ‘Ways of Doing Specialty Coffee’ derived from MAXQDA



Source: Screenshot from MAXQDA

Generally, all interview partner defined specialty coffee as taking quality as the core category of consideration. *“She mentioned that for specialty coffee it's equally important along the value chain. So it's not that you have the very good cherry from farm, but then you have a very poor processing, then it would lead to specialty coffee. So it's very important to pay attention on every single stage of the value chain for specialty coffee.”* (DoiTung 2: Pos. 31). For producers, this influences their production, their marketing behavior, and their ways of learning. In general, coffee producers are separating their products into different lots, dividing them by the location of the farm, variety or applied processing technique.

Innovations in Production

All coffee producers have highlighted that specialty coffee production starts at the farm level. Farm management is perceived as the first step to increase quality, and shade grown coffee (agroforestry) considered a key condition for producing specialty coffee. Special attention is also given to the harvesting, where ripeness of cherries is considered a key criterion for coffee quality. Additionally, all coffee farms visited are adding other processing techniques than the washed process, that is most common in commercial coffee production, to their product ranges. This ranges from *Natural* or *Honey Processed* coffees to *Anaerobic* or *Yeast Fermented* coffees. Taking control of the processing has for many coffee farmers been the first step into the specialty coffee segment, separating their product from commercial grade and adjusting the flavor of the coffee cherries from their existing plantations.

However, processing is perceived as not enough to reach the highest value segments of the specialty coffee segment. As the interviewed coffee producers reported, the specialty segment rewards single variety products, but most are working with mixed variety plantations or Catimor varieties. These are perceived as not sufficient to reach the highest market segment. Certain varieties, especially Gesha and Java are more sought after, which is why many farmers are replacing their existing mixed variety plantations with single variety trees of these varieties, which are however said to be more demanding and challenging to grow. Some coffee farmers are therefore even experimenting with grafting, using stocks of varieties with perceived high quality, such as Gesha, on root systems of Catimor or even Robusta to combine the robustness of these plants with the flavor quality of the Arabica variety.

Innovations in Marketing

Entering the specialty coffee segment with more diverse products that differentiate in flavor profile and origin also results in the producers utilizing more diverse distribution channels and new marketing strategies. They are promoting their products themselves at conventions or exhibitions. Also, DoiTung held an auction of their special lots, each lot being sold to the highest bidder. In general, all coffee farmers have highlighted the close relation to their customers. The producers also view connecting information and story to their products as an important new strategy.

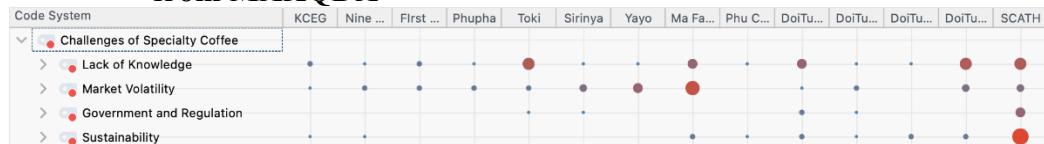
Innovations in Learning

As the production differs quite significantly, it requires coffee producers to learn about specialty coffee if they want to switch from commercial. Many producers have responded that they have first learned about specialty coffee from the internet. Other interviewees have described how they have learned from other coffee producer with more experience, with a few individuals holding key roles. Another important source of learning mentioned is building on experience and experimenting. For this experimenting, feedback becomes more important. The interviewees highlighted the importance of the close collaboration with their customers who give them feedback, but especially feedback from coffee grading competitions was mentioned a lot. These competitions are hosted by a few different organizations, and producers can send their coffee to be graded by a jury of judges following SCA guidelines. A good ranking in these competitions is perceived as an important marketing factor. Many coffee farmers are also talking about receiving SCA certified education. They have either already taken part in courses or are planning to.

6.3 Challenges of Doing Specialty Coffee

As the previous sections have demonstrated, shifting to specialty coffee production is perceived as a significant change for Thai coffee producers. This entails several challenges that will be presented in the following.

Figure 3: Coding System for ‘Challenges of Doing Specialty Coffee’ derived from MAXQDA



Source: Screenshot from MAXQDA

Lack of knowledge

The challenges mentioned the most by the participants was a lack of knowledge. In the view of the interviewees, many coffee producers do not know about specialty coffee and its opportunities. This is mainly viewed an issue of the old generation, that is not willing to learn, while the new generation is adapting. Access to knowledge is perceived as another challenge, with SCA certified education viewed as very expensive. All producers have also claimed that the government and research stations are not providing meaningful knowledge to any of them. They are therefore calling for a more open arena or platforms for knowledge exchange and collaboration. This lack or inconsistency of knowledge is also perceived to risk trust along the value chain, because it creates inconsistent products, limiting quality perception of Thai specialty coffee. This in turn creates market access issues.

Market Volatility

Thai coffee is perceived as very expensive compared to other coffee producing countries even by the producers, especially regarding the quality of the products. One reason that many of the producers have given is that due to the recent rise of demand for domestically produced coffee, big companies are competing with specialty coffee producers over buying fresh cherries, increasing the prices. Some coffee producers even speculate that the big companies are purposefully interfering with the prices to stop the diversification of producers.

While all producers have highlighted that they are happy that farmers are receiving good prices, they also argue that the price is too high and farmers having a good standard of living already. The current pricing would reduce the effectiveness of their financial incentives that are aimed to encourage farmers to invest in and work on quality improvements on the farm level. The high price for comparatively low quality is also reducing access to selling on the international market. This combined with perceived high investment costs is

challenging the further development of Thailand's specialty coffee segment. While education, processing and drying already require significant investments for producers, the changing of their plantations from mixed varieties or Catimor to higher values varieties, such as Gesha, is even more costly, and the return of these investment is perceived as not clear. Anticipating the future development of the specialty coffee sector and making these investment decisions, where financial resource are scarce anyway, is perceived as one of the big challenges.

Government and Regulations

The challenges mentioned above are also influenced by regulatory measures. Most coffee producers interviewed seemed reluctant to address regulatory issues, and instead highlighted challenges that they could address on their own. However, especially the president of SCATH and the manager at DoiTung mentioned how the current regulatory system affects the specialty coffee producers.

The high import tariffs on green coffee of 90% are in the perception of the coffee producers resulting in skewed prices. The high taxation would in fact result in a lot of smuggling and corruption. Through this practice, the current tariffs are viewed as only benefitting big companies or the ones who are using illegal business practices. The current scheme is perceived to limit the availability of coffee and increase the price in the local market. They suggest lowering the import tariffs, so that more legally imported coffee for a reasonable price can fulfill the demand for commercial grade coffee. Another limitation is that importing and planting seedlings of coffee varieties is technically illegal. All farmers have however started to grow other coffee varieties. Because it is happening illegally, it however results in transparency and traceability issues that might harm trust within the value chain. In general, the regulatory system is perceived as not aligned with the needs and reality of the specialty coffee segment.

An especially sensitive theme that emerged was issues with land ownership. As mentioned in the previous section, most coffee producers belong to one of the ethnic hill tribes, and most of them do not hold official land ownership titles. Because coffee is planted in forest, which is protected under Thai law, it limits the freedom of activity of the producers. Their coffee growing activities are currently being tolerated, but some are also afraid that this might change in the future.

“If you own the land, you have one type of paper. Like here you if you own it, you have this ownership paper. You can sell it. You can exchange it. They have a market price, for example. But the other ones that the hill tribes or people in those area have, it's a paper saying that you are allowed to make a living in this piece of land. You don't own it, but you are allowed. So this paper is also being traded around

the area for doing all these processing plants and also doing the farming. But this paper, the risks is that this paper is saying that you are allowed, so the government can just say you're not allowed anymore. ” (SCATH: Pos. 69-74)

Sustainability

Climate Change is perceived as a big challenge, already affecting coffee producers with increasing irregular rainfall resulting in draughts and flooding and increasing pests and diseases. The area suitable for Arabica cultivation in Thailand is feared to decrease. Coffee farmers ability to adapt is perceived as limited. And as mentioned in a previous section, agroforestry is perceived as a way to mitigate the effects of climate change by creating more resilient micro-climates.

While many coffee producers view specialty coffee production as a sustainable practice, the president of SCATH has mentioned an increasing issue about waste management. The increasing number of small scale producers processing coffee themselves in conjunction with a lack of knowledge is perceived to create environmental pollution. While also the larger producers are perceived as lacking in this regard, the diversification of producers increases the complexity of navigating these environmental harms of the coffee production. While none one of the coffee producers mentioned this challenge in the interviews, a lack of waste management could be observed on many of the coffee farms.

Many of the producers interviewed have reported that they are planning to increase their production and cultivation area to meet the demand. While some have claimed they are planning to convert barren land or vegetable farms into coffee agroforestry plantations, some also plan to plant more coffee in forest. This might adversely affect the forest ecosystems. Also, the clearing of coffee plantations in forests that were abandoned for many years introduces human activities into natural ecosystems.

7. Analysis

To provide a deeper analysis, these imaginaries will be linked with the Multi-Level-Perspective.

This dominant coffee *regime* consists of only a few big companies producing coffee, buying fresh cherries from coffee farmers for prices that in many cases did not result in satisfactory livelihoods. Many coffee plantations that were started decades ago were left abandoned. The big producers favored volume of production over quality. Coffee farmers were therefore dependent on the prices that the big companies dictated. The protective tariffs aimed at promoting domestic production and fair prices for farmer are so high that many ways to avoid them are exploited. This stretches from tariff-free quotas that are

granted to large-scale importers to corruption, smuggling and other forms of illegal misconduct. This skews the prices and is resulting in an imbalanced market, where market power remains with the big companies.

This production regime does not encourage farmers to know or learn about coffee production too much. The current high prices that all producers are paying for fresh cherries is also perceived as limiting the financial incentives for farmers to invest in improving the quality of their coffee cherries. In the last decades, little attention has been paid to the genetic composition of the cultivated Arabica varieties. Washed processing is most commonly used, because it is the easiest way to produce consistent results on a large scale. In the current regime, uniformity of production is prioritized over differentiation and uniqueness of the products. In general, this regime can be termed as *commodity* or *commercial coffee regime*.

However, more recently this regime has started to destabilize. The main *landscape pressures* on the current coffee growing regime perceived by the Thai coffee producers are Climate Change, adversely affecting production yield and consistency, and persisting economic and cultural marginalization of indigenous ethnic communities in the highlands. The commercial coffee regime is not perceived as providing adequate solutions to these landscape pressures. Commercial coffee production did not result in sufficient socio-economic perspectives for the coffee producers but is still one of the few practices available in these areas. The changing landscape also provided a new enabling environment. The global trend for specialty coffee, developments of standards and guidelines as well as terminology in other countries converges with changing lifestyle habits of Thai coffee consumers, increasingly preferring lighter roasted coffee with unique flavor profiles. A reason behind this is the widespread availability of information through the internet, as well as the global spread of trends through social media. The destabilization of the regime in conjunction with changing enabling environments allowed for niche developments to emerge, creating a *window of opportunity* for coffee producers to switch to specialty coffee production.

In the *niches*, different ways of production were experimented since a long time in Thailand. Nine One Coffee for example started in 1997 trying to differentiate its practices from the main-stream market by focusing on quality development. With the opening of the window of opportunity, more and more coffee producers are switching their production to specialty coffee. Operating with limited financial resources, most coffee producers have initially started with taking the processing into their own hand. Instead of selling their fresh cherries to other producers, they are experimenting with Natural or Honey processing, or developing even more exotic processing, utilizing controlled fermentation or the use of microorganisms. More recently, farmers are experimenting with separating coffee varieties. They are doing this by either

separating the harvesting on their farms by visually differentiating coffee varieties in their mixed variety plantations, or by setting up new plantations of single Arabica varieties that are perceived as having a higher value, such as Gesha and Java. New ways of marketing are employed, favoring direct relations to independent customers such as micro-roasteries, and showcasing their products in conventions or competitions. These coffee grading competitions are not just perceived as an innovative way of marketing, where high ranks are resulting in market recognition, but also as a valuable source of feedback for knowledge generating. Other sources of knowledge for niche developments are an increasing number of coffee schools and other courses taught using SCA guidelines and standards.

The trend for specialty coffee can therefore be conceptualized as a *sociotechnical transition process* that is currently in the process or re-aligning with the current coffee regime. This also is also captured by the growing market share of specialty coffee, and by the imaginary of the interview participants who are expecting this development to continue in the future. However, there are a few risks that could potentially disrupt the transition process. The lack of knowledge about specialty coffee production is a major source of these risks. It contributes both to inconsistencies of production and mislabeling of products, risking trust between producers and customers, as well as to environmental harm due to the lack of waste management. Due to an increasing number of small-scale producers adopting processing techniques themselves, these problems might accelerate. While specialty coffee producers are imagining their way of production as more sustainable, leading to the protection of forests, the further diversification of coffee producers may in fact result in more environmental pollution through increasing waste from coffee processing. Also, an extension of coffee plantations into forests in order to increase the production of specialty coffee may have impacts on forest ecosystems that previously were absent from human economic activity.

In conjunction with the land ownership issues, this poses a threat to coffee farmers in indigenous ethnic communities. While they are being tolerated to grow coffee in forest areas by the government now, this tolerance could be revoked by the government if the environmental effects are continuing and perceived as problematic. The absence of full land titles is putting them at risk to lose the permission to produce coffee in these forests, threatening their livelihood practice to be taken away from them. These risks should be mitigated in order to promote the continuation of the transitioning of the coffee sector that is perceived to contribute to livelihood improvements and sustainability. Suggestions on how these risks can be mitigated will be given in the concluding section.

The analysis also provides insight into how Thai coffee producers are engaging with the specialty coffee imaginary. Knowledge was perceived as one

of the key challenges by the coffee producers contributing to its successful development. Here, mainly cupping protocols, sensory evaluation and other industry norms and guidelines developed by the SCA are mentioned. These international standards are increasingly replacing local, ancestral and traditional forms of knowledge about coffee that are perceived as inadequate to meet the demands of the specialty coffee segment. The formation of Thailand's SCA in 2015 also demonstrates the increasing institutional consolidation of specialty coffee techniques and practices. However, producers are also adding their local knowledge and cultural context to their products, utilizing traditional resource management and transporting stories of their origins to the consumers through their coffee.

Referring to the struggle to compete with their mixed variety or Catimor plantations in competitions with other varieties, the participants suggest rethinking the quality definitions of the specialty coffee imaginary. And by instead highlighting stories of the origin, how specialty is a source of economic perspective for marginalized communities, of cultural identity and recognition, they are asserting a different kind of value to their product. At least on the Thai domestic level, the Thai coffee producers are therefore actively engaging in the co-production of the specialty coffee imaginary, adopting some of its international elements and adding local context, effectively co-producing it. It is to be analyzed if this local co-production also affects the evolution of the global specialty coffee imaginary.

8. Discussion

The analysis has shown the complexity of the perceptions of Thai coffee producers responding to the specialty coffee trend. They are engaging with the global specialty coffee imaginary, adopting standards, protocols, and guidelines, but also adding local context, and in doing so are *co-producing* this imaginary. This demonstrates that they are also actively participating in the negations of attributing symbolic value to their products. It supports the claim that specialty coffee can in fact shift the distribution of value, as argued by Boaventura et al. (Boaventura et al., 2018), away from big companies, and towards the specialty producers interacting directly with their customers. The power over the creation of symbolic value is also perceived as key in addressing the inequalities of the global value chain by Fischer (Fischer, 2021). The producers are taking control over the value attribution over their products, promoting their agency. While this is perceived by the producers as protecting their cultural identity, providing them a livelihood perspective in their indigenous lands, it marks a shift from traditional knowledge and practices towards adopting industry set standards and understandings of quality as the leading value-defining variable in the specialty coffee sector. However, the contestations observed among the Thai coffee

producers about the dominant imaginary of quality of specialty coffee shows their practices of co-production. They are adding immaterial dimensions of quality to the technical, material dimensions of the SCA guidelines, trying to shape a different understanding of specialty coffee quality. The underemphasis of these quality dimensions by the SCA is also highlighted and criticized by Quiñones-Ruiz (Quiñones-Ruiz, 2020).

In the broader discussion about coffee production in Thailand, the role of agency becomes even more significant. Since the introduction of coffee through government strategies and Royal Development Project initiatives, coffee farmers in ethnic hill-tribe communities were *subjects of* development. The introduction of coffee farming initially restrained their agency, limiting their freedom of choice for economic activity, and resulted in persistent economic and cultural marginalization. The specialty coffee trend can now finally make it work. Beyond the economic dimensions, it is the broadening of agency itself that is the driving force behind the Thai specialty coffee imaginary. It is the *ability* to be independently responsible for their own livelihood that is motivating an increasing number of small-scale farmers to engage with this growing market segment. It makes them *agents of development*. This reflects contestations of Thailand's rural development approach in general. While the initial extension projects of coffee-production are following a top-down approach, Thai rural development strategies have been described as having become subsequently more participatory (Missingham, 2000). Recent Thai rural development strategies are praised for their inclusivity and participatory nature (Kelly, Yutthaphonphinit, Seubsmann, & Sleigh, 2012). However, at least in the case of coffee farming a true agency-based development approach is still missing. This is reflected in the continuing issue of insecure land rights among indigenous communities and the regulatory restrictions on farming and business practices of specialty coffee producers. This therefore links to broader debates about development studies, where often institutional or structural change is favored over practices and approaches that embrace and empower the independence of people in processes of change (Garikipati & Olsen, 2008). According to Bastiaensen et al., promoting people's agency however is one of the most effective vehicle for transformative change and should therefore be focused on more (Bastiaensen, De Herdt, & D'Exelle, 2005). In the Thai context, it also links to continuing struggles for political and cultural recognition of these politically and economically marginalized indigenous communities. Specialty coffee production can be viewed as a means of action to reshape the identification of these communities both as protectors of the forest, as well as culturally equal members of Thai society (Morton, 2023; Santasombat, 2010). With their ability to connect local and cultural knowledge and context to specialty coffee products, they are gaining control over symbolic value creation,

reshaping the persistent and somewhat derogatory imaginary of these ‘hill tribe’ communities within Thai society.

The use of MLP as a framework in conjunction with sociotechnical imaginaries as a theo-retical lens has been proven helpful to emphasize the role of agency within socio-technical transition processes, adequately addressing the theoretical shortcoming of MLP identified by Avelino & Wittmayer (Avelino & Wittmayer, 2016). They criticize an ambiguity of attempts to include power dimensions into transition process research, and a need to focus on the distributed agency happening within transition processes for both the theoretical understanding of them, as well as their application through transition governance. They offer the Multi-actor Perspective (MaP) as an additional tool in transition research, putting question *who* the actors exercising power within transition process in focus. While this addresses one part of the identified shortcomings, it neglects the act of innovation. It can be argued that in transition research, *who and what* need to be asked simultaneously, i.e. who is acting in the transition process based on what goals, motives and ideas. Sociotechnical imaginaries allow a deep understanding of what the motivations, perceptions and underlying values of actors within transition processes are.

9. Conclusions

This paper has empirically explored how Thai specialty coffee producers are imagining their motivation, the challenges they are facing, and the way they are doing specialty coffee. Key findings are that coffee farmers are motivated to switch to producing specialty coffee not only by improved income, but also the sustainability of the production and by a sense of pride that is expected by selling and marketing specialty coffee products. They are taking quality of their products into the focus by improving farm management, using innovative processing and separating varieties, but also by finding new ways of marketing, for example by joining competitions, exhibitions, and conventions. However, coffee farmers are facing several challenges, most notably a lack of knowledge, a volatile market with fluctuating prices and limited marker power of small-scale producers, a regulatory framework that restricts the decision-making freedom of specialty coffee producers and provides only limited security, and sustainability, where climate change is threatening the long-term viability of production. By adopting elements of the global specialty coffee imaginary, but adding local context, they are co-producing the global imaginary. In doing so, they are also co-creating symbolic value, potentially re-shifting the power balance of the global value chain. The driving force behind the specialty coffee transition process is the broadened agency of coffee producers, who perceive it as a perspective for marginalized communities, promising better income and sustainability, and reshaping their cultural recognition within Thai society.

To mitigate the risks that were identified to potentially interrupt the transition process, the following measures are suggested: More knowledge-sharing and collaboration should be encouraged, for example by setting up an existing or new organization with the resources to act as a knowledge sharing platform that ensures low-threshold access to learning and education about coffee production. This not only contributes to mitigating potential environmental harm, but also contributes to the development of uniform standards, promoting trustworthy within the industry. It would also contribute to balance a potentially growing inequality between specialty coffee producers in Thailand. Special attention should be given to Climate Change and its mitigation, providing support to farmers to adapt to the changing climatic conditions. Both the Specialty Coffee Association as well as the existing network of development centers and research stations could act as a starting point for these measures, but need to be equipped with the resources to meet the demands of the specialty coffee producers.

Also, the regulatory framework needs adjustments to meet the needs of the specialty coffee producers. The current rules and regulations are not connected to the reality on the ground; for example, the ban on importing and distributing genetically traceable coffee varieties is not being followed on the ground and is limiting coffee producers' abilities to meet the demand of both the domestic and international market. The land ownership issue of the indigenous highland communities should be addressed to provide long-term stability and economic perspective. In general, the regulatory framework should provide an enabling environment for Thai coffee producers to act independently in order to meet the demands of the specialty coffee producers instead of restricting autonomous decision-making. However, clear environmental regulations need to be formulated to create equal terms for all market actors and protect the environment.

Beyond the empirical findings, the paper provided valuable insights into linking MLP as an analytical framework with sociotechnical imaginaries as analytical lens. The combination allows both for systematic insights into complex sociotechnical systems while also putting individual perception and experience at the heart of the analysis, emphasizing agency.

10. Shortcomings and Future Research

This research was conducted by a singular researcher, the author, as part of a master's thesis. Due to the financial and time resource constraints, the analytical approach used for this study is narrow. Potential quality assurance methods that can be applied in larger researcher teams, like inter-coder reliability, could not be applied. Therefore, a more exploratory methodological and analytical approach were used. This opens the way for further research.

Additionally, this study is based on interviews about the perception of a limited group of actors that hold a similar position among Thai coffee producers, forming a techno-epistemic network. The influence of this techno-epistemic group on the co-production of the specialty coffee imaginary is the research scope. Although they hold key roles in shaping the imaginaries of many other coffee producer due to their prominence and visibility, they do not represent the perceptions of either very small-scale farmers or the large industrial coffee producers. Future research should therefore address these scopes and incorporate the findings with the results of this study. Additionally, more detailed research about the reform of the regulatory system is necessary to suggest a more practicable taxation and tariff system. Future research should also look into the role of the agricultural research stations within the current and further development efforts. The particularly sensitive issue of land ownership should be addressed more deeply and carefully.

The analysis also strongly focused on similarities, highlighting the shared contributions to the co-production of the specialty coffee imaginaries. In doing so, it was strictly qualitative and exploratory. Differences in perceptions based on the different profiles of the interview participants, e.g. scale, duration of involvement, market position, tenure in the industry or other relevant factors were largely neglected. A more quantitative approach in future research could highlight intra-network differences of power, and as such contributions to co-production of the specialty coffee imaginary in Thailand.

The linking of the MLP framework with sociotechnical imaginaries has proven a meaningful approach to understanding and highlighting the agency dimension of sociotechnical transition processes. Further attention needs to be laid onto the theoretical linking and its practical analytical application.

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จากสนามรบซึ่งบกสู่สนามการค้าสามเหลี่ยมมรภต:
ความทรงจำ (ที่ไม่หายไป) ในความสัมพันธ์ระหว่างประเทศ¹

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บทคัดย่อ

บทความนี้ประยุกต์ใช้แนวคิดการเมืองเรื่องความทรงจำในการศึกษาความสัมพันธ์ระหว่างความทรงจำต่อพื้นที่ชายแดนสามเส้าไทย-ลาว-กัมพูชาที่กับนโยบายของรัฐไทย ในยุคสมัยนี้ของบกเป็นพื้นที่แห่งความขัดแย้งเชิงอุดมการณ์ การสรูบททางทหารอย่างดุเดือดระหว่างรัฐไทย กลุ่มเขมรแดง กลุ่มลาวที่ต่อต้านรัฐบาล สปป.ลาว และกองทัพกัมพูชาที่ได้รับการสนับสนุนจากกองทัพเวียดนามปราบให้เห็นในพื้นที่ดังกล่าว หลังสงครามเย็นคำชี้แจงเปลี่ยนสถานะเป็นสถานการค้าสร้างความหมายของพื้นที่ด้วยการส่งเสริมการเติบโตทางเศรษฐกิจในนามสามเหลี่ยมมรภตขึ้นมา งานวิจัยขึ้นนี้มีลักษณะเชิงคุณภาพและได้ข้อมูลจากการทบทวนวรรณกรรมจากการทำวิชาการ บทความ เอกสารเชิงนโยบายและการสัมภาษณ์ในยุคปัจจุบันของบกແທจะไม่มีความสำคัญในการเติบโตทางเศรษฐกิจ ด้วยปัจจัยทางด้านการพัฒนาระบบสาธารณูปโภคและคุณภาพชีวภาพที่ยังมีจำกัดแม้หน่วยงานภาครัฐจะยืนยันว่า การส่งเสริมการเติบโตทางเศรษฐกิจในชายแดนในพื้นที่ยังคงมีอยู่ ในขณะที่ภาคเอกชนเสนอว่า การพัฒนาเศรษฐกิจสามเหลี่ยมมรภตไม่จำเป็นต้องผูกติดกับพื้นที่ชายแดนเป็นสำคัญหากแต่สามารถขยายการพัฒนาออกไปยังจังหวัดใกล้เคียงได้ด้วย บทความวิจัยฉบับนี้เสนอว่าเพื่อพัฒนาเศรษฐกิจชายแดนรัฐไทยควรริเริ่มในการพัฒนาสาธารณูปโภคและเส้นทางคุณภาพชีวภาพที่ดังกล่าว และในการเปลี่ยนผ่านความทรงจำครัวเรือนเสียจากตัวแสดงที่แทรกต่างๆ

¹ บทความวิจัยนี้เป็นส่วนหนึ่งของงานวิจัยเรื่อง จากสำนาร์บของบกสุ่ สำนาร์ค้าสำนาร์เหลี่ยมมรภต: ความทรงจำ (ที่ไม่หายไป) ในความสัมพันธ์ระหว่างประเทศชั้นนี้ได้รับทุนการสนับสนุนจากเงินทุนสนับสนุน การทำวิจัยการสร้างนวัตกรรม และการสร้างงานสร้างสรรค์จากเงินรายได้คณวัชศิศาสตร์ มหาวิทยาลัย บลราชานีประจำปีงบประมาณ พ.ศ. 2566

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หลากหลายมากขึ้น เพื่อให้สามเหลี่ยมมรภตเป็นพื้นที่แห่งความทรงจำในการเมืองระหว่างประเทศทั้งในการกำหนดนโยบายและในวิชาการต่อไปในอนาคต

คำสำคัญ ความทรงจำ, สามเหลี่ยมมรภต, ความสัมพันธ์ไทย-กัมพูชา, ความสัมพันธ์ไทย-ลาว, ความสัมพันธ์ระหว่างประเทศ

From the Battlefields of Chong Bok to the Marketplaces of Emerald Triangle: The (Missing) Piece Of Memory In International Relations

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Abstract

This research article applies the politics of memory concept in International Relations to analyse the policy of the Thai state on the triple border of Thailand, Cambodia and Lao People's Democratic Republic (PDR). During the Cold War, Chong Bok as the point where the border of the three nation-states meet was the space of ideological conflicts. Fierce military clashes occurred in the area between the Thai state, Khmer Rouge, and Lao resistant groups that fought against the Lao communist government and Cambodian troops supported by the Vietnamese. After the Cold War, the slogan of changing the battlefields to the marketplaces redefined the meaning of the area as the Emerald Triangle which has the implication of economic development. This research article is qualitative and acquires data from academic texts, journals, policy documents and interviews. Nowadays, Chong Bok does not contribute much to economic growth because of limited infrastructure and transport to the area. While sectors of the Thai state insist that the plan for the triple border development should continue, non-state actors propose that the economic development of Emerald Triangle should not be limited to just the border but extend to adjacent border provinces as well. This article argues that the Thai state should initiate a project for transport and infrastructure development for the area. In the process of memory transition, more voices of different actors should be recognised so the area of Emerald

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Triangle can be a space for developing common memory in international politics that enriches policy formulation and academic research in the future.

Keywords Memory, Emerald Triangle, Thai-Cambodian Relations, Thai-Lao Relations, International Relations

1. บทนำ

ของบก เป็นพื้นที่กรณีศึกษาในบทความขึ้นนี้ ในปัจจุบันเป็นส่วนหนึ่งของพื้นที่ซึ่งรัฐลักษ์กันในชื่อสามเหลี่ยมมรดก (Emerald Triangle) ซึ่งมีนัยของความร่วมมือทางเศรษฐกิจ พื้นที่บริเวณนี้เป็นชายแดนระหว่างรัฐอธิปไตยสามแห่ง คือ ไทย กัมพูชา และสปป.ลาว ในไทยเป็นพื้นที่ของอำเภอคำเนิน จังหวัดอุบลราชธานี ใน สปป.ลาว คือ เมืองมุน盆地 แขวงจำปาสัก ส่วนกัมพูชาคือ อำเภอจอมกระสา จังหวัดพะริบุรี ในอดีตพื้นที่ของบกเคยเป็นหนึ่งในสมรภูมิที่ดูเดือดของสงครามอินโดจีนครั้งที่สาม (Supatn, 2012) ในการประทักษิณของสมรภูมิ ของบกที่เกิดขึ้นในพื้นที่จังหวัดอุบลราชธานีกินเวลาจากปี ค.ศ. 1985-1987 พื้นที่แห่งนี้จึง แห่งนัยแห่งสงคราม ความไม่มั่นคงต่อชีวิตและผู้ลี้ภัย (Paribatra, 1984; Phuangkasem, 1984; Liamdee, 2020) บริเวณชายแดนไทย-ลาว-กัมพูชาจึงเต็มไปด้วยเรื่องเล่าร่าด้วย สงครามและผู้อพยพ (สุรชัย ศิริไกร, 2527; จัดภัย บุรุษพัฒน์, 2531) จนกระทั่งใน ค.ศ. 1989 นายกรัฐมนตรีไทยในขณะนั้นคือ พลเอกชาติชาย ชุณหะวัณได้ประกาศคำขวัญว่าด้วย การเปลี่ยนสนาમรบเป็นสนาમการค้า ทำให้ส่งผลต่อนโยบายระหว่างไทยที่มีต่อสปป.ลาว และ กัมพูชาและมีการสร้างความหมายต่อพื้นที่ชายแดนไทย-กัมพูชา และไทย-ลาวที่เปลี่ยนไปและ แห่งนัยแห่งโอกาสตลอดจนความร่วมมือทางเศรษฐกิจมากยิ่งขึ้น

บทความฉบับนี้ใช้แนวคิดการเมืองเรื่องความทรงจำตอบคำถามที่วิธีการได้ควรใช้ สองเสริมให้พื้นที่สามเหลี่ยมมรดกเป็นพื้นที่แห่งความทรงจำทางประวัติศาสตร์ที่เปิดกว้างร่วมกัน ของสามรัฐอธิปไตยและนำไปสู่การพัฒนาเศรษฐกิจแบบสร้างสรรค์ โดยจะได้วิเคราะห์ว่าชนชั้น นำทางการเมืองไทยมีคำอธิบายในการสร้างความทรงจำต่อพื้นที่ของบกก่อนจะเปลี่ยนมาเป็น สามเหลี่ยมมรดกอย่างไร เหตุการณ์ทางการเมืองในระดับโลกส่งผลต่อการสร้างความทรงจำ เช่นนั้นหรือไม่ และผู้คนในบริเวณชายแดนสามเส้ามีความทรงจำต่อพื้นที่ดังกล่าวอย่างไร ในยุคปัจจุบันของบกแห่งจะไม่มีความสำคัญในการเติบโตทางเศรษฐกิจ ด้วยปัจจัยทางด้าน การพัฒนาระบบสาธารณูปโภคและคมนาคมเข้าสู่พื้นที่ยังมีจำกัดแม้หน่วยงานภาครัฐจะยัง ยืนยันว่าการสร้างเส้นทางเศรษฐกิจในชายแดนสามเส้ายังคงมีอยู่ ในขณะที่ภาคเอกชน เสนอว่าการพัฒนาเศรษฐกิจสามเหลี่ยมมรดกไม่จำเป็นต้องผูกติดกับพื้นที่ชายแดนเป็นสำคัญ หากแต่สามารถขยายการพัฒนาออกไปยังจังหวัดใกล้เคียงได้ด้วย

ในการใช้แนวคิดการเมืองเรื่องความทรงจำวิเคราะห์การเปลี่ยนแปลงความหมาย ของพื้นที่ของบกสู่สามเหลี่ยมมรดก บทความฉบับนี้เสนอว่าหากภาครัฐของไทยยังยืนยัน ในการพัฒนาพื้นที่ของบกให้เป็นแหล่งท่องเที่ยวเชิงประวัติศาสตร์และเชิงธรรมชาติ รัฐไทย ควรริเริ่มโครงการพัฒนาเส้นทางคมนาคมและระบบสาธารณูปโภคให้ผู้คนเข้าถึงได้โดยง่ายก่อน

ในเบื้องต้น เนื่องจากในปัจจุบันแม้จะมีการบันทึกความทรงจำถึงการสูรับในอดีตในพื้นที่ผ่านรูปแบบอนุสาวรีย์แต่เนื่องจากสิ่งอำนวยความสะดวกและระบบสาธารณูปโภคในบริเวณดังกล่าวยังไม่อำนวยให้สามารถพัฒนาเป็นสถานที่ท่องเที่ยวจนมีศักยภาพทางเศรษฐกิจได้ นอกจากนี้ ในการเปลี่ยนผ่านความทรงจำ รัฐไทยควรเคราะฟเสียงจากตัวแสดงที่เป็นรัฐและไม่ใช่รัฐที่แตกต่างหากหลายมากขึ้น เพื่อเป็นการระดมสมองในการพัฒนาพื้นที่ทั้งภาครัฐคือ สปป.ลาวและกัมพูชาและภาคเอกชน ตลอดจนประชาชนในท้องที่เพื่อพัฒนาพื้นที่แห่งเศรษฐกิจเชิงสร้างสรรค์ในเมืองชายแดนในอนาคตระหว่างอุบลราชธานีของไทย จำปาสักของ สปป.ลาว และพระวิหารของกัมพูชา บทความฉบับนี้จึงได้เรียงลำดับโครงสร้างเพื่อสนับสนุน ข้อเสนอดังกล่าว โดยเริ่มต้นด้วยบทนำ การทบทวนวรรณกรรมที่กล่าวถึงที่มาของสมรภูมิ ของบกและสามเหลี่ยมมรภกต แนวคิดว่าด้วยการเมืองเรื่องความทรงจำ ลักษณะเฉพาะของ ชายแดนสามเส้า และความทรงจำของพื้นที่จากหน่วยงานภาครัฐและภาคเอกชนตามลำดับ

2. สมรภูมิของบก: การเมืองเรื่องความทรงจำ

2.1 สมรภูมิเย็นในอินโดจีน

กรณีพิพาทด้านพรหมแดนระหว่างประเทศบริเวณของบก ในพื้นที่จังหวัดอุบลราชธานี ซึ่งเป็นส่วนหนึ่งของสมรภูมิอินโดจีนครั้งที่สามແຫບไม่ปราฏไม่ว่าจะเป็นบทความทรงวิชาการ มหาบัณฑิตหรือดุษฎีบัณฑิตนิพนธ์ หากจะเทียบกับสมรภูมิในบริเวณชายแดนที่จัดได้ว่าเป็น ส่วนหนึ่งของสมรภูมิอินโดจีนครั้งที่สามที่เกิดขึ้นในพื้นที่ของรัฐไทยเมื่อตนกัน เช่น เหตุการณ์ที่ สามหมู่บ้าน บริเวณบ้านกลาง บ้านสว่าง บ้านใหม่ ซึ่งเป็นพื้นที่บริเวณอำเภอบ้านโคก จังหวัด อุตรดิตถ์ที่ติดกับเมืองปากลาย แขวงไชยบุลี สปป.ลาว ใน ค.ศ. 1984 (Dommen, 1985; Ngaosyvathn, 1985; Viraphol, 1985) หรือสมรภูมิรั่มเกล้าที่อำเภอชาติตระการ จังหวัด พิษณุโลกในบริเวณฝั่งไทย ส่วนฝั่ง สปป.ลาว คือเมืองบ่อแตน แขวงไชยบุลี (Jiwalai, 1994; Theeravit & Semyearn, 2003)⁴ งานวิจัยจึงได้ตั้งคำถามวิชาการโดยเฉพาะอย่างยิ่ง ความสัมพันธ์ระหว่างประเทศ หน่วยงานความมั่นคงในจังหวัดอุบลราชธานีซึ่งต้องปฏิบัติการกิจ ในสมรภูมิของบกโดยตรงและประชาชนในอุบลราชธานีบอกเล่าถึงความทรงจำเกี่ยวกับสมรภูมิ ของบก ในอำเภอโนนดี จังหวัดอุบลราชธานีที่ติดกับเมืองมุนปะโนก แขวงจำปาสัก สปป.ลาว และอำเภอจอมกระสาต จังหวัดพระวิหารของกัมพูชาอย่างไร

⁴ โปรดดูวิรัช ร่วมพงษ์พัฒนา (2531), ดาวมาศ อิ่มสำราญรัชต์ (2535) และชินวัฒน์ แม้นเดช (2544) เพิ่มเติม

สมรภูมิช่องบกตั้งอยู่ในพื้นที่อำเภอคำเนิน จังหวัดอุบลราชธานี ในอดีตพื้นที่บริเวณนี้ เป็นส่วนหนึ่งของสังคมอินโดจีนครั้งที่สามระหว่าง ค.ศ. 1975 ถึง 1991⁵ รัฐบาลไทยในขณะนั้นมีบทบาทในสมรภูมิช่องบกทั้งทางอ้อม คือการให้การสนับสนุนกองกำลังเขมรแดง ที่ได้รับการสนับสนุนจากรัฐบาลสาธารณรัฐประชาชนจีนและสกัดกั้นทหารของรัฐบาลสาธารณรัฐประชาชนกัมพูชา (People's Republic of Kampuchea) ที่มีกองทัพเวียดนามสนับสนุน และก็ทางตรงคือเข้ารวมผลักดันกองกำลังเวียดนามที่สมรภูมิช่องบกโดยตรง

ท่ามกลางการต่อสู้กันระหว่างมหาอำนาจของโลกในยุคสงครามเย็น คือสหรัฐอเมริกา และสหภาพโซเวียตที่ต่างพยายามสนับสนุนรัฐบาลท้องถิ่นในเวียดนาม กล่าวคือ ฝ่ายสหรัฐอเมริกาสนับสนุนเวียดนามใต้และสหภาพโซเวียตสนับสนุนเวียดนามเหนือ เมื่อสหรัฐอเมริกาเริ่มถอนทหารใน ค.ศ. 1973 จนทำให้ฝ่ายเวียดนามใต้ที่ใกล้ชิดกับสหรัฐอเมริกาอ่อนแลงจนกระทั่ง เมืองไช่ย่อนในเวียดนามใต้แตกใน ค.ศ. 1975 เวียดนามเหนือกับเวียดนามใต้ได้กล้ายเป็นรัฐเดียวกัน และเวียดนามทั้งประเทศก็ตกอยู่ภายใต้การปกครองของพระคุณมิวนิสต์เวียดนาม (Lawrence, 2008; Taylor, 2013) หลังจากนั้นอีกไม่กี่เดือน ขบวนการปฏิวัติลาว (Pathet Lao) ซึ่งใกล้ชิดกับเวียดนามเหนือภายใต้การนำของโซจิมินห์ กีสถาปนารัฐบาล สปป.ลาว ได้สำเร็จ (Evans, 2002) อุดมการณ์แบบสังคมนิยมคอมมิวนิสต์จึงได้ถูกนำมาเริ่มวางแผนปฏิบัติการจริงใน สปป.ลาว (สุจิตา ตันเลิศ, 2542) ส่วนในฝั่งกัมพูชา ฝ่ายเขมรแดง ซึ่งยึดถืออุดมการณ์แบบสังคมนิยมคอมมิวนิสต์ก็ยึดอำนาจรัฐของกัมพูชาได้สำเร็จก่อนจะสถาปนา กัมพูชาประชาธิปไตย (Democratic Kampuchea) ขึ้นสำเร็จ (Chandler, 2008) แต่ด้วยการนำนำโดยนายเศรษฐกิจตามอุดมการณ์สังคมนิยมมาปฏิบัติอย่างสุดโต่ง ทำให้มีประชาชนชาวกัมพูชาเป็นจำนวนมากต้องเสียชีวิตภายใต้การปกครองของเขมรแดง กล่าวกันว่าจำนวนตัวเลขผู้เสียชีวิต อาจจะสูงถึงสองถึงสามล้านคนหรือมากกว่านั้น (Kiernan, 1998) จนเกิดความรู้สึกไม่พอใจในหมู่ชาวกัมพูชาด้วยกันเอง (สุวัฒนาสุคุณ, 2558) โดยเฉพาะอย่างยิ่งแกนนำของเขมรแดงบางส่วน เช่น นายอูน เข็น

โครงสร้างการเมืองโลกในขณะนี้มีการแตกกันระหว่างชาติคอมมิวนิสต์ คือ สาธารณรัฐประชาชนจีน กับสหภาพโซเวียต (Herz, 1975) เมื่อเขมรแดงได้รับการสนับสนุนจากรัฐบาลสาธารณรัฐประชาชนจีน หากว่ากองทัพเวียดนามที่สหภาพโซเวียตสนับสนุนรุกราน กัมพูชาประชาธิปไตยเพื่อโคนลงรัฐบาลเขมรแดงในขณะนั้นก็เท่ากับว่าประกาศตนเป็นปฏิบัติ

⁵ สงครามอินโดจีนสามครั้ง สงครามอินโดจีนครั้งที่หนึ่งเป็นการต่อสู้ของเวียดนามกับจักรวรรดิฝรั่งเศสระหว่าง ค.ศ. 1946-1954 สงครามอินโดจีนครั้งที่สองเป็นการต่อสู้กันระหว่างเวียดนามเหนือกับเวียดนามใต้ที่มีการแทรกแซงกันของชาติตามท่าอำนาจ คือ สหรัฐอเมริกาและสหภาพโซเวียตและสันสุดลงด้วยการรวมประเทศของเวียดนามใน ค.ศ. 1975 (กรรณ์พรรณ์ สุขสวัสดิ์, 2530; Tai, 2009)

ต่อรัฐบาลจีน อย่างไรก็ตี กองทัพเวียดนามรุกรานกัมพูชาประชาธิปไตยจนสามารถผลักไส เขมรแดงออกจากรุงพนมเปญสำเร็จใน ค.ศ. 1979 และสถาปนารัฐบาลหุนเซิดของเวียดนาม ในนามสาธารณรัฐกัมพูชาประชาชนนิยมชื่น (Chandler, 2008) ทำให้ทหารเขมรแดงต้อง หลบหนีการไล่ของทหารเวียดนามอยู่ในหลายจุดของชายแดนไทย-กัมพูชา (Liamdee, 2020) สงครามอินโดจีนครั้งที่สามจึงไม่ใช่สงครามที่ครอบคลุมพื้นที่ระหว่างเวียดนามเหนือ เวียดนามใต้ดังที่ปรากฏก่อนการรวมประเทศเท่านั้น หากแต่สงครามอินโดจีนครั้งที่สาม กินอาณาบริเวณมาถึงพื้นที่ของกัมพูชาและบริเวณชายแดนไทย-สปป.ลาว และชายแดนไทย- กัมพูชา เพราะนอกจากทหารเวียดนามจะสามารถยึดครองพื้นที่หลายส่วนในกัมพูชาได้แล้ว ทหารเวียดนามยังประจำการอยู่ในพื้นที่ สปป.ลาว อีกด้วย (Oldfield, 1998) ทั้ง สปป.ลาว และเวียดนามมีความใกล้ชิดกันทางทหาร เศรษฐกิจและการเมืองเป็นอย่างยิ่งโดยอาศัยกรอบ ของสัญญาณิตรภาพและความร่วมมือที่ลงนามกันในปี ค.ศ. 1977 (แสงเพชร อุทัย, 2547) หากพูดกันตามโวหารของสงครามเย็นรัฐไทยเปรียบเสมือนรัฐด้านหน้าที่ต้องประจันหน้า โดยตรงกับโลกสังคมนิยมคอมมิวนิสต์ (Paribatra, 1984) แต่เมื่อรัฐที่มีพระคocomมิวนิสต์เป็น รัฐบาลอย่างสาธารณรัฐประชาชนจีนหันมาเป็นพันธมิตรกับสหรัฐอเมริกา (Herz, 1975) โครงสร้างเชิงอำนาจของภูมิรัฐศาสตร์โลกก็ยิ่งทวีความซับซ้อนยิ่งขึ้นไปอีก รัฐไทยต้อง เพชญหน้ากับกองทัพที่ยึดมั่นอุดมการณ์คอมมิวนิสต์ตามแนวทางของโซเวียตนั้นก็คือกองทัพ ของเวียดนามที่อยู่ทั้งในสปป.ลาว และกัมพูชา (Oldfield, 1998) และต้องผูกมิตรกับรัฐบาล ที่ยึดถืออุดมการณ์สังคมนิยมคอมมิวนิสต์ตามแนวทางของสาธารณรัฐประชาชนจีนที่ใกล้ชิดกับ รัฐบาลเขมรแดง เมื่อกองทัพเวียดนามรุกรานกัมพูชาของรัฐบาลเขมรแดง รัฐไทยต้องให้ การสนับสนุนกองกำลังเขมรแดงที่ถอยร่นเข้ามาประชิดชายแดนไทย-กัมพูชาด้วย และมีพื้นที่ ของรัฐไทยด้วยและซ่องบกก เป็นหนึ่งในพื้นที่นั้น

รัฐบาลไทยมองว่ากองทัพเวียดนามในกัมพูชาและสปป.ลาว เป็นภัยคุกคามต่อรัฐไทย (Paribatra, 1984) ด้วยสถานการณ์ทางการเมืองระหว่างประเทศในขณะนั้นที่เกิดการ บาดหมางกันในค่ายคอมมิวนิสต์ระหว่างสหภาพโซเวียตและสาธารณรัฐประชาชนจีน และ สาธารณรัฐประชาชนจีนได้หันมาร่วมมือกับสหรัฐอเมริกาต่อต้านสหภาพโซเวียต รัฐไทยจึง เจรจาด้วยรัฐบาลรัฐประชาชนจีนในทางลับเพื่อขอร้องให้รัฐบาลบังคับใช้การสนับสนุน พระคocomมิวนิสต์แห่งประเทศไทย (Li, 2003) แต่มีข้อแลกเปลี่ยนหลายประการ เช่นไทยเอง ต้องให้การหนุนหลังกองกำลังเขมรแดงซึ่งถอยร่นมาประชิดชายแดนไทย-กัมพูชาในขณะนั้น ในขณะเดียวกันนั้นเองในปี ค.ศ. 1979 เมื่อสาธารณรัฐประชาชนจีนได้ทำการสั่งสอน โดยส่งกองทัพเข้าโจมตีเวียดนามจากทางตอนเหนือ (อนุรรัณ เหล็งงาม, 2547) ทำให้ เวียดนามในทางหนึ่งต้องส่งกองกำลังที่ดีที่สุดเข้าไปต้านทานการโจมตีของสาธารณรัฐประชาชน

จีน (O'Dowd, 2007) และส่งผลต่อสมรรถนะทางการทหารที่ประจำการบริเวณชายแดนไทย-กัมพูชาซึ่งไม่มีความแข็งแกร่งดังที่ควรจะเป็น นอกเหนือจากเขมรแดงที่รัฐบาลไทยต้องสนับสนุนแล้ว ยังมีกองกำลังเขมรอีกหลายกลุ่มที่ต่อต้านรัฐบาลกัมพูชาประชาชนนิยตด้วยเช่นกัน ทั้งกลุ่มแนวร่วมปลดปล่อยประชาชนแห่งชาติเขมร (Khmer People's National Liberation Front) ของชนชาติและพระคริสต์นิกายเปก (FUNCINPEC) ของสมเด็จพระนโรดม สีหนุ ในหลายๆ จุดบริเวณชายแดนไทย-กัมพูชา กองกำลังเขมรแดงได้ตั้งฐานฝึกอบรมลึกลับเข้ามาในพื้นที่ฝั่งไทย เมื่อทหารเวียดนามต้องการจะตัดกำลังบำรุงที่สนับสนุนกองกำลังเหล่านี้จึงต้องรุกพื้นที่ฝั่งไทยเข้ามา จึงเป็นสาเหตุให้กิจกรรมเมิดบูรณาภิเษกแห่งดินแดนและเกิดการประทะระหว่างกองทัพไทยกับเวียดนามในสมรภูมิช่องบก มีรายงานอย่างไม่เป็นทางการตามสื่อสังคมออนไลน์ ปัจจุบันว่าติดต่อระหว่างเวลาสองปีทหารไทยเสียชีวิต 109 นาย บาดเจ็บ 664 นาย แต่นักวิชาการอย่าง Neher (1988) ระบุว่าแม้ว่าโ咻หកกองทัพบกได้แลงการณ์ว่าทหารไทยเสียชีวิต 70 นาย กลับมีการตั้งข้อสังเกตว่าจำนวนที่แท้จริงอาจจะมากกว่านั้นถึงราว 200 นาย⁶ ราย ค.ศ. 1987 ทหารเวียดนามได้ถอนตัวออกจากบริเวณช่องบกกลับเข้าไปในฝั่งกัมพูชาเนื่องจากเพชญ์ การต่อต้านจากทหารไทย การก่อการจากเขมรแดงในฝั่งกัมพูชาเองและกลุ่มต่อต้านคอมมิวนิสต์ในลาว

สมครามอินໂດจีนครั้งที่สามสิ้นสุดลงเมื่อ ค.ศ. 1991 เมื่อกองทัพเวียดนามได้ถอนทหารออกจากกัมพูชาใน ค.ศ. 1989 อย่างสมบูรณ์ตามที่วางแผนไว้ (Cima, 1990) และได้มีการลงนามในข้อตกลงสันติภาพกัมพูชาที่ปารีสในปี ค.ศ. 1991 องค์การสหประชาชาติได้ส่งกองกำลังรักษาสันติภาพเข้าไปคุ้มครองความสงบเรียบร้อยเพื่อเตรียมความพร้อมไปสู่การจัดการเลือกตั้งในสองปีถัดมา สมรภูมิช่องบกได้ถูกปรับเปลี่ยนคำนิยามใหม่เพื่อให้สอดคล้องกับยุคสมัย ดังที่ปรากฏในคำวัญเปลี่ยนนามรบเป็นนามการค้าของพลเอกชาติชาญ ชุณหวัณ อดีตนายกรัฐมนตรีของไทยในขณะนั้น (Phonpraphai, 2021) สมรภูมิช่องบกจึงไม่晦มาที่จะถูกเรียกขานในสถานะสมรภูมิรบอีกต่อไป หากแต่ถูกเปลี่ยนชื่อให้สอดคล้องกับพื้นที่ที่ทางการค้าคือสามเหลี่ยมรกรก (Supatn, 2012) ซึ่งย่อมหมายความว่าความทรงจำว่าด้วยพื้นที่ชายแดนที่เป็นพื้นที่บรรจบของสามรัฐอธิปไตยได้ถูกปรับเปลี่ยนไปตามสถานการณ์ของโครงสร้างภูมิรัฐศาสตร์โลกยุคใหม่คือยุคหลังสงครามเย็นที่ความขัดแย้งด้านอุดมการณ์ทางการเมืองจะถูกแทนที่ด้วยโลกซึ่งมีการแลกเปลี่ยนค้าขายในระบบตลาดหรือทุนนิยมที่จะกลายเป็น

⁶ สื่อสังคมออนไลน์ระบุว่าทหารไทยเสียชีวิต 109 นาย บาดเจ็บ 664 นาย เนื่องจากปราภูมิเอกสารทางราชการน้อยมากตัวเลขดังกล่าวจึงไม่อาจยืนยันอย่างเป็นทางการได้ โปรดดูเพิ่มเติมที่ สมรภูมิช่องบก กับเวียดนามบุกไทยที่แท้จริง (Pantip, 2556)

บรรทัดฐานเดียวกันทั้งโลกดังที่ได้ปรากฏอยู่ในคำอธิบายว่าประวัติศาสตร์ของโลกได้สิ้นสุดลงแล้ว (Fukuyama, 1992)

2.2 การเมืองเรื่องความทรงจำ

การศึกษาความทรงจำโดยทั่วไปมีแนวโน้มนิยมถึงกระบวนการซึ่งผู้คนแสวงหาระบบการกักเก็บข้อมูลภายในใจของพวกรฯ (Thelen, 1989) เช่นความจำของคอมพิวเตอร์ย่อมมีระบบการกักเก็บข้อมูลที่เราสามารถสืบค้นสถิติ ประสบการณ์หรือข้อเท็จจริงที่บันทึกไว้ก่อนหน้านี้กลับมาได้อีกครั้งหนึ่ง ในการจำบางสิ่งบางอย่าง มนุษย์จะต้องเข้าไปมีปฏิสัมพันธ์กับอดีตโดยเฉพาะอย่างยิ่งประวัติศาสตร์ แม้กระนั้นการจะจำไม่ได้มีบทบาทเพียงแค่การระลึกถึงอดีตเท่านั้น หากแต่การจะจำยังมีส่วนในการปฏิสัมพันธ์กับการเข้าไปตีความปัจจุบันที่อยู่ตระหง่านของเรารือก็ด้วย (Schwartz, 1982) เมื่อเป็นเช่นนี้ การนำประเด็นเรื่องความทรงจำในที่นี้ก็ไม่ได้คาดหวังเรื่องความถูกต้องของความทรงจำ มากเท่ากับว่าความทรงจำนั้นส่งผลอย่างไรต่อกุญแจ (Value) ความเชื่อ (Belief) และปัทสตาน (Norms) ที่หล่อหลอมวัฒนธรรมที่เชื่อมต่อระหว่างอดีตเข้ากับปัจจุบัน นอกจากนี้ ประเด็นที่ความทรงจำให้กุญแจ คือความหมายที่สถาบันทางการเมืองต่างๆ และแต่ละบุคคลตีความอดีตและความทรงจำว่าด้วยสถาบันนั้นอย่างไรด้วย เพราะความทรงจำยอมถูกหล่อหลอมไปด้วยบทสนทนากำจัดบันทึกตลอดจนเงื่อนไขทางการเมือง สังคมและวัฒนธรรมในยุคปัจจุบัน (Sturken, 1997)

คำถามสำคัญในการนำแนวคิดเรื่องการเมืองเรื่องความทรงจำมาวิเคราะห์ก็คือว่า ความทรงจำของคนกลุ่มใดถูกบังคับให้เสียบเลี้ยง หรือไม่ให้ความเห็น และความทรงจำชุดใดได้รับอนุญาตให้นำเสนออย่างของตนซึ่งถูกผลิตชาจันภัยหลังกล้ายมาเป็นความทรงจำหลักในที่นี้เสียงและความทรงจำที่ได้รับกล้ายเป็นความทรงจำหลักมักจะได้สนับสนุนโดยตัวแสดงที่เป็นรัฐ และถูกบรรจุเข้าสู่สิ่งที่ Benedict Anderson (2006) เรียกว่าชุมชนจินตกรรม (Imagined Community) ดังที่ Confino (1997) ได้นิยามการเมืองเรื่องความทรงจำว่าเป็นประสบการณ์อันเป็นอัตลักษณ์ของกลุ่มทางสังคมหนึ่งกลุ่มซึ่งจำเป็นที่จะต้องใช้รักษาไว้ซึ่งความสัมพันธ์เชิงอำนาจ การเมืองเรื่องความทรงจำจึงต้องเกี่ยวข้องกับประเด็นที่ว่าใครต้องการให้ใครจำหรือไม่จำอะไรและ เพราะเหตุใด และใครเป็นผู้มีอำนาจในการอนุญาตให้เลือกจำหรือลืมอดีตในเรื่องใด หากกล่าวถึงเรื่องอดีต นักประวัติศาสตร์เกี่ยวข้องในฐานะการศึกษาอดีตมากที่สุด อย่างไรก็ตาม Halbwachs (1992) ได้นำเสนอให้เห็นถึงความแตกต่างและการปฏิสัมพันธ์กันระหว่างสองแนวคิดคือ ประวัติศาสตร์กับความทรงจำ ความทรงจำนั้นเป็นประวัติการณ์ที่เกี่ยวข้องกับการปฏิสัมพันธ์ระหว่างอดีตกับการตีความเหตุการณ์เฉพาะหน้า ซึ่งมีปัจจุบันเข้ามายังเกี่ยวข้อง ในขณะที่ประวัติศาสตร์จะเน้นหนักเรื่องเล่าของอดีต ความทรงจำ

กับประวัติศาสตร์ซึ่งมีส่วนประกอบสร้างซึ่งกันและกันมากกว่าที่จะแยกกันอย่างเบ็ดเสร็จเด็ดขาด การตระหนักรถึงความแตกต่างระหว่าง ความทรงจำและประวัติศาสตร์นั้นสำคัญ เพราะจะเป็นจุดตั้งต้นในการวิเคราะห์ว่าความทรงจำร่วมมีลักษณะอย่างไร ดังที่จะได้กล่าวถึงในบทความนี้คือความทรงจำด้วยสมรภูมิของบุคคลและสามเหลี่ยมมรรค หลักฐานที่สามารถนำมาวิเคราะห์ได้ย่อมปราศจากบทความวิชาการ สืบสิ่งพิมพ์ คำพูด การแสดงออก ภาพวาดหรือภาพถ่าย สิ่งของและการสื่อสารในรูปแบบต่างๆ (Blair, Dickinson, & Ott, 2010) ด้วยพระการนำเสนอเช่นนี้สื่อให้เห็นถึงวิธีการที่ผู้คนตีความอดีตแต่ยังปราศอยู่ในปัจจุบัน

การเมืองเรื่องความทรงจำ คือวิธีการนำเสนออดีตในรูปแบบต่างๆ ที่มักจะใช้ไปเพื่อกระตุ้นความรู้สึกร่วมของบุคคลปัจจุบัน และเมื่อความทรงจำได้ถูกผูกขาดโดยรัฐ เนื่องจากรัฐต้องการให้ประชาชนจำในเรื่องบางเรื่องและลืมในเรื่องบางเรื่อง การนำเสนอความทรงจำในหลายครั้งมีลักษณะความเป็นการเมือง กล่าวคือเป็นไปเพื่อกระตุ้นความรู้สึกร่วมของความเป็นชาติ ประเด็นเรื่องความทรงจำและการบอกเล่าความทรงจำจึงมีความเป็นการเมืองอยู่ในตัวของมัน ดังที่ปราศจากในงานของ Thongchai Winichakul (2020) ที่อธิบายความทรงจำของผู้ร่วมเหตุการณ์สังหารหมู่ 6 ตุลาคม 2519 ในมหาวิทยาลัยธรรมศาสตร์ ความทรงจำในเรื่องดังกล่าวถูกกดทับ บางเสียง บางมุมมองหากกว่าไม่สอดคล้องกับมุมมองที่รัฐต้องการได้ยินก็จะถูกกล่าวหาว่าผิดกฎหมาย และต้องระวังโทษมิ่นประบรมเดชานุภาพ

ความทรงจำแม้ว่าจะเกิดขึ้นในอดีตแต่ก็เป็นอดีตที่ยังปฏิสัมพันธ์กับการตีความในปัจจุบันและอนาคต เมื่ออดีตถูกบอกเล่าซ้ำ สิ่งที่ควรพิจารณาไว้เรื่องเล่าที่เกิดขึ้นซ้ำเหลือบันทึกเล่าแบบใดและเพื่อใคร เพราะการบอกเล่าอดีตก็สามารถทำหน้าที่รักษาไว้ซึ่งความชอบธรรมในการครองอำนาจของคนกลุ่มใดกลุ่มหนึ่งด้วยเช่นกัน (Koczanowicz, 1997) ดังที่ปราศในประเทศโปแลนด์ในยุคหลังจากรัฐบาลเด็ดจักรคอมมิวนิสต์ถูกโอนลงจากอำนาจในค.ศ. 1989 ประธานาธิบดีโปแลนด์ นาย Aleksander Kwasniewski ในฐานะสมาชิกพรรค Nomenklatura ได้เดินทางเยือนปราร์ส การเดินทางเยือนฝรั่งเศสในครั้งนั้นถือเป็นการเดินทางไปต่างประเทศอย่างเป็นทางการครั้งแรกหลังจากรับตำแหน่งใน ค.ศ. 1995 นาย Aleksander Kwasniewski ไปเยือนสถาบันวัฒนธรรมและเข้าพบผู้ก่อตั้งคือนาย Jerzy Giedroyc ในบ้านพักครั้งนั้นนาย Aleksander Kwasniewski ได้กล่าวถึงวารสาร Kultura ว่าวารสารดังกล่าวเป็นแหล่งความรู้ชั้นเลิศ แต่ก็โดนถามกลับมาว่าวารสารดังกล่าวถือเป็นภัยคุกคามต่อพรรคคอมมิวนิสต์และแกนนำพรรค Nomenklatura ระดับสูงไม่ควรอ่านวารสารดังกล่าว มิใช่หรือ นาย Kwasniewski รู้สึกอับอายและถึงกับต้องปฏิเสธความเกี่ยวข้องกับอุดมการณ์แบบคอมมิวนิสต์และในขณะเดียวกันก็พยายามชี้ช่องอุดมการณ์ที่อยู่ต่างข้ามกับคอมมิวนิสต์ อาทิเช่นพรรครัฐธรรมดากับ Solidarity ซึ่งมีส่วนสำคัญในการต่อต้านอุดมการณ์แบบสังคมนิยม

คอมมิวนิสต์ในโปแลนด์ก่อนสงครามเย็นจะสิ้นสุดลง (Koczanowics, 1997) เหตุการณ์ในครั้งนั้นยืนยันว่าความทรงจำเป็นเรื่องในอดีต แต่ก็เกี่ยวข้องกับเหตุการณ์ปัจจุบันว่าสิ่งใดถูกเลือกที่จะจำ หรือลืม เพื่อเหตุใด

การศึกษาการเมืองเรื่องความทรงจำในวิชาความสัมพันธ์ระหว่างประเทศจำนวนไม่น้อยมีลักษณะที่ความทรงจำนั้นเกี่ยวข้องกับความทรงจำบาดแผล (Trauma) (Resende & Budryte, 2014) การศึกษาในลักษณะดังกล่าวจะวิเคราะห์ความรุนแรงทางการเมืองและผู้คนมีประสบการณ์กับเหตุการณ์ไม่ว่าจะเป็นสงคราม การฆ่าล้างเผ่าพันธุ์ การก่อการร้ายภัยธรรมชาติ หรือวิกฤตทางเศรษฐกิจ โดย Resende & Budryte (2014) ได้ยกตัวอย่างการก่อการร้ายในกรุงมาดрид สเปน เมื่อ ค.ศ. 2004 และเหตุการณ์สีนามิที่ฟูกซิมะ ญี่ปุ่น เมื่อ ค.ศ. 2011 ว่าเหมาะสมที่จะมีการศึกษาว่าความทรงจำร่วมนั้นเกี่ยวข้องกับนโยบายต่างประเทศว่าด้วยผลประโยชน์ชาติและอัตลักษณ์ของผู้คนข้ามชาติอย่างไร เมื่อเวลาผ่านไปความทรงจำก็จะถูกผลิต บอกเล่ารักษา และผลิตขึ้นมาใหม่จากทั้งผู้คนที่เคยประสบเหตุการณ์นั้นและผู้คนภายนอกที่มองเข้ามายังฐานะที่เป็นตัวแสดงทั้งที่เป็นรัฐและไม่ใช่รัฐ

การนำเสนอความทรงจำ ไม่ได้ปราภูตแต่เพียงในตัวบท ถ้อยคำ แต่ยังปราภูอยู่ในภาพยนตร์และสิ่งปลูกสร้างอีกด้วย Biesecker (2002) ได้ศึกษาการนำเสนอความทรงจำและประวัติศาสตร์ไม่ใช่แค่เฉพาะในรูปแบบของตัวบทในรูปเล่มการพิมพ์ในหนังสือเรื่อง The Greatest Generation ของ Tom Brokaw และภาพยนตร์เรื่อง Saving Private Ryan เท่านั้น หากแต่ยังศึกษาผ่านการสร้างอนุสรณ์สถานสงครามโลกครั้งที่สอง ที่ National Mall ในกรุงวอชิงตัน ดีซีอีกด้วย โดย Biesecker (2002) กล่าวว่า โวหารในตัวบทและสิ่งปลูกสร้างเหล่านี้แม้ว่าจะบอกเล่าเรื่องราวในอดีต คือบทบาทของกองทัพสหรัฐอเมริกาในสงครามโลกครั้งที่สอง ความทรงจำส่งผลต่อการกำหนดคุณค่าและปัทสถานต่อพลเมืองชาวอเมริกันในยุคปัจจุบันว่าการเป็นพลเมืองที่ดีควรปฏิบัติอย่างไร สิ่งเหล่านี้ทั้งหมดจึงทำหน้าที่ในการยืนยันอีกครั้งหนึ่งของความเป็นชาติท่ามกลางสถานการณ์ซึ่งถูกตีความว่าเป็นภัยคุกคามของสหรัฐอเมริกาในขณะเวลานั้น (Biesecker, 2002) หากจะพิเคราะห์ถึงสถานการณ์ทางการเมืองระหว่างประเทศในต้นทศวรรษ 2000 สหรัฐอเมริกาเพิ่งถูกโจมตีจากกลุ่มก่อการร้ายอัลกอติดิชท์ ในเดือนกันยายน ค.ศ. 2001 บทความของ Biesecker (2002) จึงตีความว่าทั้งตัวบท ภาพยนตร์และสิ่งปลูกสร้างคืออนุสรณ์ชี้งี้เมื่อว่าจะมีการผลิตหรือก่อสร้างก่อนการก่อการร้ายใน ค.ศ. 2001 แต่เมื่อสหรัฐอเมริกาตกอยู่ในภาวะที่ต้องการสร้างขวัญและกำลังใจให้กับพลเมืองอเมริกัน สิ่งเหล่านี้ที่แรกจึงทำหน้าที่บอกเล่าประวัติศาสตร์เพื่อกระตุ้นการเล่าเรื่องของความเป็นอเมริกันและยังสามารถทำหน้าที่เป็นการนำเสนอความทรงจำซึ่งประกอบสร้างอดีตกับปัจจุบันเข้าด้วยกัน คือแนวทางการปฏิบัติของพลเมืองชาวอเมริกันที่ดี

ที่ควรจะเป็นกีดีอีกการสนับสนุนนโยบายต่างประเทศของสหรัฐอเมริกาภายใต้การนำของอดีตประธานาธิบดี George W. Bush ซึ่งปฏิบัติการทางการเมืองของด้วยคำไวหารภาพยนตร์และสิ่งปลูกสร้างเหล่านี้ยังส่งเสริมให้พลเมืองอเมริกันมีความรู้สึกชาตินิยมและสนับสนุนการรุกรานสหรัฐอเมริกาของอิรักในปี ค.ศ. 2003 (Balthrop, Blair, & Michel, 2010)

ดังจะเห็นได้จากการณ์ศึกษาของสหรัฐอเมริกาและการนำความทรงจำในอดีตมาใช้เพื่อวัตถุประสงค์ทางการเมืองในเวลานั้นคือการต่อต้านการก่อการร้ายของชาวอเมริกันปฏิเสธไม่ได้เลยว่ารัฐมีบทบาทในการควบคุมความทรงจำ ว่าเรื่องเล่าชุดใดสมควรรักษาไว้ในขณะที่เรื่องเล่าชุดใดสมควรที่จะถูกสังหารไม่ให้พูดถึง ดังที่ Sanyarat Meesuwan (2023) ได้นำเสนอถึงความทรงจำร่วมของรัฐไทยที่มีต่อสาธารณะชนจีนโดยเฉพาะอย่างยิ่งโครงการหนึ่งแถบหนึ่งเส้นทาง (One Belt One Road Initiative) โดยได้วิเคราะห์เรื่องเล่าที่ชั้นชั้นนำจากหน่วยงานภาครัฐของไทยผลิตขึ้นเป็นความทรงจำที่มีต่อสาธารณะชนจีน มีการวิเคราะห์เหตุการณ์ทางการเมืองโลกควบคู่กันกับนโยบายของรัฐไทย รวมถึงความเข้าใจของประชาชนไทยต่อนโยบายของรัฐไทยด้วย ในทำนองเดียวกันการศึกษาการเมืองเรื่องความทรงจำที่เน้นวิเคราะห์เสียงของผู้คนมากขึ้นก็ปรากฏในงานของ Khathaleeya Liamdee (2020) ซึ่งวิเคราะห์ถึงการเคลื่อนไหวของผู้คนในบริเวณชายแดนไทย-กัมพูชา ในช่วงสงครามอินโดจีนครั้งที่สาม โดยเฉพาะอย่างยิ่งความทรงจำจากการต้องลี้ภัยสังคมกลางเมืองภายในประเทศกัมพูชาทำให้ชาวกัมพูชาเป็นจำนวนมากต้องอพยพข้ามเขตแดนมาอยู่ในด้วยไทยโดยเฉพาะอย่างยิ่งในพื้นที่จังหวัดสุรินทร์ของไทยกับอุดรมีชัยของกัมพูชา เรื่องเล่าและความทรงจำของผู้คนในหลายครั้งก็เป็นมุ่งมองที่แตกต่างจากเรื่องเล่าและความทรงจำของรัฐ

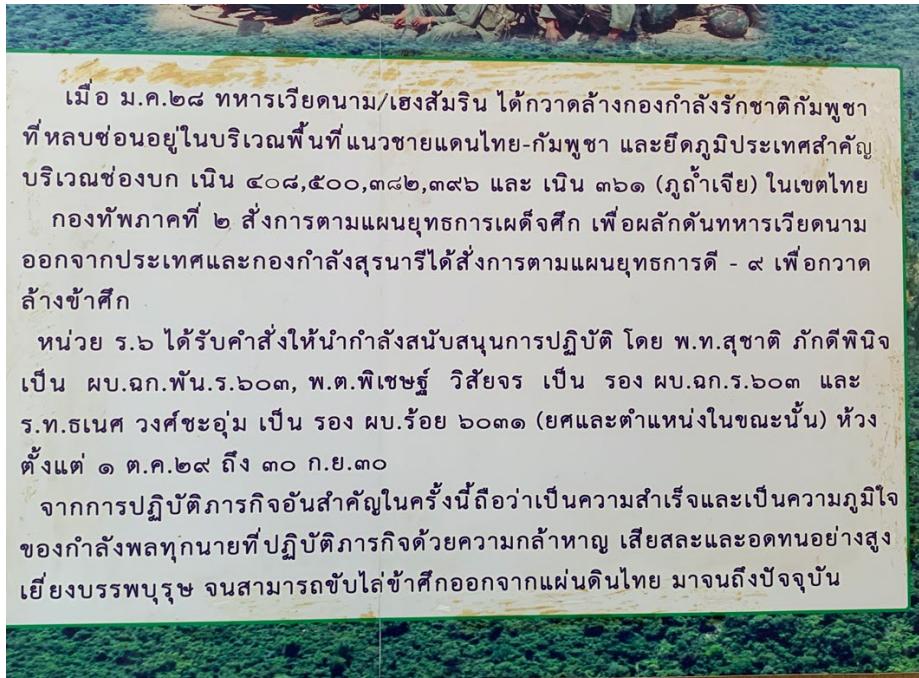
3. ความทรงจำของรัฐไทย: เรื่องของบกท.(ไม่)หายไป

ดังที่ได้กล่าวไว้ในการบททวนวรรณกรรมว่าประวัติศาสตร์กับความทรงจำเป็นสองแนวคิดที่ไม่ได้เหมือนกันแต่ประกอบสร้างซึ่งกันและกัน สมรภูมิของบกประภูมิอยู่น้อยมากในประวัติศาสตร์ของรัฐไทยและเมื่อเก็บข้อมูลในการทำวิจัย ความทรงจำของช่องบกประภูมิอยู่ในหน่วยงานรัฐ แต่เป็นไปในลักษณะที่มองว่ารัฐไทยประสบความสำเร็จในการรักษาบูรณาภิเษกแต่ต้องการให้ความสำคัญกับความต่อเนื่องทางประเพณี ดังจะได้ยกตัวอย่างในงานวิจัยของสุรพงษ์ ชัยนา (2559, 2560) ว่าด้วยการต่างประเทศของไทยกับกัมพูชา และสปป.ลาว ก็ปรากฏแต่เพียงการประทับกันทางทหารของไทยกับสปป.ลาว ที่สมรภูมิรับสามหมู่บ้านและบ้านร่มเกล้าใน ค.ศ. 1984 และ 1988 ซึ่งทั้งสองเหตุการณ์ได้มีการศึกษา

ในวงวิชาการอย่างกว้างขวางดังที่กล่าวไปแล้วนั้นแทบจะไม่ปรากฏ เช่นในงานวิจัยของ กระทรวงการต่างประเทศซึ่งเป็นหน่วยงานในระดับรัฐ (สุรพงษ์ ชัยนาม, 2559, 2560) Neher (1988) และ Raymond (2000) ระบุว่าสาเหตุหนึ่งที่แทบจะไม่มีการกล่าวถึงเรื่องของบก เพราะรัฐไทยประสบความล้มเหลวอย่างสิ้นเชิงในสมรภูมิของบก กล่าวคือ Neher (1988) ระบุว่าในช่วงเวลาหนึ่งกองทัพไทย และผู้บัญชาการทหารบก คือ พลเอกชวลิต ยงใจยุทธ มีภาพลักษณ์ที่เป็นบวกในสังคมไทยเป็นอย่างมาก แต่ด้วยปฏิบัติการที่ช่องบกที่ทหารไทยประสบความสูญเสียบุคลากรทางทหารไปร้าวสองร้อยนาย ขณะที่กองทัพเวียดนามมีทหารเสียชีวิตเพียงสี่สิบห้านาย (Raymond, 2020) ทำให้ภาพลักษณ์ของกองทัพไทยมีความด่างพร้อยขึ้นมา

ในขณะเดียวกัน เมื่อวิเคราะห์ความทรงจำของหน่วยงานรัฐในระดับท้องถิ่น มีความพยายามกล่าวถึงสมรภูมิของบกในเชิงชี้ชี้มว่าเป็นความสำเร็จของรัฐไทย ดังจะเห็นได้จาก ข้อมูลปฐมภูมิที่ได้รับข้อมูลจากการทหารรบที่ 6 ค่ายสรรสิทธิประสงค์ อำเภอวารินชำราบ จังหวัดอุบลราชธานี ในฐานะหน่วยงานที่รับผิดชอบในการรักษาบูรณาภิภัณฑ์ดินแดนของ รัฐไทยโดยตรง ภารกิจที่สมรภูมิของบกนั้นถือว่าประสบความสำเร็จ ทั้งนี้ บทความชี้นี้ วิเคราะห์การเล่าเรื่องจากอนุสรณ์สถาน เช่น พิพิธภัณฑ์ทหาร และคำบอกเล่าจากผู้ที่ได้รับ คือนายทหารที่ปฏิบัติหน้าที่ในปัจจุบัน โดยในพิพิธภัณฑ์มีคำบรรยายที่ระบุว่ารัฐบาลกัมพูชา ภายใต้การสนับสนุนของกองทัพเวียดนามได้กวาดล้างกองกำลังเขมรแดง ซึ่งกองทัพไทยอธิบาย ว่าเป็น “กองกำลังรักชาติกัมพูชา” ต่อสู้และถอยร่นมาประชิดชายแดนไทย-กัมพูชาในขณะนั้น ซึ่งสอดคล้องตามงานวิจัยของ Liamdee (2020) ว่ากองกำลังเขมรแดงวางแผนกำลังอยู่รัฐจัด กระจายตตลอดชายแดนไทย-กัมพูชาในเวลานั้น คำอธิบายของกรมทหารรบที่ 6 ว่ากลุ่ม เขมรแดงเป็นกองกำลังรักชาตินั้นสืบถึงสภาพการเมืองโลกคือการแตกกันของคอมมิวนิสต์ เมื่อสาธารณรัฐประชาชนจีนผูกมิตรกับสหรัฐอเมริกา และนโยบายต่างประเทศของไทย ในสังคมอินโดจีนครั้งที่สามที่สนับสนุนรัฐบาลสาธารณรัฐประชาชนจีนซึ่งมีความใกล้ชิดกับ กลุ่มเขมรแดง โดยการกวาดล้างเขมรแดงของกัมพูชาประชาชนนิติที่เป็นหุ้นเชิดของเวียดนาม ภายใต้การนำของนายเชง สัมรินใน ค.ศ. 1985 ก่อนที่จะมีการนำแผนการทางทหารไปใช้ ผลักดันกองกำลัง “ต่างชาติ” ที่ “รุกล้ำอธิปไตยของชาติ” ซึ่งอนุสรณ์สถาน พิพิธภัณฑ์ใน กรมทหารรบที่ 6 ได้ระบุไว้ ในช่วงตุลาคม ค.ศ. 1986 - 30 กันยายน ค.ศ. 1987 และ กรมทหารรบที่ 6 ภายใต้การบังคับบัญชาของกองกำลังสุรนารี ที่มีอำนาจหน้าที่ครอบคลุม การรักษาอธิปไตยในเขตอีสานให้ของรัฐไทยถือว่า “ยึดที่หมายได้ในเวลาอันรวดเร็ว” และ การกิจในครั้งนี้ “ได้ผลเป็นที่น่าพอใจเป็นอย่างมาก”

รูปภาพที่ 1 คำบรรยายใต้ภาพในพิพิธภัณฑ์ทหาร กรมทหารราบที่ 6 ค่ายสรรพสิทธิ์ ประสังค์ที่ก่อสร้างถึงสมรภูมิช่องบก



ที่มา: พิพิธภัณฑ์ทหาร กรมทหารราบที่ 6 ค่ายสรรพสิทธิ์ ประสังค์

Raymond (2000) กล่าวต่อไปอีกว่า กองทัพเวียดนามล่วงเส้นเขตแดนอธิปไตยของไทยเข้ามาทางช่องบกเป็นระยะทางถึง 3 กิโลเมตร เพื่อเป็นการสกัดกั้นไม่ให้กองกำลังเขมรแดงที่อยู่ในพื้นที่ของไทยใช้เป็นช่องทางเดินทางกลับไปยังกัมพูชา ด้วยความหวั่นวิตกของคณะรัฐมนตรีตกลดจนขาดการระดับสูงของไทย แม้แต่นักการทูตอย่าง Sukhumbhand Paribatra (1984) ก็ยังคาดการณ์ว่ากองทัพเวียดนามอาจรุกรานไทย ด้วยกองทัพเวียดนามในขณะนั้นมีความเชี่ยวชาญทางยุทธวิธีในการรบ แม้จะมีทหารเวียดนามในกัมพูชาอยู่ประมาณ 160,000 นายก็ตาม แต่ประกอบกับกองกำลังเวียดนามในสปป.ลาว และอาวุธที่สหรัฐอเมริกาเหลือทิ้งไว้ในเวียดนามได้ทำให้เวียดนามมีความได้เปรียบเป็นอย่างมาก ประกอบกับในเวลานั้นรัฐบาลเชง สัมริน ภายใต้การสนับสนุนของเวียดนามได้สร้างรั้วทางทิศเหนือของประเทศตามแนวชายแดนกัมพูชา-ไทย และมีทั่วประเทศเปิดฝั่งอยู่ริว่า 734 กิโลเมตร ช่องบกจึงอยู่ในสถานะที่เป็นพื้นที่อันตรายและพื้นที่แห่งความไม่แน่นอนด้วยเพราะมีค่ายผู้อพยพชาวกัมพูชาอยู่ตลอดแนวชายแดนในมุมมองของรัฐไทย (Raymond, 2020) แต่ถึงอย่างนั้นก็ต้องจอมตั้งช่องบกเพื่อเล daraเขมรแดงของเวียดนามกับประเทศอุปสรรคเมื่อเขมรแดงเองก็ได้รับ

ดังที่กล่าวไปในส่วนทบทวนวรรณกรรม แนวคิดเรื่องประวัติศาสตร์นั้นเป็นเรื่องของอดีต แต่ดีดความสามารถนำมาเพิ่มมิติให้เป็นความทรงจำได้เมื่อมีการนำสิ่งที่ผู้คนประสบพบเจอในอดีตมาตีความร่วมกับสถานการณ์ในปัจจุบัน ซึ่งความหมายของช่องบกยังคงถูกจำในฐานะพื้นที่สังคม แต่ทว่าก็ถูกนิยามต่างออกไปในนามสามเหลี่ยมมรดกที่มีนัยด้านการพัฒนาเศรษฐกิจและความร่วมมือในประเด็นอื่นที่เกี่ยวข้องซึ่งครอบคลุมพื้นที่ซึ่งกว้างขึ้นใน ค.ศ. 2000 ได้มีแผนงานจากรัฐบาลไทยในขณะนั้นโดยความร่วมมือกับรัฐบาล สปป.ลาว และกัมพูชาไว้พื้นที่สามเหลี่ยมมรดกจะเป็นส่วนหนึ่งในการพัฒนาความเชื่อมโยงระหว่างประเทศทั้งภูมิภาคลุ่มน้ำโขง (Greater Mekong Subregion) และระเบียงเศรษฐกิจตะวันออก-ตะวันตก (East West Economic Corridor) ซึ่งประกอบไปด้วยเจ้าจังหวัดจากสามประเทศ อันประกอบไปด้วยสตีงเตียง พระวิหารและอุต្រมีชัยจากกัมพูชา สามวันและจำปาสักจากสปป.ลาวและอุบลราชธานีและศรีสะเกษจากไทย (Ishida, 2012)⁷ ย่อมหมายความว่าพื้นที่ซึ่งเป็นจุดบรรจบกันของสามรัฐอธิปไตยในนามของบกถูกขยายออกไปอีกเจ้าจังหวัดในสามประเทศซึ่งมีนัยเชิงพัฒนาเศรษฐกิจและความร่วมมือในด้านอื่นเช่น การคุณภาพน้ำสิ่งการพัฒนาทรัพยากรธรรมชาติและการท่องเที่ยว เมื่ออ้างตามรายงานของหอการค้าจังหวัดอุบลราชธานีและงานวิจัยของประรานหอการค้าจังหวัดอุบลราชธานี (ชวิติ องค์ภานิช, 2553; กระทรวงการต่างประเทศ, 2555)

อย่างไรก็ตาม การประชาสัมพันธ์พื้นที่ซึ่งอดีตเป็นสมรภูมิที่ดุเดือดก็ไม่ได้หมายความว่าจะหายไปจากแผนพัฒนาของหน่วยงานภาครัฐ แม้ว่าจะมีแผนการพัฒนาความเชื่อมโยงระหว่างประเทศในส่วนอื่นที่ใกล้เคียงกัน นายศุภศิษย์ กอเจริญศุภ ผู้ว่าราชการจังหวัดอุบลราชธานี ซึ่งเริ่มดำรงตำแหน่งนี้ใน ค.ศ. 2023 ในฐานะผู้ให้ข้อมูลซึ่งแม้ในปัจจุบันจะเป็นข้าราชการสังกัดกระทรวงมหาดไทย แต่ในอดีตเคยปฏิบัติหน้าที่ข้าราชการทหารและคาดการณ์ว่าจะเกี่ยวกับช่วงสงครามอินโดจีนครั้งที่สามอีกด้วย ในทศนักษัตร์ ผู้ว่าราชการจังหวัดและกองอำนวยการรักษาความมั่นคงภายในราชอาณาจักร อุบลราชธานีนั้นช่องบกยังมีความสำคัญในฐานะพื้นที่แห่งความทรงจำทางประวัติศาสตร์และจังหวัดควรพัฒนาศักยภาพทางด้านคุณภาพน้ำสิ่งแวดล้อมและการค้าชายแดนกับประเทศไทยเพื่อนบ้านคือ สปป.ลาว และกัมพูชาในพื้นที่ซึ่งขยายตัวออกไป

⁷ หน่วยการปกครองของไทยกับกัมพูชาใช้คำว่าจังหวัดและอำเภอในความหมายเดียวกัน แต่ใน สปป.ลาว คำว่า แขวง จะหมายความว่า จังหวัดในภาษาไทยและเมืองจะหมายความว่าอำเภอ ในภาษาไทย

ภายในนามสามเหลี่ยมมรภทที่ไม่ได้จำกัดเฉพาะแต่จุดพบกันของสามรัฐอธิปไตย การปฏิสัมพันธ์จึงปรากฏในช่องทางอื่น คือด้านตราชูนเข้าเมืองถาวรที่บ้านช่องเม็ก อำเภอสิรินธรที่ติดกับบ้านวังเต่า เมืองโพนทอง สปป.ลาวที่อยู่ห่างจากช่องบกไปทางทิศเหนือเป็นระยะทาง 113 กิโลเมตรทางถนน⁸ และแผนการสร้างสะพานมิตรภาพไทย-ลาว แห่งที่หก ที่อำเภอโนนทรายกับเมืองลະคอนเพ็ง แขวงສາລະວັນซึ่งอยู่ห่างจากช่องบกไปทางทิศเหนือเป็นระยะทาง 235 กิโลเมตร⁹ ในส่วนของการแลกเปลี่ยนสัมพันธ์กับกัมพูชา เนื่องจากช่องทางจุดผ่านแดนชั่วคราวของอานม้า¹⁰ อุบลราชธานี คืออำเภอโนนยืนและจอมกระสาต์ของกัมพูชา ที่อยู่ห่างจากช่องบกเป็นระยะทาง 58.8 กิโลเมตรนั้นยังไม่ได้ถูกยกระดับให้เป็นจุดผ่านแดนถาวร (Srisuphan, 2020) จากการได้รับข้อมูลของเจ้าหน้าที่ที่ว่าการอำเภอโนนยืนในการประชุมเชิงปฏิบัติการสานสัมพันธ์ในภูมิภาคลุ่มน้ำโขงระหว่างเจ้าหนังงานในระดับอำเภอกรีเวณ ชายแดนไทย-กัมพูชานี้เดือนพฤษจิกายน ค.ศ. 2023 และข้อมูลจากสำนักงานพานิชย์จังหวัดอุบลราชธานี การข้ามแดนในบริเวณดังกล่าวยังเป็นไปอย่างจำกัด เพราะยังไม่มีการบังคับเขตแดนกันอย่างชัดเจน ทำให้เกิดความวิตกในเรื่องการสูญเสียอำนาจอธิปไตยในพื้นที่ชายแดน

ในระดับการปกครองส่วนท้องถิ่น นางสาววาราณา คำโถ ในฐานะนายกองค์การบริหารส่วนตำบลโดยมีประดิษฐ์ อำเภอโนนยืน จังหวัดอุบลราชธานีซึ่งรับผิดชอบในพื้นที่บริเวณเนิน 500 ในสมรภูมิช่องบกโดยตรงได้จัดการทำบุญประจำปีอยู่เป็นประจำ ในระหว่าง ค.ศ. 2015 และ 2016 ได้มีแนวคิดให้มีการสร้างอนุสรាយีทหารที่เคียงสูรับในสมรภูมิช่องบกขึ้นเพื่อให้คนรุ่นหลังได้รับลึกถึงวิรกรรมในอดีตเมื่อครั้งต่อต้านกองกำลังเวียดนามระหว่าง ค.ศ. 1986-1987 ด้วย เพราะในขณะนั้น ไม่มีอนุสรាយีในพื้นที่ มีแต่เพียงแผ่นหินที่บอกเล่าเรื่องราวของทหารที่ซึ่ง จำกัดกับสิบสองชุมชน แก้วประดิษฐ์ ตั้งอยู่บริเวณร่องชาติไทยที่เนิน 500 ที่จำกัดกับสิบสองชุมชน ได้รับคำสั่งเข้าตีกองกำลังฝ่ายตรงข้ามแต่ถูกอาวุธโจมตือย่างหนักจนกระหั่งเสียชีวิตและนับแต่นั้นเป็นตนมากีประภูรูปปั้นของจำกัดกับสิบสองชุมชน แห่งความทรงจำ ที่สร้างโดยหน่วยการปกครองส่วนท้องถิ่นตำบลโดยมีประดิษฐ์ อำเภอโนนยืน จังหวัดอุบลราชธานี (ชาติชยา ศึกษิต, 2558) และใน ค.ศ. 2020 ถังประภูมิการวางแผนพวงมาลัย อนุสรាយี พันตรีอนุพงษ์ บุญยะประทีป ในฐานะนายทหารที่ต่อสู้ในสมรภูมิช่องบก บริเวณเนิน 500 ใกล้เคียงกับบกอนุสรាយีของจำกัดกับสิบสองชุมชน ที่มีการบอกเล่าเรื่องราวในอดีตและความเป็นชาตินิยมให้กับผู้คนที่เดินทางมาเยี่ยมชม

⁸ โปรดดูแผนที่ขับรถจากช่องบก ไปยังช่องเม็กจาก Google (2567)

⁹ โปรดดูแผนที่ขับรถจากช่องบก ไปยังอำเภอโนนทรายจาก Google (2567)

¹⁰ โปรดดูแผนที่ขับรถจากช่องบก ไปยังช่องอานม้าจาก Google (2567)

ในปัจจุบันจากส่วนราชการไม่ว่าจะเป็นกองกำลังสุรนารีและองค์การบริหารส่วนท้องถิ่น (เกรียงเดช ปัญจันกุล, 2563)

ในความทรงจำของหน่วยงานทางด้านสาธารณสุข พื้นที่สามเหลี่ยมมรภต้นน้ำ มีความสำคัญเป็นอย่างยิ่งโดยเฉพาะการคุณภาพของผู้ป่วยจากกัมพูชาและสปป.ลาว เข้าสู่แหล่งบริการทางสาธารณสุขในอุบลราชธานี ผู้อำนวยการโรงพยาบาลสตรีพิธิประทรงค์ นายแพทย์มนต์ชัย วิวัฒนาสิทธิพงศ์ ที่มีประสบการณ์การรับราชการในโรงพยาบาลในหลายสาขาของจังหวัดอุบลราชธานี ก่อนจะย้ายมาปฏิบัติหน้าที่ในอำเภอเมืองกล่าวถึง บรรยายกาศในโรงพยาบาลน้ำยืนเมื่อครั้งสมคุณอินโดจีนครั้งที่สามเพิ่งสิ้นสุดลงว่าอดีตนั้น จะมีผู้ป่วยที่ได้รับบาดเจ็บจากการทำมาหากินในเขตพื้นที่ชายแดนสามเส้าซึ่งติดกันกับไทย กัมพูชาและสปป.ลาว ในลักษณะโดนทุนระเบิดผังดินแต่ในปัจจุบันกรณีคล้ายกันนี้ลดน้อยลงเป็นอย่างมาก และแม้จะมีกรณีเช่นนี้เกิดขึ้นในบริเวณช่องบกหรือพื้นที่ใกล้เคียง แต่ในโรงพยาบาลในอำเภอเดชอุดมซึ่งใกล้กับพื้นที่อำเภอน้ำยืนมากกว่าโรงพยาบาลสตรีพิธิประทรงค์ในอำเภอเมืองมีศักยภาพมากพอที่จะรับมือกรณีดังกล่าว นอกจากนี้ ในฐานะบุคลากรรัฐทางสาธารณสุข การปฏิสัมพันธ์กับผู้คนที่เดินทางมาใช้บริการทางการแพทย์จาก สปป.ลาว และกัมพูชาจำนวนมากขึ้นโดยอาศัยช่องทางอื่นที่ไม่ใช่จุดประเทศไทยรัฐอิปไตย คือช่องบกในอดีต ดังนั้น ความทรงจำของช่องบกในทัศนะของบุคลากรทางสาธารณสุขจึงยังคงเป็นพื้นที่แห่ง สมคุณภาพกว่าพื้นที่ทางเศรษฐกิจ ซึ่งแตกต่างจากช่องเม็กที่มีเส้นทางคุณภาพสูง เช่น ผู้ใช้บริการโรงพยาบาลทั้งรัฐและเอกชนในอุบลราชธานี จากสปป.ลาว เดินทางผ่านจุดผ่านแดนถาวรบริเวณช่องเม็ก อำเภอสิรินธร จากสถิติของกระทรวงสาธารณสุขด้วยชาวลาวที่มาใช้บริการโรงพยาบาลในจังหวัดอุบลราชธานีทั้งรัฐและเอกชน ใน ค.ศ. 2015 มีจำนวน ผู้ใช้บริการ 16,156 คน ใน ค.ศ. 2015 มี 13,383 คน ในปี ค.ศ. 2017 มี 15,116 คน และ ใน ค.ศ. 2019 ก่อนที่จะมีการปิดชายแดนเมืองสิ้น 16,098 คน (สมหมาย ชินนาค และกาญจนานา ชินนาค, 2566) และชาวกัมพูชาเป็นจำนวนมากได้อาศัยช่องทางที่ด่านผ่านแดนถาวรทั้งบริเวณ ช่องจอมในจังหวัดสุรินทร์และช่องสะจำในศรีสะเกษ โดยเฉพาะอย่างยิ่งช่องทางจากบริเวณ ช่องจอมที่อำเภอเชิงจังจังหวัดสุรินทร์เพื่อมาใช้บริการสาธารณสุขในจังหวัดอุบลราชธานี ตัวเลขโดยประมาณในปี ค.ศ. 2019 ย้อนหลังไปจะมีชาวกัมพูชาชาว 17,000 คนต่อปีใช้บริการ โรงพยาบาลรัฐ เช่น สรรพสิทธิประทรงค์ หรือโรงพยาบาลเอกชน เช่น อุบลรักษ์ อนบุรี (สมหมาย ชินนาค และกาญจนานา ชินนาค, 2566) ความพิเศษในการส่งเสริมความทรงจำในพื้นที่ซึ่งอยู่ บนจุดประเทศไทยที่ชายแดนสามเส้าอาจไม่ได้มีความสำคัญเร่งด่วนเท่ากับการสนับสนุนระบบ สาธารณูปโภคในพื้นที่อื่น เช่น อำเภอสิรินธรที่อยู่ทางเหนือของอำเภอน้ำยืน อำเภอตาลที่มี แผนการก่อสร้างสะพานมิตรภาพไทย-ลาว แห่งที่หก ชายแดนไทย-ลาวที่จังหวัดอัมnatเจริญ

และมุกดาหาร รวมไปจนถึงพื้นที่ชายแดนไทย-กัมพูชาบริเวณจังหวัดศรีสะเกษและสุรินทร์ ที่ครอบคลุมพื้นที่ของสามเหลี่ยมมรกตซึ่งจุดนี้มีความแตกต่างจากมุ่งมองของเจ้าหน้าที่ รัฐบาลตั้งจะได้กล่าวในส่วนต่อไป

4. ความทรงจำของภาคเอกชนและคนเมืองชายแดน: การ(ไม่)ประติดประต่อความทรงจำ

เมื่อมีการประกาศนโยบายที่ต้องการเปลี่ยนผ่านการค้า รัฐบาลไทยได้มีการประกาศนโยบายดังกล่าวต่อภาคเอกชน (ศิริสุดา แสนอิว, 2562) แต่บทความวิจัยขึ้นนี้เสนอว่าข้อมูลที่ถ่ายทอดสู่ประชาชนในพื้นที่ยังเป็นไปอย่างจำกัด เมื่อแผนการที่จะส่งเสริมสามเหลี่ยมมรกตโดยเฉพาะในพื้นที่ชายแดนสามเส้าไม่ประสบความสำเร็จ แต่ไปพัฒนาเติบโตในพื้นที่อื่นก็ไม่ได้มีการประชาสัมพันธ์ให้ภาคเอกชนและประชาชนเข้าใจถึงสถานภาพของโครงการในปัจจุบัน

ใน ค.ศ. 1988 พลเอกเปรม ติณสูลานนท์ นายกรัฐมนตรีไทยในขณะนั้นได้เดินทางเยือนกรุงมอสโก สหภาพโซเวียต ทำให้ภาพลักษณ์ความสัมพันธ์ระหว่างไทยกับโซเวียตนั้นดีขึ้น (Uhnger, 2015) ในขณะเดียวกันรัฐบาลเวียดนามก็ได้ประกาศว่าจะได้เริ่มถอนทหารออกจากกัมพูชา และหลังจากนั้นไทยได้เกิดการเปลี่ยนแปลงทางการเมืองภายใน คือมีการเลือกตั้งครั้งใหม่และได้นายกรัฐมนตรีคนใหม่ คือ พลเอกชาติชาย ชุณหะวัณ ที่ได้ประกาศคำขวัญที่ต้องการเปลี่ยนผ่านการค้าในอินโดจีนให้กลายเป็นผ่านการค้า (Phonpraphai, 2021)

ในภาพรวม ค.ศ. 2019 ปริมาณการค้าชายแดนระหว่างไทยกับสปป.ลาว มีมูลค่า 197,446.53 ล้านบาท (กระทรวงพาณิชย์, 2563) สินค้าส่งออกที่สำคัญจากไทย คือ น้ำมันเชื้อเพลิง ผลิตภัณฑ์ทางการเกษตรและอุตสาหกรรม สินค้านำเข้าที่สำคัญจาก สปป.ลาว สู่ไทย คือ เชื้อเพลิง ทองคำ ทองแดง พิชัพก และอุปกรณ์ไฟฟ้า เช่น โทรศัพท์ วิทยุ และโทรศัพท์มือถือ ซึ่งมีมูลค่าคิดเป็น 59,302.69 ล้านบาท มีมูลค่าสูงสุดในบรรดาจุดผ่านแดนถาวรไทย-ลาว และจังหวัดอุบลราชธานีที่จุดผ่านแดนถาวรด้านซองเม็ก-วังเตาเมืองศักยภาพตามมาเป็นอันดับที่สี่ของมูลค่าการค้าไทย-ลาว (กระทรวงพาณิชย์, 2565) ในขณะเดียวกันมูลค่าส่งออกระหว่างไทยกับกัมพูชาใน ค.ศ. 2020 คิดเป็น 133,046 ล้านบาท สินค้านำเข้ามีมูลค่า 23,001 ล้านบาท ใน ค.ศ. 2021 มูลค่าส่งออกคิดเป็น 143,115 ล้านบาทและนำเข้าคิดเป็น 25,989 ล้านบาทในภาพรวม ด้านการค้าที่มีมูลค่าโดยรวมสูงสุด 5 อันดับแรกประกอบไปด้วยด้านอุรุปะรัง เจ้าหน้าที่ ด้านคลองใหญ่ จังหวัดตราด ด้านจันทบุรี จังหวัดจันทบุรี ด้านช่องจอม จังหวัดสุรินทร์ และด้านซ่องสะจำ จังหวัดศรีสะเกษ และที่น่าสนใจคือ จังหวัดอุบลราชธานีซึ่งติดกับจังหวัดพะริหารไม่ติดอันดับ

หนึ่งในห้าเนื้องจากจุดผ่านแดนยังเป็นเพียงด้านประเพณี (กระทรวงพาณิชย์, 2565) ซึ่งถือว่า เป็นอุปสรรคประการหนึ่งในการยกระดับการพัฒนาและการค้าของพื้นที่บริเวณสามเหลี่ยม มรดกหรือซ่องบกที่เป็นบริเวณชายแดนสามสี

พื้นที่ซ่องบกซึ่งเป็นบริเวณติดกันของสามรัฐอิปปิตี้ อันประกอบไปด้วย อำเภอคำเนิน จังหวัดอุบลราชธานีของไทย เมืองมุนปะโมก แขวงจำปาสักของสปป.ลาว และอำเภอ จอมกระสาต จังหวัดพระวิหารของกัมพูชา เมื่อสัปดาห์ที่แล้วสืบต่อจากสุดยอดและรัฐไทยมีท่าที่สนับสนุนการค้าการลงทุนในสปป.ลาว และกัมพูชา พื้นที่ซ่องบกจึงได้รับการขานนามอีกครั้ง ใหม่ว่าเป็นสามเหลี่ยมมรดกและมีการสร้างศalaรวมใจ ณ จุดที่สามประเทศมาบรรจบกัน เพื่อเป็นสัญลักษณ์แห่งความร่วมมือและความสัมพันธ์อันดีในอนาคต (Supatn, 2012) ด้วยนัย ที่พื้นที่ดังกล่าวมีความอุดมสมบูรณ์ของป่าไม้ที่มีสีเขียว จึงใช้ชื่อว่าสามเหลี่ยมมรดกที่แปลว่า สีเขียวรัฐสามรัฐมารอบรัฐกันและกินพื้นที่นอกจากบริเวณนิน 500 ตำบลโดยประมาณ รัฐ อำเภอ คำเนิน ก็ขยายไปครอบคลุมอุบลราชธานีทั้งจังหวัดและอีกสามจังหวัดทางทิศตะวันตก คือ ศรีสะเกษ สุรินทร์ และบุรีรัมย์

ถึงแม้จะนั้นก็ต้องยังคงภูมิแพนการส่งเสริมการลงทุน การแลกเปลี่ยนทางการค้าและการท่องเที่ยวในพื้นที่ ณ จุดที่สามรัฐอิปปิตี้บรรจบกัน เช่น แผนการสร้างสนามกอล์ฟสาม แผ่นดินที่ฝ่ายกัมพูชาเสนอ ตลอดจนตลาดรับรองสินค้าจากทั้งสามประเทศ แต่ท้ายที่สุดแล้ว แผนพัฒนาพื้นที่ดังกล่าวก็ไม่อาจจะบรรลุผลลัพธ์ในการพัฒนาทางเศรษฐกิจเท่าที่ควร หากจะ เทียบกับพื้นที่ซึ่งเป็นจุดบรรจบของสามรัฐอิปปิตี้ในบริเวณลุ่มแม่น้ำโขง คือ สามเหลี่ยม ทองคำทางตอนเหนือของไทย ซึ่งเมียนมา ไทยและสปป.ลาวมีพื้นที่ชายแดนติดต่อกัน (Ishida, 2012) สาเหตุความร่วมมือทางเศรษฐกิจของสามเหลี่ยมมรดกซึ่งเคยเป็นพื้นที่สูรับในสมรภูมิ ซ่องบกไม่ประสบความสำเร็จเป็นเพราะว่า ประการแรกพื้นที่ดังกล่าวยังขาดสาธารณูปโภค ขั้นพื้นฐาน และถนนทางที่มีความสะดวกเข้าถึงได้ด้วยซึ่งเป็นอุปสรรคที่สำคัญต่อการขนส่ง ไม่ใช่แค่เฉพาะฝั่งไทย แต่ฝั่งสปป.ลาว และกัมพูชา ก็ไม่มีถนนทางที่สะดวกเข้ามาบริเวณ ชายแดนสามเส้าเช่นกัน เมื่อถูกถูกความทรงจำในอดีตเมื่อครั้งที่สังคมอินเดียเจนครั้งที่สาม เพิ่งสืบต่อ หนึ่งในสมาชิกของสภากองการค้าจังหวัดอุบลราชธานีได้บอกเล่าถึงประสบการณ์ การค้าขายที่ซ่องบกกว่าในอดีตที่กินเวลาค้าบกิ่ว ก่อนมีนโยบายเปลี่ยนสถานะเป็นสาม การค้าเมื่อ ค.ศ. 1989 พื้นที่ชายแดนสามเส้ามีภาพลักษณ์ของการขนส่งสินค้าผิดกฎหมาย โดยเฉพาะอย่างยิ่งการค้าไม้ เสื่อนจากกัมพูชา ภาพลักษณ์ของการค้าไม้เสื่อนข้ามชาติได้รับ การยืนยันจากผู้ให้ข้อมูลอีกหนึ่งคนที่เคยเป็นอดีตทหารประจำการในพื้นที่ซ่องบก เมื่อ ค.ศ. 1991 หลังจากปลดจากกองประจำการได้ประกอบอาชีพเป็นรปภ.ในอำเภอ วารินชำราบได้ให้ข้อมูลว่าช่วงระยะเวลาดังกล่าวตนเคยได้ยินและพบเห็นการขนไม้ในรัฐสินค้า

ข้ามแดนจริง ประเด็นการขันส่งไม้เดือนจากกัมพูชาmany ฝั่งไทยถูกสะท้อนในบทความวิชาการ ชาวต่างประเทศอย่าง Daniel Unger (2015) ว่า นักธุรกิจสัญชาติไทยมีความเกี่ยวข้องกับ นักการเมืองกัมพูชาที่จะช่วยอำนวยความสะดวกในเรื่องการขันส่งไม้ข้ามชายแดนmany ฝั่งไทย ตั้งแต่ก่อนการเข้าไปของกองกำลังรักษาสันติภาพใน ค.ศ. 1991 และพื้นที่เป้าหมายอยู่บริเวณ ตะวันออกเฉียงเหนือของกัมพูชาซึ่งเป็นพื้นที่สามเหลี่ยมรัฐ

ในความทรงจำของนายเอ (นามสมมติ) ในฐานะเยาวชน เพศชายที่เกิดเมื่อ ค.ศ. 1997 และเติบโตในพื้นที่ตำบลโดยมีประดิษฐ์ อำเภอโน้นยืน จังหวัดอุบลราชธานี ซึ่งบกถูกอธิบาย ในฐานะพื้นที่สูรับ ซึ่งนายเอกพงศ์คำบอกเล่าจากผู้เป็นยายวัย 73 ปีของตนว่าเป็นการต่อสู้ ระหว่างกองทัพไทยกับกัมพูชา แต่ก็ไม่ได้ระบุลงรายละเอียดว่าเป็นกัมพูชาฝ่ายที่ได้รับการ สนับสนุนจากเวียดนามในขณะนั้น และในขณะเดียวกันกองทัพไทยก็สนับสนุนกองกำลังทหาร จากกัมพูชาภายใต้ชื่อเขมรแดง

รองประธานหอการค้าจังหวัดอุบลราชธานีและคณะได้ให้ข้อมูลว่าเป็นอุปสรรคที่สำคัญ ต่อการเข้าไปลงทุน ภาคเอกชนจึงเลือกที่จะลงทุนในเส้นทางที่มีความสะดวกมากกว่า เช่น การขันส่งจากอุบลราชธานีสู่แขวงจำปาสักของ สปป.ลาว ผ่านด่านช่องเม็ก-วังเต่า ก่อสร้าง โรงพยาบาลไฟฟ้าจากพังงาลงในเมืองดากัง แขวงเชกวงที่ติดกับประเทศไทยชื่อว่าเป็นวิธีการขันส่งวัตถุดิบผ่านช่องเม็กของจังหวัดอุบลราชธานี เพื่อเดินทางผ่านไปยังจำปาสักและ เชกวง เนื่องจากเส้นทางคุณน้ำมีความเหมาะสมมากกว่าที่จะส่งจากเวียดนามแล้วข้าสู่ เชกวงโดยตรง ดังนั้น ในมุมมองของเอกชนสาธารณะปีกอุบลราชธานีพื้นฐานมีความสำคัญมากต่อการ ตัดสินใจลงทุน ในประเด็นเรื่องเส้นทางคุณน้ำ แม้แต่ด้านยุทธศาสตร์ที่เคยประจารอยู่ บริเวณช่องบกและปัจจุบันปลดประจำการและประกอบอาชีพอยู่ในวารินชำราบ อุบลราชธานี รวมถึงเยาวชนรุ่นใหม่วัย 25 ปีที่มีภูมิลำเนาอยู่อำเภอโน้นยืนก็ยืนยันว่าเส้นทางคุณน้ำ ขันส่งไปสู่เนิน 500 และการยกระดับพื้นที่ช่องบกขึ้นเป็นแหล่งท่องเที่ยวเชิงประวัติศาสตร์ ก็ถือว่าเป็นอุปสรรคที่สำคัญ

นอกจากนี้ แม้ว่าพื้นที่ดังกล่าวจะมีความอุดมสมบูรณ์ทั้งทางด้านพันธุ์ไม้และสัตว์ป่า และมีศักยภาพที่จะสนับสนุนให้เป็นแหล่งท่องเที่ยว นายเอได้ให้ข้อมูลว่าฝั่งไทยเองก็เป็นพื้นที่ เขตราชอาณาจักรสัตว์ป่าอยอดดิบ โดยมีรัฐบาลไทยบังเอยด์ความเห็นว่าไม่สมควรจะส่งเสริม ให้พื้นที่ดังกล่าวเป็นแหล่งท่องเที่ยวเนื่องจากส่งผลกระทบต่อธรรมชาติ (ศิริสุดา แสนอิว, 2562) ซึ่งเหตุผลข้อนี้ได้รับการสนับสนุนข้อมูลจากสำนักงานพานิชย์จังหวัดอุบลราชธานีเพิ่มเติมจาก การทบทวนวรรณกรรมอีกด้วย ประการที่สามในพื้นที่ฝั่งกัมพูชาอย่างปรากฏว่ามีกับรัฐเปิดที่ยัง ไม่ได้ทำการกู้อยู่เป็นจำนวนมาก ทำให้อาจเป็นอันตรายต่อผู้ทำการสัญจร เมื่อต้องมีการ แลกเปลี่ยน (Liamdee, 2020) จากการเก็บข้อมูลเพิ่มเติมจากการรักษาความมั่นคง

ภายในราชอาณาจักร กับระบบที่ไม่ได้มีเพียงแค่ในฝั่งกัมพูชาเท่านั้น แต่ยังมีในฝั่งไทยอีกด้วย เนื่องจากในช่วงการสูรปไม้ใช้แค่ทหารกัมพูชา และเวียดนามที่วางกับระบบที่แต่ทหารไทยก็วาง ด้วยเช่นกัน ในการเก็บกู้ภัยกับระบบที่ต้องใช้บประมาณเป็นจำนวนมากและต้องอาศัยความร่วมมือ ทั้งสามประเทศไม่ใช่แค่ประเทศไทยและประเทศนั้น ข้อมูลในส่วนนี้ได้รับการสนับสนุนจากนายเอ ในฐานะคนรุ่นใหม่ เขากล่าวว่าพื้นที่ที่อยู่ในบก โดยเฉพาะใน 500 นั้นมีภูมิภาคลักษณะเป็นพื้นที่ อันตรายและเคยมีประชานชนได้รับบาดเจ็บจากกับระบบที่มีความหลากหลายของป่า จนแทนจะไม่มีใคร สนับสนุนให้บุตรหลานของตนเดินทางไปใกล้บริเวณดังกล่าว เมื่อเป็นเช่นนี้ในฐานะคนในท้องถิ่น ชายแดนไทย-ลาว-กัมพูชาจึงไม่ประติดประต่อ ซึ่งแตกต่างจากพื้นที่ชายแดนไทย-ลาวในจุดอื่น เช่น ซ่องเม็ก-วังเต่า หรือโขงเจียม-ชานะสมบูรณ์ ที่มีการติดต่อสัมพันธ์ของผู้คนโดยตลอด (Wisaijorn, 2021)

ประการที่สี่ ภูมิภาคเป็นด้านการขนส่งของทั้งไทย สปป.ลาว และกัมพูชา มีความ แตกต่างกัน เช่น การขนส่งมันสำปะหลังไปยัง สปป.ลาว ฝั่งสปป.ลาว พร้อมจะส่งออกจาก ทุกแขวง แต่ฝั่งไทยอนุญาตให้นำเข้าและส่งออกได้จังหวัดละหนึ่งจุดผ่านแดน ซึ่งอุบลราชธานี ใช้จุดผ่านแดนถาวรที่ด่านช่องเม็กที่ติดกับแขวงจำปาสัก อย่างไรก็ตาม อุบลราชธานีมีพื้นที่ ซึ่งติดกับแขวงใน สปป.ลาว อีกสองแขวงคือ ทั้งสะหวันนะเขตและสลาลวัน ทำให้การขนส่ง มันสำปะหลังทำได้เพียงแค่ผ่านช่องเม็กเข้าสู่แขวงจำปาสักเพียงจุดเดียว และยังไม่ได้มีการ พุดคุยอย่างเป็นทางการเพื่อแสวงหาทางออกในการสนับสนุนให้พื้นที่ดังกล่าวพัฒนาเป็นแหล่ง ทองเที่ยวได้ คำอธิบายดังกล่าวเป็นคำอธิบายที่ได้ข้อมูลจากภาคธุรกิจของรัฐไทย ทั้งในระดับ รัฐบาลและท้องถิ่นซึ่งระบุถึงสาเหตุของความไม่ประสบความสำเร็จในแง่ความร่วมมือทาง เศรษฐกิจของสามรัฐอิปปี้ ประการที่ห้า ปัญหาการบกบังเขดแนรงหวังไทยและกัมพูชา นับตั้งแต่พื้นที่ช่องสะจำ จังหวัดศรีสะเกษมานั่นเป็นจุดที่ต้องการเดินทางผ่าน สำหรับ ไม่มีความชัดเจน ทำให้มีปัญหารือเรื่องความวิตกกังวลในการละเมิดบูรณาภาพแห่งดินแดนระหว่าง ไทยและกัมพูชา ผลกระทบที่ตามมาคือ ที่บริเวณด้านซ้ายของอุบลราชธานีที่ติดกับอำเภอ จอมกระสาต์ไม่สามารถมีจุดผ่านแดนถาวรได้ ทำให้ชาวกัมพูชาที่ต้องการเดินทางเข้ามา ยังประเทศไทย ลึกเข้ามายังตัวเมืองอุบลราชธานีต้องเดินทางผ่านจุดผ่านแดนช่องสะจำ อำเภอ ภูสิงห์ จังหวัดศรีสะเกษ ด้วยอุปสรรคทั้งทางการที่กล่าวมานี้ทำให้พื้นที่ช่องบกยากที่จะเป็น ชายแดนที่จะมีการติดต่อถึงกันและกัน เมื่อเทียบกับพื้นที่ชายแดนในส่วนอื่นของสามเหลี่ยม มรภตที่ครอบคลุมพื้นที่จังหวัดอุบลราชธานีทั้งจังหวัดและศรีสะเกษ การบอกรเล่าข้อมูล เชิงนโยบายก็ขาดการประชาสัมพันธ์ที่ให้ประชาชนทั่วไปสามารถเข้าถึงและมีส่วนร่วมในการ แสดงความคิดเห็นได้

5. สรุป

ซึ่งบก เป็นพื้นที่กรณีศึกษาในบทความขึ้นนี้ ในปัจจุบันเป็นส่วนหนึ่งของพื้นที่ซึ่งรัฐจัดกันในเชือกมหานครต ซึ่งมีนัยของความร่วมมือทางเศรษฐกิจ พื้นที่บริเวณนี้เป็นชายแดนระหว่างรัฐอิสระไทยและ คือ ไทย กัมพูชา และสปป.ลาว ในไทยเป็นพื้นที่ของอำเภอราย จังหวัดอุบลราชธานี ในสปป.ลาว คือ เมืองมุนปะโนก แขวงจำปาสัก ส่วนกัมพูชา คือ จอมกระสา จังหวัดพระวิหาร ปัจจุบันซึ่งบกบริเวณชายแดนสามเส้าเทบจะไม่มีความสำคัญในการเติบโตทางเศรษฐกิจ การบันทึกความทรงจำของทั้งหน่วยงานภาครัฐและเอกชนมีความหลากหลายและขาดความประติดต่อ แม้หน่วยงานภาครัฐเองก็ยังมีความแตกต่าง ในงานวิจัยระดับชาติตัวตัวความสัมพันธ์ไทย-สปป.ลาว และไทย-กัมพูชาเทบจะไม่ได้กล่าวถึงการสรุปในสมรภูมิซึ่งบกโดย แต่หน่วยงานภาครัฐในระดับจังหวัดยังคงกล่าวถึงสมรภูมิซึ่งบกความสำคัญในฐานะพื้นที่แห่งความทรงจำเชิงประวัติศาสตร์และยังยืนยันว่าครรษณ์การเติบโตทางเศรษฐกิจในลักษณะพื้นที่แห่งความทรงจำในอดีตเพื่อพัฒนาเป็นแหล่งท่องเที่ยวทางประวัติศาสตร์ อีกทั้งแหล่งท่องเที่ยวเชิงธรรมชาติที่ยังถือว่ามีศักยภาพในการพัฒนาในอนาคต ในขณะที่ภาคเอกชนโดยเฉพาะอย่างยิ่งหน่วยการค้าจังหวัดอุบลราชธานีนั้นเสนอว่าการพัฒนาเศรษฐกิจสามเหลี่ยมมีรัฐไม่จำเป็นต้องผูกติดกับพื้นที่ชายแดนเป็นสำคัญหากแต่สามารถขยายการพัฒนาออกไปยังจังหวัดใกล้เคียงได้ เนื่องจากพื้นที่ซึ่งบกขาดตอนหนทางที่สอดคล้องในการเดินทาง และรองรับการสูบหักการผังกับระบบที่มีการเก็บกู้

ถึงอย่างนั้นก็ดี บทความวิจัยขึ้นนี้เสนอว่าการรับฟังความคิดเห็นที่หลากหลายเป็นสิ่งที่จำเป็นอย่างยิ่งในการบันทึกความทรงจำทั้งจากหน่วยงานภาครัฐ สถาหอการค้าในฐานะเอกชน รวมถึงประชาชนในพื้นที่ การเมืองเรื่องความทรงจำมีความเกี่ยวข้องกับประวัติศาสตร์และความทรงจำคือ ประวัติศาสตร์ที่ต้องตีความให้เหมาะสมกับสถานการณ์ในปัจจุบัน บทความฉบับนี้เสนอว่าหากหน่วยงานภาครัฐต้องการส่งเสริมเศรษฐกิจโดยใช้การเมืองเรื่องความทรงจำ รัฐไทยควรเป็นผู้นำเริ่มต้นในการส่งเสริมการพัฒนาสาธารณูปโภคและแนวทางคุณภาพเข้าสู่อำเภอราย จังหวัดอุบลราชธานี การสร้างความทรงจำพื้นที่ชายแดนควรเปิดกว้างและมีความยืดหยุ่นในการเปลี่ยนผ่านความทรงจำควรเคารพเสียงจากตัวแสดงที่เป็นรัฐและไม่ใช่รัฐที่มีแตกต่างหลากหลายมากยิ่งขึ้นและเปิดเวทีในการแลกเปลี่ยนความคิดเห็น เพื่อโอกาสในการสร้างพื้นที่แห่งเศรษฐกิจเชิงสร้างสรรค์ในเมืองชายแดนในอนาคตระหว่างอุบลราชธานีของไทย จำปาสัก ของสปป.ลาว และพระวิหารของกัมพูชา

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Navigating Environmental Security in the Anthropocene: The Potential for Cooperation and Conflict in International River Basins

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Abstract

The paper argues that from an analytical perspective, an international river basin (IRB) offers a particular geographic and structural context, as it represents an interrelated, connected, geographic space. Climate change impacts have not only direct consequences for the availability and quality of water resources - spanning from changing precipitation events, flood events, or a higher rate of evaporation - but even more fundamental, long-lasting impacts as the major source of comprehensive environment degradation associated with the Anthropocene approach. When considering the actual and further potential impact on the availability of water resources and the distribution challenge, the prospects for aggravating lingering political conflicts, or even generating new political conflicts between the countries sharing an IRB becomes an even greater possibility. However, it would be misleading to assume that all countries within an IRB are exposed to environmental degradation and climate change impacts to the same extent. It is worth recognising that structural inequality exists within an IRB, that between upstream and downstream countries, as up-stream countries may be in a better situation to address related challenges. Moreover, environmental and climate change impacts in an IRB go far beyond the water resource issue, representing a microcosm for applying the Anthropocene approach.

Keywords International River Basins, Environmental Security, Resource Distribution, Regional Cooperation

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1. Introduction

When we consider international river basins (IRB) as a focus for addressing environmental security, several related issues need to be addressed. Among them are issues of resource distribution and the level of existing amity or enmity between the countries located within an IRB. Such considerations will also have a fundamental impact on the extent to which the countries within an IRB are willing to cooperate to address environmental and climate change impacts. After all, a common structural inequality between upstream and downstream countries within an IRB exist, since upstream countries are in a stronger position to take advantage of water resource distribution and thus may be in a better situation to address climate change impacts. The potential and level for regional cooperation in addressing environmental and climate change impacts within an IRB are also influenced by the anarchic character of the International System (IS) and associated topics of national insecurity, or to be more precise, the perception of it. The extent to which bilateral threat perceptions can be overcome and cooperation can take place between the countries of an IRB will have a crucial impact on how they will address environmental security challenges. In this regard, a focus on IRB also could provide some further insight into the ability to generate trust and cooperation within the context of an anarchic IS.

Concerning environmental security, the original focus on the impact on humans and human societies has given way to a more comprehensive focus as identified by the Anthropocene approach which alerts us to the comprehensive negative impacts generated by and through human development such as environmental degradation, climate change, and biodiversity loss. As such, the Anthropocene approach provides an integrating view of distinctive, but specific fundamental challenges humanity and the globe are facing. Besides, focusing on IRBs as a potential source for regional cooperation, IRBs also offer a specific focal point for investigating the implications of the Anthropocene approach. While environmental security has now become an established concept in both academia and politics, it is still a rather new concept when compared with the traditional perception of security, with its focus on military means and the state. This is even more relevant with regard to the Anthropocene approach. Hence, the ongoing dominance of the traditional state and military focus on security, based on the amount of financial resources spent, needs to be taken into consideration considering IRBs as a focus for addressing environmental and offering a source for cooperation. After all, resources re-directed to traditional security sectors are seldom available for addressing the impacts of climate change and the related Anthropocene challenge. As such, the paper provides a rather novel approach to identifying the source and challenges for cooperation within IRBs.

Recognising IRBs as a structural space, based on geographic proximity and deepening relations, represents a suitable first step forward in identifying IRBs as a strategic setting for addressing climate change-environmental degradation nexus challenges as emphasised within the Anthropocene approach. Painter's (2010, 1,093) assertion that space can best be recognised as the consequence of networked relations supports such an assessment. Closely related characteristics can be differentiated into physical, functional, and ideational aspects, consequently supporting the perception of a particular linked space. From a physical perspective, IRBs constitute an interrelated ecosystem covering an extended geographical space connected by a river. From a functional perception, on the other hand, the prospects for economic cooperation and infrastructure connectivity also provide a strong argument. One added aspect, supporting the focus on IRBs, can be identified as social proximity, based on social, cultural, linguistic, or historical links. Therefore, various aspects of proximity do offer the opportunity for enhancing cooperation and reducing enmity between the countries within an IRB.

Even so, it should be pointed out that geographic proximity has a Janus-faced character, as it can be the source for conflicts, not least because of the anarchic character of the IS, which generates a perception of enmity between neighbouring countries. It is also crucial to remember that environmental degradation has the potential to generate comprehensive transnational impacts, since environmental and climate change impacts occur in the context of specific geographic settings, such as mountain ranges, coastal areas, or river basins, and are not restricted by national borders. In the case of IRBs the availability and distribution of water resources within an IRB reveals a clear conflict potential related to the climate change-environment degradation impact, associated with the Anthropocene approach. The existing structural inequality between upstream and downstream countries within an IRB further highlights this conflict potential between the different countries. Consequently, we can identify various aspects of interlinkages within an IRB that may either support or hamper efforts to address environmental security issues. It is worth remembering that climate-change-related risks are characterised as a combination of exposure and vulnerability to climate change impacts (UNEP, 2021).

The paper is organised in the following way. The next section will evaluate the process of how the understanding of security is changing, thus offering an opportunity to identify environmental and climate-change-related issues as security topics. This is followed by a discussion about the Anthropocene approach and its implications. After all, if we accept the Anthropocene approach, then, we also have to acknowledge its comprehensive evaluation of the human impact generated, going beyond the traditional environmental security focus which mostly focuses on the impact on humans.

The next section puts IRBs in the spotlight of analysis for addressing environmental security challenges.

2. Environmental degradation as a security topic

When considering environmental degradation and climate change as security issues, it is crucial to recognise that environmental security belongs to the so-called non-traditional security topics. Non-traditional security issues focus on development, human security, and the environment which are often identified as secondary security issues, whereas security issues related to national security and military issues are typically described as traditional, primary, security issues. Another, and equally important, differentiation is that, while the traditional security focus is strongly associated with a state focus, non-traditional security issues focus on the impacts generated on humans and society.

2.1 The fragmentation and proliferation of the meaning of security

With the end of the Cold War era and a reduced possibility of a nuclear war, we witnessed a fragmentation and proliferation of what security meant; the traditional, military and state-focused security emphasis no longer seemed to be fit for fully addressing the emerging security challenges of the time. For that reason, there was a growing awareness that alternative security issues – human health, social welfare and social disadvantages, environmental degeneration, and political and social identity – were leading to a wider interpretation of the meaning of security. This is a position supported by Buzan, Waever, and de Wilde (1998), stating that the meaning of security should be broadened to include not only the military aspect of state security but also economic and ecological aspects. Walker (1997) emphasises that the differentiation between security and development (what he identifies as an artificial distinction) needs to be broken down. Likewise, in the view of Smith (2005), the conceptualising of security should begin with a focus on the real conditions of insecurity that people and collective entities are facing. Those developments, in turn, led to further critical inquiries into how we should re-interpret security, resulting in a number of processes, including the deepening of security, to overcome the abstraction of military issues from their broader contexts; broadening of security, moving away from a narrowly military focus; extending security, overcoming the strong state focus by incorporating other levels of analysis as social, ethnonational or religious identities, or individuals; and to consider security as emancipation, which means the freeing of people – as individuals and groups – from constraints (Jones, 1999). Interestingly enough, Katzenstein (1996, p. 10) argues that, with these alternative interpretations of the meaning of security, we are re-discovering an older, nineteenth-century interpretation of security, which included a social and economic dimension. Human Security Unit Office for the Coordination of Humanitarian Affairs (2009) concept offers yet

another example of redefining the meaning and focus of security, with a strong people-centred focus. It also highlights the complexity of insecurity by including seven elements: economic security; food security; health security; environmental security; personal security; community security; and political security. It therefore offers another indication that the link between development and security has gained prominence.

Even as it is now generally acknowledged that the conception of security underwent a critical re-evaluation process in the 1990s, as more subjects were added to the security discourse, it still represents an ongoing process of re-evaluation. After all, traditional security threat perceptions are still considered primary by many political decision makers and academic analysts. Yet it was within the Critical Security Studies approach that the increasing complexity of security challenges had been recognised early on. Still, Booth (2005) reminds us that a politic-free definition of security does not exist, as political and social actors interpret security differently. Smith (2005) similarly argues that the conceptualisation of security is based on diverging opinions of what politics is and should be about. This echoes Buzan et al. (1998) in their earlier position that it represents a political choice to securitise a particular issue, adding that securitisation implies that a specific issue is presented as an existential threat. Consequently, more resources to address this specific security issue will be made available.

Within this context, environmental security also rose in its relevance. This change in perception is not without justification, as recurrent extreme weather and climate events can be viewed as an indication of the increasing challenges we face in this respect, with the prospect that the character of climate change may change from a linear process to one characterised by abrupt changes, with all their expected devastating impacts, since we are on track of grossly missing the agreed 1.5-degree target with regard to global warming. Despite that, environmental security has still not replaced traditional national security in its relevance.

2.2 Environment security: An evolving concept

Despite the continuing strong support for a traditional interpretation of security, non-traditional security threats have become more significant in their impact, with environmental security representing a prominent example. As environmental degradation and the impacts of climate change increase in their force, challenging and undermining the development prospect for individuals and communities – and national development strategies and development gains already made – environmental security as a concept is increasing in its relevance. Indeed, with an ongoing intensification of the climate change impact and associated risks, environmental security issues have even begun posing a threat to political stability. As stated before, when considering the term ‘environmental

security', a crucial qualification needs to be made as it focusses on the social, political, and economic implications for humans. Buzan et al. (1998) alert us to another crucial feature of environmental security, as one can identify two different aspects when considering the application of environmental security: one focus is on the environment itself, and the other on the link between civilisation and the environment. While the first one dominates the focus of environmental security, the later aspect rises in prominence with the Anthropocene concept. However, even before the Anthropocene concept gained in status, questions about the sustainability of the extensive growth model underlining economic development became a focal point for environment security. Within the Anthropocene approach, this focus and its devastating impact on the environment is strongly re-emphasised and will be evaluated in more detail in one of the following sections.

Concerning the environmental security agenda, one could argue that it, at least partially, underwent a successful securitisation process, since related impacts and security challenges are increasingly recognised. Yet environmental security still has not gained the same recognition, or 'status,' as traditional, state-focused, security, even as the destructive impact of the excessive economic growth model on the environment is increasingly recognised. The year 2021, with its floods, wildfires, storms, and heat waves, was a compelling reminder of the impact climate change has recently been generating. Yet, based on previous years' experiences, the indications are that 2021 was not a so-called 'once-a-century' episode. Based on this experience, and the impacts climate change generated in previous years, a continuous interpretation of environmental security as a secondary security threat should no longer be accepted, as events indicate a new quality of risk which in turn should lead to a transformation of our awareness of security threats. Therefore, environmental security should be recognised as a particular risk category and integrated into any national risk assessment (Ploberger and Filho, 2016). After all, the purpose of a risk assessment is to address the uncertainty of future events. Consequently, the continued interpretation of environment security as a secondary security threat should no longer be accepted. The most recent edition of the Global Risk Report (2022) states that, short of a comprehensive response, our capacity for mitigating and adapting will shrink fast, consequently, the failure to act in addressing climate change has been identified as the risk category with the highest damage potential at the global level within the next decade.

Demands that we recognise the increasing relevance of environment security as a fundamental global security challenge are further supported not only by the actual climate change related impact we already can observe but also from a conceptual perspective, based on the Anthropocene approach.

3. A revolutionary, all-encompassing, approach to environmental security: The Anthropocene concept

While the Anthropocene concept has gained considerable weight, there are still unsettled issues linked to it. It is worth recognising that the Anthropocene – the period that supposedly represents the most recent period in Earth's geological history, during which humans started to generate a significant impact on the planet – has now been rejected as a description of a geological period. In early March 2024, The International Union of Geological Sciences confirmed the dismissal of recognition of the Anthropocene as a description of a new geological time. However, the Anthropocene concept has been recognised as an essential description of the impact humanity had and has on the Earth system. As such it has preserved its value as a focus for recognising humanity's impact, after all, as stated before, it provides an umbrella for the various impacts generated by humans and the climate change dynamic. Even the original statement made by Crutzen and Stoermer (2000) who argued that the Anthropocene represent a new geological epoch has now lost some of its value. While Maslin and Lewis (2015, p. 108) point out that a general scientific agreement has been reached that human activity has generated a profound influence on the Earth's system, with the above-mentioned decision, humans as the source of a new geological epoch have been rejected. Still, as emphasised by Dalby (2014, p. 442), applying the concept of the Anthropocene also highlights the challenges generated through human actions, as opposed to natural causes. This is a position shared by Delanty and Mota (2017, p. 12), describing the Anthropocene as the result of the fundamental transformation of the earth through human activity. A position which still can be upheld today. Harrington (2016, 481) states that the Anthropocene indicates the arrival of a new reality, characterised by complex and interwoven linkages between humans, non-human creatures, and things.

3.1 Ongoing discourse about the historical origins of the Anthropocene

While the Anthropocene concept has gained some acceptance, there are still a number of issues that have to be discussed. Harrington (2016, p. 483) points out that identifying a specific period as the beginning of the Anthropocene invites fundamental questions about its character and who can be held accountable for it. Similarly, Editorial Comment (2003, p. 251) points out that selecting a specific date for the start of the Anthropocene remains rather subjective. To assess the controversy we may consider Ruddiman et al. (2015) who refer to the 'Early Anthropocene' thesis, with a focus on the beginning of agricultural civilisation, when the first fundamental land-use changes occurred, such as comprehensive deforestation and the beginning of animal husbandry. An alternative and strongly supported historical period for identifying the origins of the Anthropocene favours the eighteenth-century Industrial Revolution and the

subsequent invention of the steam engine and associated massive industrial and agricultural expansion (Delanty and Mota, 2017, p. 14). When selecting the Industrial Revolution as the point of departure for the Anthropocene, the question arises about the actors, since the Industrial Revolution was not a universal human undertaking, consequently, the context of the origins of the Anthropocene changes. As Harrington (2016, p. 483) states, when positioning the Industrial Revolution as the beginning period of the Anthropocene, one can no longer accept humanity as a coherent group and the universal driver behind it. After all, it was a small group of wealthy, European economic modernisers who initiated the Industrial Revolution. For the same reason, Malm and Hornborg (2014, p. 64) also question to what extent this is consistent with a perception of humankind, in its totality, as a new geological agent. After all, those economic inventors and modernisers, the owners of the means of production, represent a tiny minority of humans, consequently pointing towards an intra-species focus within a specific geographic location. Based on such considerations, some researchers argue that the term Capitalocene would be more fitting since it would offer a more direct link between human motivation and behaviour in pursuing a continuous development strategy at all costs, generating climate change, environmental degeneration, biodiversity loss and an extinction dynamic on a global scale. Such a perspective may gain more recognition when considering the above-mentioned rejection of the Anthropocene as a new geological epoch. As Rowan (2014, p. 448) argues, it is the specific set of social relations governed by the capitalist model that drove and still drives humans in their pursuit of gains, while generating all the negative impacts on the environment and non-humans. Chakrabarty (2009) asserts that hardly a doubt exists that capitalism can be identified as a major driver of the Anthropocene. The argument is also supported by Chandler, Cudworth, and Hobden (2018, p. 203), who states that applying the term Capitalocene would provide a better link between the global ecological and climate crises we are facing and the driving force of capitalism.

There is little doubt that capitalism constitutes the underlying, driving force for much of human behaviour. Yet accepting Capitalocene as a replacement for Anthropocene, or even as the more fitting description of the current ecological period, does carry considerable implications for the date when the human impact generated was strong enough to begin causing a strong geological impact on the globe. With this in mind, there exists yet another approach to identifying a different starting point for the Anthropocene, which is linked to the ‘Great Acceleration’ thesis (Steffen et al., 2015), based on the argument that planetary change needs to generate a recognizable impact on the Earth’s system. The first detonation of an atomic bomb (on 16 July 1945) would constitute such an impact. Harrington (2016, p. 483) adds that the expansion of

the human population, the creation of long-lasting materials such as plastics, and extensive organic pollution further support the ‘Great Acceleration’ approach.

3.2 The Anthropocene concept as a comprehensive threat identifier

While there exist various options for identifying the beginning of the Anthropocene, there also exists a discussion about the implications and potential responses to it. Such considerations are based on our experiences of human impact, such as climate change and related disasters, environmental destruction, biodiversity loss, ocean acidification, and deforestation. Simangan (2019, p. 564), for example, points out that the impacts generated by humans threaten the biosphere, with severe implications for life on earth, as it threatens the survival of all species, including humans themselves. Harrington (2016) takes the same position, stating that the Anthropocene highlights the prospect of an existential threat the world is facing, pointing towards a possibility of an ecosystem collapse, leading to a failure to maintain life; Harrington adds that we may have already entered the ‘sixth mass extinction’ event. Delanty and Mota (2017, p. 19) clarify that mass extinction should not be treated as ‘death write large’, since it represents a qualitatively distinct event, characterised by erasing a particular life form and reducing diversity within the global biosphere. In the same vein, Mitchell (2017, p. 12) argues that one should not simplify the notion of mass extinction to mean large-scale death, as this would lead to a category error. Delanty and Mota (2017, p. 11) state that the Anthropocene approach appeals to our urge to re-consider the meaning of global connectivity since it highlights the co-existence of natural and social worlds and the deep intertwining of human and planetary life. Burke et al. (2016, p. 2) concur with such an assessment, as they recognise an urgency to acknowledge the deep interrelationship between humans, animals, ecologies, and the biosphere. While one may argue that the issue of environmental security has already identified some aspects that are amplified by the Anthropocene approach, it does not acknowledge the same extent of the interrelationship between human activities and their impacts on the globe, for example, as the possible sources for generating another mass extinction event. This adds further value to the Anthropocene concept. There is considerable value in the Anthropocene approach to increase our awareness of the fundamental risks we are facing and consequently, the demands to react to those risks. Therefore, the Anthropocene concept endures in its relevance as an analytical concept, even if it was rejected to identify a new geological epoch.

Burke and Fishel (2016) raise the spectre of the implications of the Anthropocene, by arguing for the establishment of an ‘Earth System Council’, something akin to an ecological security council, to protect, preserve, and repair global ecosystems. They add that it should consist of 25 voting seats, 13 allocated to states for a fixed period, with the rest held by so-called eco-regions, such as the Arctic, Antarctic, the Pacific and Indian oceans, the Amazon Basin,

or major river systems such as the Mekong and the Congo. Here, the relevance of IRBs as a focus for evaluating environmental security is again recognised. For Chandler, Cudworth, and Hobden (2018, p. 195), the time has come to envisage a new category of harmful activity, that of ‘crimes against biodiversity’. They reason, that it is time to expand international human rights law to cover precious species and ecosystems and criminalise any harm towards them. In addition, critical voices are pointing out that the discipline of International Relations in its current form, as an academic discipline, fails to address the implications of the Anthropocene, such as mass extinction, and consequently needs to be reformed if it wants to stay relevant in the Anthropocene period. In this regard, Mitchell (2017) stresses the necessity for the discipline of International Relations to engage with the non-human in addressing the threat of mass extinction. Burke et al. (2016) remind us that International Relations as a discipline has traditionally focused on insecurity and incorporated major conflict scenarios and transforming political conditions in its analyses, consequently adjusting, or even changing, its focus to an extent – adding that, with the Anthropocene representing a fundamental, maybe even the gravest, crisis for life on earth, it is rather astonishing that the underlying dynamics of the Anthropocene have not already been integrated into the discipline. We do not need to go very far back in history, as argued by Harrington (2016, p. 494), to identify another doomsday scenario which had a considerable influence on the discipline of International Relations, that of a nuclear apocalypse. Mitchell (2017, p. 9), too, points out how the concept of a ‘nuclear winter’ became associated with the possibility of global extinction during the Cold War period. For the older generation among us, the author of this paper is one, the concept of a nuclear winter was not just one abstract concept coming out of Hollywood, but rather one linked to a real-world threat scenario, with the possibility that the superpowers at the time, the USSR and the United States, may miscalculate their nuclear threat postures, leading to the outbreak of nuclear war, destroying the basis of life on earth. What is more, whoever had an interest in security policy during the Cold War could not escape recognising and debating the nuclear threat scenario either, for a considerable number of strategies to deal with this threat had to be developed; they even count today as primary literature to read if one is interested in military and strategic security. When considering the world’s recent history, one can seriously question why the Anthropocene and associated threats, which identify equally devastating security threats have not generated a similarly strong response and focus within the discipline of the International Relations Theory and in security policy decision-making. While environmental security has risen in its relevance, it offers only a partial recognition of the threat scenario we are confronted with identified within the Anthropocene approach.

For this reason, when compared with the environmental security concept, the Anthropocene offers an extension, one may even say a ‘totality’, of the scope of threat evaluation, by highlighting the impact of environmental degradation beyond a focus on humanity. At the same time, it further highlights the challenges humanity is facing and raises serious questions about how to respond to them. While a cooperative response seems the only logical one, based on the wide-ranging threat scenario presented, it cannot be denied that there may only be national, specific responses, based on misperceptions of national interests. When considering one of the most fundamental challenges that humanity has just experienced, a global pandemic, and seeing that the responses to it were dominated by national responses, the outlook for global cooperation in addressing other fundamental challenges, like environmental degradation and the impact of climate change, let alone the doomsday scenario associated with the Anthropocene view, seems rather slim. Even so, it is still of value to consider the various aspects of regional cooperation within different strategic settings, for instance, within an IRB, which is dealt with in the next section.

4. International river basins as a structural context for cooperation

Yet, to begin with, we can identify IRBs as a focal point for cooperation, based on the recognition that an IRB represents a particular space, a structural context based on geography and proximity. Adding to such a perception, one can identify physical (interrelated ecosystems), functional (infrastructure connectivity), and ideational (social proximity among the people) features supporting a focus on IRB as a potential location for cooperation. However, as a major river forms the nucleus of any IRB, and in considering the implications of environmental degradation and climate change for humanity, or the more encompassing Anthropocene approach, the potential for serious negative impacts within IRBs can be identified. Having the potential of generating a region-wide but not necessarily equal impact within the geographic setting of an IRB can generate serious implications for cooperation within an IRB. To assess the potential for cooperation and the ability to address shared environmental security issues, let's take a closer look at the implications of geography, proximity, and the prospects for shared development

4.1 IRB as a focus for regional cooperation: the supportive arguments

There are three fundamental arguments in support of identifying the potential for cooperation within IRBs, geographic proximity, shared development challenges and coherent environment space. One can add another specific aspect, shared infrastructure challenge, as another critical aspect related to the shared development challenge. Together those aspects generate a particular structural context of IRBs as a particular interrelated, and connected space. Scherrer (2023), for example, refers to proximity trade, based on geographic

proximity, in describing one potential for regional economic cooperation and shared infrastructure development within IRBs. It is this potential for supporting local development through regional cooperation and shared infrastructure development, even when separated by national borders, which could enhance cooperation within an IRB. This prospect of shared development in turn could also give credence to a cooperative approach in addressing climate change and environmental degradation challenges as amplified in the Anthropocene approach. As such, the positive image of geographic proximity is given credit for enhancing the potential for cooperation within an IRB. The cooperation along the Lancang-Mekong region and within the Danube River in Europe indicates this potential for cooperation. In both cases, The Greater Mekong Regions and the European Strategy for the Danube River, local cooperation generated a river basin-wide cooperation dynamic based on different levels of cooperation, including, city-to-city cooperation, province-to-province cooperation or state-to-state cooperation. In some cases, as within the Danube River basin, there also exists a shared form of cultural and historical identity among the people as the 'people of the river'. While different interests continue to exist among the various actors and participants they also recognise that it is in their best interests to work together. They also recognise that have to work together to address climate change and environment degradation within each IRB. Extreme changes to rainfall and related flood events offer another potential source for cooperation within an IRB, as the people and countries can escape the impact of such events.

Another fitting, but unsettling, scenario provides the prospected climate change impact on the Indus River Basin. The Indus River Basin is mostly sustained by the glaciers in its upper section. Climate change can generate a double impact. First by generating extensive and repeated serious flood events, by melting the glaciers, and second, through water scarcity once the glaciers have been melted away. Such a double scenario of catastrophic impacts would offer a solid base for cooperation as the whole river basin will be affected. Still, based on the history of Pakistan-Indian relations strong regional cooperation seems rather unlikely, but should not be completely ruled out as a single country response to those threat scenarios will not offer a solution. Yet, if Pakistan and India could agree to address those looming threats together, it may even help to overcome the existing trust deficit between them. Even this may be a rather remote possibility.

As affirmed by UN Secretary-General António Guterres, 'Water, peace, and security are inextricably linked' (UN News Centre, 2022). The same argument is put forth by Tortajada and Fernandez (2018), stating that water scarcity should be characterised as multidimensional, as it generates an impact on all social and economic sectors, while UNESCO (2016) emphasises that water resources are crucial for development; without it, sustainable development

cannot be achieved. However, while equally sharing the available water resources within an IRB does generate a strong dynamic for regional cooperation, the failure of equally water-sharing arrangements within an IRB has the potential to undermine the potential for regional cooperation. This one aspect of the Janus face characteristics of cooperation within an IRB, geographic proximity represents another one, especially concerning national security.

4.2 IRB as a focus for regional cooperation: identifying the challenges

While geographic proximity from an economic perspective is often interpreted as an asset (like access to markets) it is also linked to the traditional understanding of national insecurity within the anarchic character of the IS. Insecurity is local. Jervis (1978) points out that the inherent uncertainty about neighbours' intentions leads states to interpret any changes in the security outlook of other states as a potential or actual security challenge. Related concepts such as the security dilemma – emphasising that the increase of security of one country increases the insecurity of its neighbour – highlight the underlying threat perception associated with geographic proximity. Alike argues Buzan and Waever (2003) for most countries, threats to their own security stream from their neighbours. Roach et al. (2002, pp. 267-268) emphasise, with reference to Carr and Morgenthau, that, from a realist perspective, it is foolish to believe in the natural harmony of interests among states, or that the power competition between states can be restrained; indeed, realists take the view that conflicts and war are normative elements of international relations. Obviously, within such an interpretation, geographic proximity does lose its positive image. Consequently, as the IS represents a structural setting of insecurity, enmity, instead of amity, seems to be the norm between states, which in turn undermines the readiness for cooperation within an IRB. Aside from security considerations based on the character of the IS, we can identify another potential challenge to cooperation within an IRB, one that is linked to the structural inequality existing within an IRB, that between upstream and downstream countries. Upstream countries are in a better position to exploit the available resources at the cost of downstream countries and thus have an advantageous position in cases of resource conflicts. An emerging situation of resource conflicts can be linked either to development strategies of the countries within an IRB, or to a situation of environmental degradation and climate change impact. A resource conflict based on dwindling water resources has the potential to develop into a serious political conflict between the countries within an IRB. After all, utilising and sharing available resources within an IRB constitutes a vital aspect for considering regional cooperation in the first place. Likewise, a loss of biodiversity and an increase in associated environmental and agricultural challenges may also generate some political conflicts between the countries located within an IRB, especially if this impact is linked to national development

strategies. When the development strategy of one country may undermine the development prospect of another country within an IRB.

Take for example the national development strategies of Laos and Thailand as both countries plan to even further utilise the water resources of the Mekong for their national development strategies. In the case of Lao, this is linked to the continuous extension of hydropower development, in the case of Thailand to planned extensive increase of agricultural irrigation projects. In addition to the impact already generated from the further upstream dams, China has built. While one can argue that from their national perspective, it may make sense to implement such development strategies, from an IRB perspective it may further enhance water distribution and environmental degradation impact on two down-stream countries, Cambodia and Vietnam, as both rely on the Mekong to supply them with water and sediments to support their agriculture sector which is related to food security. In the case of Vietnam, water and sediments from the Mekong counterbalance saltwater intrusion into the delta which will increase because of seawater level rise. The Mekong Delta is often described as the ‘rice bowl’ of Vietnam, hence any serious degradation of it as an agricultural space would generate serious food shortage within Vietnam. What the Mekong Delta is for Vietnam is the Tonle Sap, the huge inland water space supported by the seasonal Mekong floods, for Cambodia. The question arises, will other riparian countries be willing to offer support for protecting the Mekong Delta and the Tonle Sap by changing their own development strategies? Indeed, would Laos be willing to change core aspects of its national development strategy (becoming the ‘Battery of Southeast Asia’) and halt further hydropower development, or Thailand is willing to change its massive planned extension of agricultural irrigation to save the Mekong Delta and the Tonle Sap? However, the outlook is most likely not. This in turn could undermine regional cooperation within the Mekong River Basin, even so far there are no indications yet that this will happen. Still considering the critical relevance of both, the Mekong Delta and Tonle Sap, for national food security, one should not ignore the potential conflict potential. Yet, the situation grows even more complex, since Vietnam is involved in some hydropower projects which will further contribute to the challenges the Mekong Delta is already facing, as it needs the energy for domestic development. The situation within the Lancang-Mekong River Basin also offers a good example of the structural inequality within IRBs, associated with the location of a country within an IRB.

From the perspective of an IRB as a potential source for regional cooperation, the question arises: Will the impact generated by environmental degeneration and climate change be a factor for cooperation, in coming together to address a shared challenge or a factor for conflict? Once again, we are reminded of the Janus faces of geographic proximity, as proximity may be a source either for cooperation or for conflict. There is another crucial aspect that

will contribute to how either cooperation or confrontation will prevail within the structural setting of an IRB, and that is the extent and intensity of environmental degeneration and climate change impacts we will observe in the years to come. If one takes the Anthropocene approach as a guideline, then we are ‘all together in one boat’, which may allow cooperation to occur. However, when considering the recent experience during the COVID-19 global pandemic, such an optimistic perception of working together to address a regional and global challenge may not be appropriate.

5. Conclusion

In considering IRBs as a potential focus for regional cooperation we have to take into consideration that IRBs offer a particular structural context based on geographic proximity. Geographic proximity and a major river at the centre of each IRB increase an IRB’s exposure to climate change and environment degradation impacts, amplified in the Anthropocene approach. After all, an IRB also represents an integrated ecosystem. In assessing an IRB’s characteristics for supporting regional cooperation among the countries we have to recognise the Janus face of geographic proximity. On the one hand, geographic proximity supports economic cooperation, shared infrastructure development and thus can offer to address shared development challenges the countries within an IRB are facing. Geographic proximity may also help to recognise that climate change and environment degradation represent fundamental transnational challenges to be addressed together. In this way, geographic proximity can be interpreted as a source of cooperation, in building trust. On the other hand, national insecurity is local, as countries can never be sure about the intentions of neighbouring states within the context of an anarchic International System. Neighbouring countries may also have contractionary interests and follow development strategies not considering their wider river basin impacts. The existing structural inequality between upstream and downstream countries within an IRB may also contribute to a more conflictual relationship between the different countries. Not least as upstream countries may be able and willing to take advantage of their privileged position at the costs of downstream countries.

The critical question is to what extent the positive aspect of geographic proximity can become a source for regional cooperation by counterbalancing the controversial aspects of geographic proximity. Will the prospect of economic and development gains based on cooperation overcome the existing distrust between states, based on the character of the anarchic International System? Alternatively, will a fundamental common threat scenario, like that based on the Anthropocene concept, generate enough support for cooperation within an IRB? It may even have an advert effect on cooperation if countries within an IRB decide to face the challenge on their own, especially upstream countries as they

are in a more advanced position regarding access to IRB's resources, especially water resources. Considering the IRBs also represent integrated ecosystems, may contribute to more cooperative relationships. Of course, historical animosities between individual countries also generate their own dynamic of cooperation or conflict. Nevertheless, the structural character of IRBs, as a potential side for cooperation should not be discounted, not least because facing doomsday scenarios like the amplified impact of climate change and environmental degradation as presented in the Anthropocene concept, will require cooperation. Still, recalling our most recent experience with a fundamental global threat, COVID-19, the prospect for cooperation even at the regional level cannot be taken for granted. However, focusing on IRB as a potential source of cooperation may offer critical insight into our ability and willingness to cooperate when facing fundamental, or even, existentially challenges.

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Green Energy Diplomacy in the Post Covid-19 World: India's Efforts towards Climate and Energy Security in the Global South

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Abstract

India currently faces a situation where economic growth and citizens' welfare depend on factors like access to energy. Under these circumstances, it becomes critical to examine the need of renewable energy in India. With its commitments on dealing with climate security issues and its own Nationally Determined Contributions, India now banks on clean and renewable sources of energy as the best option available at its disposal. Amidst the Covid-19 and the ongoing Russia-Ukraine conflict, energy security has, therefore, become the key concern of India's foreign policy. India's excessive reliance on coal and petroleum led to its increase in emissions generating environmental havocs. To avert these crises, India is boosting up its renewable energy sector as the best option for a sustainable future. It has also taken progressive steps in the promotion of renewable energy through multilateral partnerships like the International Solar Alliance. At the 27th Conference of Parties (CoP-27) held in Egypt in 2022, India stated how it had achieved great heights in RE through its updating of the Nationally Determined Contributions in August 2022. Therefore, the paper answers an important question in the literature on renewable energy politics: "In which ways has India linked climate diplomacy with energy security after Covid-19 through the promotion of renewable sources at the international and national levels?" The paper is significant for researchers to view India's role as a Global South climate leader in a post-pandemic world order by bridging the Global South and the global north divide through renewable sources promotion. The paper also explores the close relationship between climate change and energy security, especially in a post Covid-19 world, where climate change and energy crises are no more national issues but global issues.

Keywords Global South, Loss and Damage Fund, Panchamrit, Renewable Energy, Net-Zero

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1. Introduction

The GS, in the 21st century, faces challenges of meeting the energy needs of growing population with “limited sources” where sustainability, climate issues and waste management are often compromised (Gavankar, 2023). Hence, a post-pandemic world has “renewed” its focus on RE and climate-resilient infrastructure in four sectors, namely, RE, electric vehicles, green buildings and waste management (Gavankar, 2023). Since decades, it has been witnessed that the GS bears the burden of increasing greenhouse gas (GHG) emissions due to rampant anthropocentric activities which makes them vulnerable to climate disasters like earthquakes, droughts, sea-level rise that result in widespread population displacement, thereby, threatening the socio-economic development of a nation. This was the central argument of the United Nations (UN) 27th Conference of Parties (CoP) (See Footnote 6) held at Sharm-el-Sheikh, Egypt in 2023 which was concluded with an “extended period of negotiations”. Although critics opine that it failed to arrive at concrete decisions on fossil fuels’ phase-down, it argued for the establishment of a Loss-and-Damage (L&D) fund framework that would be financed by the world’s “historical emitters”, that is, the Global North (GN)² who have been contributing to an overall increase in GHG emissions because of which the crunch of climate disasters is being borne by the GS. Henceforth, it was decided that the GN would “compensate” the GS for its environmental disasters by bearing the responsibility of transferring climate finance to the L&D fund. India had been long advocating for the L&D fund that would finance infrastructure rebuilding and economic recovery in the disaster-struck GS countries. Such global initiatives reflect India’s important role in negotiating climate change mitigation strategies as a GS country which is one of the world’s fastest growing economies.

As the world struggles through an energy crisis, it looks up to RE to meet its rising demands. With the Russo-Ukraine conflict further pushing up fuel prices since 2022 (Kolaczkowski, 2022), the global energy crisis has “motivated nations” (International Energy Agency, 2022) to switch over to renewables like solar and wind electricity that reduce imports costs and meet energy demands. International Energy Agency (IEA) Director Mr. Fatih Birol states that quick expansion of renewables has “kicked an extraordinary new phase of even faster growth” (International Energy Agency, 2022) with the world set to increase its RE capacity within the upcoming five years at a rate equivalent to that of the last 20 years, with

² The Global North comprises of the western world with countries like Canada, Israel, Russia, Turkey, United Kingdom, United States of America and the entire European continent with Asian and Pacific countries like Australia, Hong Kong, Japan, Macau, New Zealand, Singapore, South Korea and Taiwan (Japan and South Korea are the only Asian countries that do not form the Global South). They are characterised by high income levels, economic development, political education, industrialisation, existence of human rights, minimum socio-economic disparities and wealthier than the Global South countries. Some of the nations share a history of being colonisers of the Global South which has been historically responsible for the existing inequalities (Worldatlas.com, 2022)

wind and solar energy projects contributing to 90 percent of the total RE capacity over the next five years. While Europe and USA show “emerging diversification signs” in solar photovoltaic (PV) projects, India, as an emerging economy, has set an example for the GS in boosting RE through its ambitious climate targets through renewables to achieve net-zero³. Such targets would enable India to achieve its multidimensional goals of climate change mitigation strategy, energy security, import costs reduction, waste management and employment generation.

However, since the late 20th century, India’s “renewed focus” on climate change can be found through measures like electricity generation from wastes and switching over to renewables that reduce its reliance on conventional fuel sources. This has been accelerated during Covid-19 when global supply chains were disrupted that affected universal access to electricity, especially in the GS (World Health Organisation, 2022). It is in this backdrop that India has widened its global outreach to solve both climate and energy security multilaterally through its grassroots' level ratification of international climate commitments. Such an opportunity is offered by G-20 (Group of 20)⁴ whose presidency was wielded by India between December 2022 and November 2023 respectively. Of late, India has become an inspiration for both the GN and the GS, given its ambitious climate targets and their achievement before deadlines, thereby, offering the lowest prices of solar-powered renewables and green hydrogen at competitive prices globally (ET Energyworld, 2023a) which attract foreign investors and set an example of sustainable development. Such achievements prove India's potential in leading global RE projects which adds to employment opportunities, strengthens economies and enables it to become a global exporter of RE. After India, with Brazil and South Africa all set to assume G-20 presidency, the world's geopolitics shows a shift of focus from the GN to the emergence of the GS for investment and L&D fund mobilisation, climate and energy security (Nodo, 2022). India's South-South cooperation on these issues is instrumental for the GN since the GS is a fertile ground for solar energy production, given its geographical location in the Tropic of Cancer (Rongmei, 2022). Thus, India's clean energy strategies call for sustainable urbanisation, innovative low-emission industrial system, energy and carbon-free transportation through innovations in solar, wind and hydro power projects, green hydrogen along with green fuel manufacture. As a growing economy of the GS, energy security and stability remains on India's forefront which it aims to fulfil through renewables as it needs to secure 50 percent of its

³ The term “net-zero” means reducing emissions to a minimum. It aims to limit temperature rise by greenhouse gas emissions reduction by cutting down coal consumption, switching over to renewables, efficient waste management strategies, afforestation measures and promoting e-vehicles usage. While the EU aims to achieve net-zero by 2050, India targets to achieve it by 2070.

⁴ Formed in 1999, the Group of 20 (or G-20) is an organisation of world's largest economies from both Global North and South including 19 countries and the European Union. It addresses global issues like climate change, energy crisis, financial stability and sustainable development.

energy requirements from them by 2030 (ET Energyworld, 2023a). At this stage, what India needs is finance and technology transfer from the GN countries to address its climate and RE targets as reiterated by the L&D fund and such targets will drive international cooperation towards achieving RE targets (ET Energyworld, 2023a). It is since 2014 that the Indian economy is the world's fastest growing energy hub (PIB, MNRE, 2022b) in terms of "renewable capacity transition" (Anand, 2023) to have achieved 40 percent of its installed electricity capacity through renewables in 2021, nine years before its deadline that indicates its ambitious and consistent global efforts towards net-zero.

Therefore, the paper is divided into two broad sections: in the first section, it talks of India's role as a vital GS nation in bridging the North-South divide and allowing each country to explore avenues in RE promotion, so that all are mutually benefited in terms of meeting net-zero goals, tackling rising energy requirements and climate challenges. It explains how the GN is responsible for GS' climate challenges and how it can collectively work for securing the GS' future through fund transfer like the L&D fund, while in the second section, it focuses on how India has achieved RE transition at the national and local levels by bridging climate challenges and energy security with a focus on its various schemes and initiatives. The analysis of India's green energy projects calls for a case study to highlight its role in renewables promotion for emission reduction and energy security through self-reliance that transforms its global image from a GS coal-based economy to an emerging GS climate and RE leader.

2. Objectives

- (1) to analyse India's role as a GS climate leader in bridging the North-South divide and opening avenues for greater cooperation through RE promotion;
- (2) to analyse India's national and domestic RE commitments through its initiatives that link its climate goals with green energy.

3. Methodology

This paper highlights India's vision for attaining its international climate goals through multilateral cooperation and setting up of RE projects at the domestic level. Based on qualitative research sources like reports by the international organisations and the Indian government, conceptual analysis of terms like Global South⁵ and North, CBDR, net-zero and Panchamrit, is applied

⁵ Global South broadly refers to the developing and underdeveloped countries of Latin America, Africa and Asia where the world's highest population resides (mostly, in the Tropics) excluding Israel, Japan and South Korea. The region is characterised by low-income, high poverty levels, poor educational and healthcare facilities, dense population and political or cultural marginalisation (Arbab, 2019). These have been historically subjected to European colonialism

as a framework to analyse the role of RE as an alternative to petroleum in India's climate diplomacy and to address the GS' climate challenges articulated at macro to micro levels in the post Covid-19 world order. While content analysis is often applied in discourses of India's international climate negotiations, this research offers a novel insight into rethinking a link between climate change and energy security that emphasises the role of RE in India's commitments towards attaining net-zero. The research uses qualitative method analysis in an exploratory case study to develop a more comprehensive understanding of the North-South divide, the GN's historic responsibilities towards the GS, India's role as a GS climate leader in bridging the divide and its domestic initiatives that call for multilateral cooperation to meet global commitments. It has collected data through a literature review using political and economic approaches. Secondary data has been obtained by analysing government reports, articles, books, research papers, journal chapters, websites and newspapers. Official reports uploaded in government sites have been studied. The methods allow a better understanding of the relationship between India and the globe in RE diplomacy in the 21st century, in general, and in the post-pandemic world, in particular.

The main official sources can be best demonstrated through the following table:

Table 1: Sources used in the research

Levels	Official Sources
International/Global	International Energy Agency (2022), World Population Review (2023) and World Health Organisation Departmental News (2022)
National/Domestic	Reports and data released by the Government of India through the Press Information Bureau (Cabinet, Ministry of External Affairs, Ministry of Environment Forest and Climate Change, Ministry of New and Renewable Energy, Ministry of Consumer Affairs, Food & Public Distribution and Ministry of Petroleum and Natural Gas) between 2020 and 2023

Source: Author

and, until recently, they were not industrialised because they sustained their livelihood on agricultural practices.

4. Literature Review

While there are numerous studies examining India's climate and green energy diplomacy in specific fields such as green hydrogen, biofuels, solar and other forms of RE, a comprehensive examination of India's holistic alignment strategies between climate challenges and energy security as a GS country is noticeably absent from the existing literature. The literature possesses India's diplomatic strategies in bringing the GS and the GN together at the international level and RE transition initiatives at the domestic level which significantly influences its global standing. Moreover, the literature review reveals a crucial gap in the understanding of intrinsic ways by which India has bridged the North-South divide through climate and RE diplomacy by aligning its domestic goals with the global ones, especially in the post Covid-19 world order. In this paper, the term "climate diplomacy" and "renewable energy diplomacy" have been repeatedly used to talk of India's negotiations, discussions and deliberations on global platforms and through bilateral agreements to stress the need of RE as a vital climate change and energy crisis mitigation strategy that needs to be implemented on joint basis through technological know-how and finances from the GN and cheap labour, land and other natural resources readily available in the GS.

Existing studies predominantly focus on India's policy discussions and deliberations on the global stage, neglecting the comprehensive analysis of internal policies leading to their landmark achievements that draw parallels with India's efforts as a GS climate leader. Therefore, there is a pressing research gap calling for a more nuanced approach to study the alignment of India's international commitments with its domestic ones after Covid-19. This approach should consider both the internal and external dimensions of these strategies, encompassing the distinct diplomatic, political, social and economic aspects of each initiative. By filling this gap and adopting a multi-dimensional approach, this research aims to shed light on the comprehensive and interconnected factors of climate change and energy crisis that shape the international dynamics and domestic initiatives of India. India's climate diplomacy, originally started by the former Indian Prime Minister Smt. Indira Gandhi in the 1980s to highlight the GS' climate challenges caused primarily by the GN nations since colonialism, has been continually applied while India has voiced the GS' climate challenges to counteract the GN's stakes. However, it has also been meticulously studied by the scholars in the domains of climate finance and energy security.

For example, Mohan (2017) highlights India's evolution in climate politics from being a 'protest voice' to one who shapes its own ways to combat climate change as a 'subset of its foreign policy agenda'. He analyses the active drivers of India's climate negotiations and argues that the shifts in India's stance in climate change negotiations have resulted in its 'greater responsibility in the management

of global commons'. In the end, he concludes by saying that India's geopolitical strategies have shifted towards pragmatism which is reflected in its engagement in climate negotiations. His paper analyses gradual changing roles of India in climate politics internationally but all in a pre-pandemic context. On the other hand, Thaker and Leiserowitz (2014) have written that India's concerns about environmental degradation, energy crisis, climate vulnerable and its ambitious climate goals have led to a "plurality of discourses" highlighting its "potential implications". They describe India's approach to climate diplomacy as the one centred on "co-benefits" that is progressed by the existence of different non-governmental institutions. Climate change has become a "discursive weapon" for the grassroots organisations who try to "reinforce and amplify their critique of Indian government's developmental policies" and that the policies involve a "closed-door" legislation. However, little does their paper focus on India's achievements as a GS country in climate diplomacy in a post-pandemic world. While this literature cover interesting and crucial themes, they fail to offer a holistic approach. Hence, this article seeks to provide a broader lens through examining internal and external dimensions from political, socio-economic and diplomatic considerations. On a positive note, this set of literature has accentuated the saliency of India's diplomatic and national strategies for the GS countries. However, none has focused on the implications for bridging the North-South divide on other GS countries and on India, in specific. Besides, as these scholarly works place greater emphasis on external factors in foreign policy adjustments, there is a neglect in the examination of India's adherence to the Panchamrit strategies while analysing its diplomatic execution of domestic climate and RE strategies. Besides, these issue-based researches do not comprehensively consider the multiplicity of political, economic, societal and diplomatic factors. Hence, this article aims to fill the lacuna by adopting a parallel diplomatic-domestic approach to the study of holistic climate change challenges and RE strategies of India.

5. Bridging the North-South Divide

India, as a GS country, houses 20 percent of the global population (Intergovernmental Panel on Climate Change, 2022) and has been prone to climate catastrophes, given its geopolitical strategic location in the tropical South Asia. This makes climate a global common and requires the responsible action of bridging the North-South divide to mitigate its disastrous effects, constituting the global public good. Having clearly articulated its position in acknowledging the "historical responsibility of the North" for its emissions (Dubash, 2013), India, in its climate negotiations at the United Nations Framework Convention for Climate Change (UNFCCC)⁶ Rio Summit in 1992, urged the GN to strengthen its financial

⁶ The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty adopted at the Rio Summit of 1992 to combat GHG emissions in climate

and technologies' framework (Dasgupta, 2012) in assisting the GS as climate crisis reparations. It led to the formulation of "an equitable agenda", thereby, institutionalising the "Common but Differentiated Responsibilities"⁷ (CBDR) principles (Hurrell & Sengupta, 2012) (Thaker & Leiserowitz, 2014). As India's first diplomatic victory, the GN's responsibility was further channelised in the 1997 Kyoto Protocol which confirmed its initiatives of reducing their emissions while India and other GS nations were exempted from bearing the burden of climate change mitigation costs. The world's largest democracy has, of late, been an "emerging economic power"⁸ and adhered to the principle of CBDR, the definition of which was further elaborated at the CoP- 25 (PIB Delhi, 2019) in Madrid in which India reiterated its claims that the GN was primarily responsible for the ecological damages caused to the GS nations because of the former's rapid industrialisation and that it should take a lead in making up for the damages by "fulfilling climate finance commitments" of 100 billion dollars annually by 2020. These indicate the GN's "deeper pockets of responsibilities" (Oguntuase, 2023) to fulfil "pre-2020 commitments" that stands for the promises to be fulfilled by the it under the Kyoto Protocol, leading to the establishment of the loss-and-damage (L&D) fund mechanism (also known as the Warsaw International Mechanism) (UNFCCC, 2016) during the CoP-21 in 2015. However, the L&D fund was formally agreed to by the GN nations at the CoP-27 held at Sharm-el-

change. It lays down several policy agreements to check climate change, ensure food security and sustainable economic development. Its yearly conferences are called Conference of Parties (CoPs) where members meet annually to discuss progresses on climate change mitigation strategies.

⁷ The CBDR principle, the first international legal instrument advocated in UNFCCC Rio Summit of 1992 to address climate change, states that all nations are obliged to address environmental destruction and climate change, however, the obligations are not equal. The developed world, being the most industrialised, responsible for climate change which allows less opportunities for the developing countries to industrialise. Hence, the developed world should pay compensation for the damages incurred and reduce their industrial emissions, hence, allowing the Global South for industrialisation.

⁸ The world's economic hegemony seems to shift "from west to the east" and it is expected that by 2030, the top three economies of the world shall be China, India and Japan, all being Asian. According to reports by Morgan Stanley, India is currently the world's sixth largest economy and is the fastest growing economy in the world. It is predicted to take over Japan in Asia with its second largest projected GDP exceeding 8.4 trillion dollars and might also exceed that of Germany and UK in the world by 2030. Consequently, its per capita income is expected to cross 15 thousand dollars by 2047 with its GDP exceeding 26 trillion dollars. It shall become a global manufacturing and technology hub to diversify its supply chains, owing to its investment-attracting policies and reforms, renewable energy transitions, digitalised infrastructure, sustainable transition procedures and global competitiveness. Many Multinational Corporations (MNCs) look towards India as "an investment destination" with its "entrepreneurial, English-speaking and digitally literate" working-age population exceeding 900 million. Therefore, in the post-pandemic world, the World Bank, IMF and the Global Consulting Firms claim that India "is on the verge of becoming an important world economic power in the near future" (Deshpande, 2023) because of which it can be called an "emerging economic power".

Sheikh when India reiterated on an L&D framework that focuses on “the inclusion of 1.5°C temperature limit” (Harvey & Goldenberg, 2015) for the GS through the co-operation of the GN which was responsible for climate change and environmental catastrophes in the GS and, therefore, would “compensate vulnerable countries suffering from climate change” (Wyns, 2022). Thus, India was seen as a “cooperative” (Oguntuase, 2021), a negotiating partner and a “climate-enthusiast” that “staked” (Oguntuase, 2021) the GS' claims of “climate reparations” which the GN owes to the GS. It indicates India's “renewed focus” on climate change through measures like reducing reliance on conventional fuel sources and switching over to renewables which has been accelerated during Covid-19 when global supply chains were disrupted that affected universal access to electricity, especially in the GS (World Health Organisation, 2022). It is in this backdrop that India has widened its global outreach to solve both climate and energy security multilaterally through its “grassroots' level ratification” of international climate commitments. Such an opportunity is offered by the G-20 which was presided over by India between 2022 and 2023 through which it inspired both the GN and the GS with its ambitious climate targets and their achievement before deadlines by offering the lowest prices of solar-powered renewables and green hydrogen at competitive prices globally (ET Energyworld, 2023a). These prove India's potential in leading global RE projects which adds to employment opportunities, strengthens economies and enables it to become a global exporter of RE by attracting global energy players to invest in India's RE projects that are mutually beneficial.

India announced that it had already achieved its first set of Intended Nationally Determined Contributions (INDCs), according to the Paris Agreement in 2015 that aimed towards achieving its 40 percent of its cumulative electric power requirements from non-fossil fuel sources and “reducing its emissions intensity of GDP by 33 to 35 percent” (PIB Delhi, 2022c) by 2030 as compared to 2005 levels. However, it achieved its targets of fulfilling 40 percent of its installed electricity from renewables in 2021 (seven years before the deadline) that prove India's pursuit of advocating the “energy-economy” dichotomy through Mission LiFE (Lifestyle for Environment) and the five-fold Panchamrit⁹ (Down To Earth, 2021) strategy, focused on renewables. Hence, in 2022, India updated its INDCs submitted to the UNFCCC through the achievement of the Panchamrit

⁹ The Panchamrit principles (five nectar elements of India's renewable energy goals towards net-zero) were announced by PM Modi at CoP-26 in 2021. A mixture of five natural foods like milk, ghee, honey, curd and jaggery, the Panchamrit is traditionally offered to Gods in Hinduism and Jainism and as a medicine in Ayurveda. Therefore, the Panchamrit principles reflect India's pious ambitions towards net-zero. These include attaining net-zero by 2070, obtaining 500 gigawatts of renewable energy, meeting 50 percent of its energy requirements from non-fossil fuels, reduce its projected carbon emissions by one million tonnes and reduce the carbon intensity by 45 percent within 2030.

goals announced at CoP-26 in Glasgow to reach net-zero by 2070. It indicates an increased emission intensity upto 45 percent of its GDP to be reduced (10 percent more than its previous INDCs) and upto 50 percent of its cumulative electric power installed capacity from non-fossil fuels (10 percent more than what was outlined in its previous INDC clauses) by 2030 which articulate its continuous adherence to the principle of CBDR with Respective Capabilities (CBDR-RC) and its commitments towards net-zero through clean energy initiatives. However, it is to be noted that India's updated framework needs more technological know-how and more investments to increase RE manufacturing and low emission products like electric vehicles and green hydrogen which enhance employment opportunities for the local population at the grassroots level and international exports, at the macro level. To sum up, at this stage, what India needs is finance and technology transfer from the GN to address its climate and RE targets as delineated by the L&D fund which will drive greater international cooperation towards achieving RE targets.

In a post-pandemic world, energy crisis has led to a climate change-green energy dichotomy (Oguntuase, 2021) especially in the GS, which requires collaboration between investments, projects, rapid industrial decarbonisation measures and transition towards renewables. Such collaborations between the GN and the GS are based on “long lasting concerns” about the anthropocene, leading to the emergence of the global climate action and energy security regime. Therefore, the emergence of a tripartite relationship involving climate change, emission reduction and energy security through renewables is clearly indicated by the presence of multilateral partnerships like the India-led International Solar Alliance (ISA) (Hristova & Chankova, 2020) and the European Union (EU)¹⁰ Green Deal. However, India's entry into the United Nations Security Council (UNSC) as a non-permanent member marked the birth of “a reformed multilateralism” (Vachhatani, 2020) as outlined by its “Five-S” vision of “Samman” (respect), “Samvaad” (dialogue), “Sahyog” (cooperation), “Shaanti” (peace) and “Samriddhi” (global prosperity) which are reflected in its foundation of multilateral organisations like the ISA. Born under India's ambitious “One Sun, One World, One Grid” (OSOWOG) at the CoP-21 in 2015, the ISA reiterates India's importance as a global leader in solar energy promotion by displaying the potential of the “sunshine countries” or the Suryaputras (the countries lying fully or partially between the Tropics” (Oguntuase, 2021). Since its inception, France has partnered with India in the ISA that has strengthened the ties between the two and furthered deep engagement in the post-pandemic era through technological

¹⁰ The European Union (EU) is a political and economic organisation of 27 European countries. Headquartered in Brussels (Belgium), the EU, which was initially founded for establishing economic and monetary union of countries which have euro as their official currency, has, of late, been vocal in RE projects with Indian cooperation, especially, through multilateral platforms like the ISA.

transfer on solar, wind, hydrogen and biomass energy in a post-pandemic world (PIB Delhi, 2021). Therefore, it is to be noted that the ISA promotes solar energy as a viable renewable through cooperation, technology transfer and financial investments to achieve net-zero targets globally that consequently leads to emission reduction, an increase in employment opportunities and improved energy access to the rural livelihoods which is set to make energy “affordable and universally accessible by 2030” (Oguntuase, 2021). It reflects India’s pragmatic multilateral engagement in RE is reflected in its leadership in the ISA, adhering to its 5-S principles and elevating its international status as an emerging global RE hub that connects both the GN and the GS.

Similarly, with India having gained G-20 presidency for 2023, it is gradually undergoing a transition towards solar energy deployment and green hydrogen development. Being one of the countries to have achieved Paris Agreement targets, it is expected that India shall fulfil 80 to 85 percent of its energy requirements from renewables by 2050, before which India has already committed to fulfil 40 percent by 2030. Adhering to its CoP-27 long-term low-emission development strategy on natural resources utilisation for energy security, India requires 6 million tonnes of hydrogen to produce ammonia and methanol for industries, refineries and agricultural industry annually which is expected to increase upto 28 million tonnes by 2050. India’s G-20 leadership in 2023 has various implications: on one hand, it is committed to mitigating climate challenge by emission control and, on the other hand, tackling energy security challenges in the GS to provide affordable RE that ensures clean energy transition. This includes collective efforts by the ISA, the ASEAN and the BIMSTEC members as well as international organisations like the IEA, United Nations Economic and Social Commission for the Asia and Pacific (UNESCAP)¹¹ and the Organisation of the Petroleum Exporting Countries (OPEC).

It has inspired the GN for a RE transition, especially the EU that needs to achieve its net-zero goals by 2050¹². Therefore, India’s “proactive and cooperative internationalist approach in recent climate engagements” gives a touch of pragmatism in its transition to RE and upholds it as a “global powerhouse of renewables” with its high solar energy and green hydrogen potential. These include many significant multilateral groupings like the G20, the G-77¹³ and the

¹¹ “Asia-Pacific” (also known as the Indo-Pacific) refers to the Asian continent located near the Pacific ocean and includes Eastern, Southern and East Asian countries (Philippines, Brunei, Indonesia, Malaysia, etc.) along with the Oceania countries (Australia, New Zealand, Fiji, French Polynesia, Palau, Hawaii, Kiribati, Papua New Guinea, Tonga, Tuvalu, Vanuatu and Western New Guinea. Although “Asia-Pacific” does not have any clear and concise definition, the region has gained prominence, of late, owing to its strategic, economic and geopolitical significance.

¹² European Commission. 2050 long term strategy.

¹³ Headquartered in the United Nations Headquarters of Geneva since 1964, the Group of 77 presently comprises of 134 Global South economies to promote their economic interests. It was initially founded by 77 countries to address apartheid and global disarmament.

Bay of Bengal Initiative for Multisectoral Technical and Economic Cooperation (BIMSTEC)¹⁴, that were instrumental in the UN Conference of Parties (CoP) held at Copenhagen and Paris where India announced the creation of the ISA in 2015 (Krishnankutty, 2021), along with the submission of its Intended Nationally Determined Contributions (INDCs) that focused on emission reduction through RE (Harvey & Goldenberg, 2015). Therefore, it is said that India's ambitious RE targets kick-started in the Paris Agreement through the ISA, on the international front and the INDCs' formulation, on the domestic front. Such improvements in the RE investment sector attract GN members like the USA which has promised to assist India in clean energy technologies, critical carbon power cycles and to "strengthen and accelerate clean, secure and just energy transition" in a post-pandemic world to boost renewables and achieve climate change mitigation goals in the age of "volatile global energy markets" by enhancing technological transfer, innovative solutions, industrial decarbonisation and deployment of clean energy technologies, under the Climate and Clean Energy Agenda 2030 Partnership and the U.S.-India Strategic Clean Energy Partnership (SCEP) (PIB Delhi, 2022e). This reflects the increasing bilateral RE trade of both the countries and greater investment with opportunities for capacity-building, technological research and development. At the same time, it also offers India a great opportunity to engage with the GN to balance global energy markets along with achieving net-zero targets. Similarly, as the world struggles to recover from the widespread economic and environmental devastation of Covid-19, the Indo-EU cooperation on green development calls for a "renewed, global, green multilateral" (Jaspal, 2022) approach towards attaining RE targets for net-zero and with the EU being India's third largest trading partner and its second-largest export destination (The Print, 2022). The "EU-India Strategic Partnership: A Roadmap to 2025" of 2020 calls for strengthening clean energy transition initiatives towards implementing the EU-India Clean Energy and Climate Partnership involving the operationalisation of the Paris Agreement till 2023 through investments in green hydrogen, development of smart grids and climate financing. Furthermore, the EU's joining of the India-led ISA (European Commission, 2022) to promote solar energy reflects a North-South cooperation on RE with the former aspiring to achieve a net-zero by 2050. Its membership facilitates greater technology transfer, standard and certification development for disaster-resilient infrastructure. As India and the EU strengthen their ties multilaterally, other G-7 countries have reiterated their commitments towards "coal phase-out" through "carbon-free electricity production by 2035" when the Indian Minister of Environment Forest and Climate

¹⁴ The BIMSTEC, formed in 1997, comprises of Bangladesh, India, Myanmar, Sri Lanka, Thailand, Nepal and Bhutan, that is, the countries around the Bay of Bengal region. It is headquartered in Dhaka, Bangladesh and meets annually to discuss about trade and investment, counter-terrorism, climate change, energy, tourism, agriculture, public health, poverty alleviation, cultural exchanges, transport and communication.

Change Shri Bhupender Yadav, who was invited as the EU's most important RE partner in 2023, argued for a “coal phase-down” instead of “phase-out” since the GS is “significantly dependent on coal for electricity”. Hence, all have agreed to mobilise more investments in the RE sector to limit the temperature upto 1.5°C of pre-industrial levels by the end of 21st century and to assist the GS with technological know-how, finances and investments for GHG emissions reduction to combat climate change, according to the “equity” principle of climate justice. Consequently, the G-7 emphasises on renewables to achieve energy security and accelerate clean energy transition to “achieve a “predominantly decarbonized power sector” by 2035 (Koshy, 2023). Therefore, India seeks to ensure higher investments in the RE sector to reduce GHG emissions, phase out coal and other disaster mitigation strategies (Roche, 2021) to achieve its net-zero goals, by enhancing cooperation with the GN through RE projects. Also, these partnerships clearly indicate India’s adherence to its “Samvad-Sahyog-Samriddhi” approach in adopting multilateralism to work with the GN economies to fulfil its Panchamrit principles towards net-zero attainment.

India's adoption of a Five-S approach to multilateralism in climate diplomacy is clearly reflected in its engagement with the BIMSTEC countries to strengthen its maritime security and rejuvenate the region’s potential for blue economy in the Indian Ocean Region (IOR) through technical and technological assistance to promote climate resilient ports and RE (Joshi, 2021). Focused on solar energy, offshore wind energy, biofuels, energy efficiency in buildings and green hydrogen, both of them reiterated in 2022 to “ensure the transition towards a green future” through India-led global initiatives like the ISA wherein more EU member states have joined the ISA. Such partnerships are also furthered in India’s other multilateral disaster management mechanisms in its neighbourhood (other GS countries) such as Agreement on South Asia Rapid Response to Natural Disasters (2011), the BIMSTEC Centre for Weather and Climate (2014), the South Asian Cooperative for Environment Protection (2018) and the establishment of the BIMSTEC Technology Transfer Facility (BIMSTEC-TTF) in 2022 that have strengthened international cooperation on climate change mitigation measures and RE promotion in ports and shipping industry. The initiatives reflect India’s emerging focus on multilateral engagement to tackle environmental emergencies that the neighbourhood faces. Such measures strengthen joint disaster response mechanisms through prevention and mitigation plans so as to rapidly respond to the climate disasters without further damages, promoting RE for all projects and attracting climate finance through the L&D fund as the region is geographically one of the worst-suffering locations of the GS. Furthermore, India’s Act East Policy strives to strengthen ties with the ASEAN (Association of Southeast Asian Nations known as India’s “extended neighbourhood”) which are integral to the GS for their geostrategic location near the Pacific ocean. Therefore, the Indo-ASEAN cooperation ensures facilitating

RE transitions to mitigate climate change and the ASEAN's decision to join the ISA has allowed greater knowledge-sharing, technology transfer and RE infrastructure development that gear up grid integration under the OSOWOG initiative, based on Indo-ASEAN historical and cultural ties (PIB Delhi, 2022a). Therefore, a clear relationship is evident that shows how India is a strategically important partner for BIMSTEC and the ASEAN because of its geopolitical location, its workforce, its potential as a “global manufacturing hub for green hydrogen” and as a fertile ground for RE investments, especially towards solar grids in the Indo-Pacific region.

Amongst other GS states, the African continent also possesses an “arguably limitless” (Oguntuase, 2021) solar energy capacity given its geostrategic location which needs to be utilised to the fullest. As a tropical continent, Africa offers ample opportunities for India towards a South-South cooperation in economic and technical spheres under the UNFCCC. Consequently, India has invested in its solar projects under the ISA in African nations like Ghana, Madagascar, South Sudan, Republic of Congo, Mali, Burkina Faso, Nigeria, Uganda, Tanzania, Nigeria, Senegal and Ghana (Oguntuase, 2021) to share solar energy deployment practices in projects including rooftop solar panels, solar mini-grids, solar PV power plants, rural electrification, street lighting, solar cooling systems, solar-powered irrigation systems and urban infrastructure like schools, colleges, hospitals and public establishments. This has led to poverty alleviation, job creation and increased incomes, improving access to quality education and healthcare, social security and met Africa’s rising energy demands through ecological sustainability. These reflect India’s dynamism, under the ISA, in Africa’s solar power plants and green technology transfer, followed by bilateral trade and investment, scientific and technological cooperation as outlined by PM Modi in the ten Kampala principles of India-Africa engagement in 2018 to prioritise Africa’s development and foster South-South cooperation (Viswanathan & Mishra, 2019) in their net-zero targets.

6. Transition to Renewables: Bridging Climate Crisis and Energy Security

India is the world’s third largest producer of RE, thereby, ranking fourth in both installed wind and solar power capacity (PIB Delhi, 2022f). The India Energy Outlook 2021, released by IEA ranks India as “the world’s third-largest energy consuming country”, China and the USA being at the first and second positions respectively (as per BP Statistical Review of World Energy published in 2022) (PIB Delhi, 2022b). Therefore, achieving net-zero targets by 2050 is indeed a challenging task for 130 countries, in general, and by 2070 for India, in particular and, therefore, requires multilateral engagement for its energy transition goals. However, critics like Manchanda (2022) regard India’s net-zero target achievement as an “uphill task” (Manchanda, 2022) because its energy needs were

primarily met by coal and other fossil fuels since its independence and RE has been an expensive affair during all these years. Under such circumstances, Prime Minister Modi's announcement of the global initiative for LiFE at the CoP-27 in 2022 to "encourage an eco-friendly lifestyle" and making "pro-planet people" (Triple-P) (Business Standard, 2022), has several connotations. It outlines India's stand on a cooperative framework to secure a sustainable lifestyle by boosting agroforestry, agro-farming, using electric vehicles, banking on non-fossil fuels to reduce emissions and many more. Applying such initiatives both at the national and local levels, India, therefore, explores the close relationship amongst climate challenges, energy and food security through initiatives like manufacturing ethanol-blended fuels, electric vehicles, utilising solar and wind energy, encouraging investments in green hydrogen as an "alternate energy source" through the ISA, that keeps it adhered to its guiding principles of equity, humanity, climate justice (Mohapatra, 2022) and "Vasudhaiva Kutumbakam"¹⁵. Herein, it is seen that India looks forward to principles that are economically suitable to an agro-based nation that ensures sustainable future for not only itself but also for its allies, based on "Sahyog" and "Samriddhi" which makes it an inspiration for other GS nations.

India's ambitious energy transition projects, that aim for self-reliance or "Atmanirbharta", are inclusive, ambitious, action-oriented and significant for both the GS and the GN that direct its geopolitical footing in the post-pandemic world as a "global superpower of green energy". Recently, the Union Minister of Environment, Forest and Climate Change stated that India, under the Modi government, has emerged as one of the important "global forerunners" (PIB Delhi, 2023a) to bring the GS and the GN together to resolve challenges of climate crisis and energy security by strengthening global energy supply chains with a "whole-of-society" approach (in consonance with India's ancient principle of Vasudhaiva Kutumbakam). This means that the Central and state governments engage at all levels - national, regional and local levels soliciting the cooperation of private sector, civil society groups and indigenous communities. However, housing the world's largest population (World Population Review, 2023) necessitates the need for India to meet the rising energy requirements and control GHG emissions. Therefore, it is in this backdrop that India, being the centre of the global energy transition, has combined its economic and energy needs with a holistic and sustainable¹⁶ approach towards tackling climate crisis. With its transition towards

¹⁵ The theme of India's G20 Presidency is "Vasudhaiva Kutumbakam" or "One Earth · One Family · One Future". The Sanskrit phrase, meaning "The Whole World is A Family", is borrowed from Chapter 6 of Maha Upanishad VI.71-73 and is considered the most important moral value in the Indian society (Hattangadi, 2000).

¹⁶ The United Nations defines Sustainable Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". See "The Sustainable Development Agenda", UN.

renewables, India's achievement of its INDCs according to the Paris Agreement (n.d.) ahead of other countries reflects its sincerity and consistency in its pollution-mitigation and clean energy strategies. However, with its first set of INDCs (in 2015), it aimed towards achieving its 40 percent of its cumulative electric power requirements from non-fossil fuel sources and “reducing its emissions intensity of Gross Domestic Product (GDP) by 33 to 35 percent” by 2030 (PIB Delhi, 2022c) as compared to the 2005 levels. Surprisingly, much before 2030, it achieved its targets in 2021 that calls for India's pursuit of advocating the “energy-economy” dichotomy through Mission LiFE and its five-fold Panchamrit (five nectar-elements) strategy, focused on renewables. Therefore, it was in 2022 again that India submitted its updated INDCs by achieving its Panchamrit goals announced at the CoP-26 for attaining net-zero goals by 2070 (as promised by India). Having formally updated its NDCs in 2022 has various implications for India. It means India has to gear up its RE projects to fulfill 50 percent of its energy requirements from them that confirms to the UNFCCC. Under it, it has increased its emission intensity upto 45 percent of its GDP to be reduced (10 percent more than its previous INDCs) and upto 50 percent of its cumulative electric power installed capacity from non-fossil fuels (10 percent more than what was outlined in its previous INDC clauses) (PIB Delhi, 2022d) by 2030. This is why PM Modi, in one of his speeches, referred to India's green energy potential as a “gold mine or oil field” (Anand, 2023) that shall bear high yield to investors which indicates how India is willing to collaborate with both domestic and international players to boost its green economy, based on solar, hydro and wind energy projects. With its highly ambitious climate targets for attaining net-zero within 2070 to “establish itself as lead player in the global green energy market”, India's energy transition initiatives are based on three pillars: reducing reliance on fossil fuels, enhancing RE production and focusing on a “gas-based” economy that work towards “exacerbating fuel poverty” to facilitate a just, stable and sustainable energy transition. These reflect India's continuous adherence to the principle of Common But Differentiated Responsibilities with Respective Capabilities¹⁷ (CBDR-RC) and its commitments towards net-zero through clean energy initiatives and become a GS climate leader.

At the CoP-26, PM Modi announced that India would fulfil 50 percent of its energy requirements from non-fossil fuels by 2030 as part of its Panchamrit commitments, focused on renewables and has already achieved a total of 168.96 GW by 28 February 2023 (PIB Delhi, 2023c). This includes an installation of about 168 GW of RE projects that include solar, wind and hydro energy projects (Mukherjee, 2023) in Andhra Pradesh (Economic Times, 2023) (Ojha, 2023)

¹⁷ The principle of CBDR-RC acknowledges the responsibility of every member country under the UNFCCC in addressing climate change which includes measures like emission reduction, waste management, disaster management and increasing the use of renewables, to name a few.

(Janyala, 2023), Gujarat (ET Energyworld, 2023b), Madhya Pradesh (Mint, 2022), Rajasthan (Sharma, 2022), Tamil Nadu (BW Businessworld, 2023) and RE parks in Ladakh (Saxena, 2023) (Goswami, 2023) (Hussain, 2023). Such RE advancements advocate for India's strong voice as a GS country for energy transition and developing new sources. India's explorations of the "four verticals" in the energy sector (biofuels, vehicular decarbonisation through electric vehicles, industrial decarbonisation by green hydrogen and solar, wind and hydro power) has been further developed by its GOBARdhan (Galvanising Organic Bio-Agro Resources-Dhan) project that utilises cattle dung and biodegradable waste, thereby, ensuring rural cleanliness, minimising air pollution due to farm stubble burning (Manchanda, 2022) and electricity generation. India has launched many such waste-to-energy (WTE) plants that are working on tonnes of solid wastes daily for which industrial machinery is being imported from countries like Germany (ET Energyworld, 2022). This means that India's ambitious RE targets, in the form of energy reduction initiatives and green initiatives like the GOBARdhan, are wider research issues as they are no longer confined to the national boundaries (Thakker, 2018), rather call for international collaborations since India is a member of many multilateral organisations of both the GN and the GS. Thus, sectors like bio-manure and biofuels production (as outlined under the GOBARdhan initiative), solar energy production, EV manufacturing industry and waste management strategies have boosted employment since 2022 because they saw an "eight-fold increase" as compared to that of 2021, according to a working report by the Indian Council on Energy, Environment and Water (CEEW), Natural Resources Defense Council (NRDC) and Skill Council for Green Jobs (SCG). For example, India's solar capacity has witnessed a rise in 197 percent since 2018 (from 21,651 to 64,380 MW) (PIB Delhi, 2023b). Such innovations in RE have led to green electrification of villages, towns and cities in India that are equipped with solar pumps for agricultural uses, along with total electrification of railways, airports and other public buildings. Therefore, India's "continued growth of RE" has revealed its potential to achieve the government's multiple priorities of emission reduction, RE expansion, cost-cutting measures of enhancing energy security and robust economic development through employment generation to "create a more equitable workforce while transitioning to a low-carbon economy" (Longkumer, 2023) which adhere to India's commitments at CoP-26 for a "pro-planet, pro-people" way of life and comprise of policies and regulations to connect India's carbon market globally.

In the global race for renewables, India has also become a global market of green hydrogen which influences India's global leadership to attain energy self-reliance, given its "large landmass and low renewable energy costs" (Kumar, 2023b). Under its National Green Hydrogen Mission, the government aims to achieve five million metric tonnes of green hydrogen within 2030, an ambitious target for a GS country in the emerging world order. Therefore, in the near future,

it is expected that green hydrogen will “enable the emergence of a domestically-produced energy carrier” to reduce natural gas, petroleum and fertiliser import dependency. Similarly, the evolution of the E-10¹⁸ and the E-20¹⁹ fuels from ethyl alcohol (by fermenting sugar and food grains) (PIB Delhi, 2023d) has also incentivised farmers to opt for sugar production that adds to their incomes and national savings of about 4 billion US dollars per annum. Being produced domestically, the fuels are cheaper than petroleum which make them “not only a national imperative but also a strategic requirement for India”, by showing a 5 percent reduction in carbon emissions (Kumar, 2023a). Further researches reveal that the E-20 fuel-resilient two-wheelers have shown a 50 percent lower carbon monoxide emissions while four-wheelers have emitted 30 percent lesser, apart from a fall of 20 percent of hydrocarbons emissions (Kumar, 2023a). Therefore, it can be safely concluded that the Indian government’s ambitious initiative of E10 and E-20 petroleum are directed not only towards attaining net-zero but also to add to meet rising energy requirements and increase national income by saving import costs, strengthen grassroots economy by incentivising farmers to grow sugarcane for ethanol production and creating more employment opportunities. It reflects the Indian government’s strict adherence to PM Modi’s LiFE principles that broadly apply to all the G-20 countries that form the GS and how India is working towards collaboration with them through its GOBARdhan and green hydrogen programmes. As India imports 85 percent of crude oil and 55 percent of natural gas, high fuel prices challenge its economic and energy security which has led to its attainment of self-reliance or Atmanirbharta in RE transition initiatives like ethanol-blending and engaging in multilateral partnerships with both the GN and the GS (Anand, 2023).

Similar progress has been made in its National Green Hydrogen Mission that was announced in January 2023 and has captured the attention of the USA and the EU, in general, and EU countries like Germany and France (Anand, 2022), in particular. India’s target to achieve 5 MMT green hydrogen not only requires huge investments but also manufacturing electrolyzers, green steel and long-haul fuel cells that opens up a plethora of investment opportunities for the West. As a key partner in Saudi Arabia’s “Vision 2030” for its sustainability, India also catalyses its aspirations to “turn Middle East into ‘Europe of the Future’”

¹⁸ In 2022, the Indian Oil Corporation Limited (IOCL) rolled out the E10 petroleum in north-eastern states. Comprising of 10 percent ethanol blended in petroleum, the E10 has been implemented in 2022 (Sharma, 2023) has reduce the nation’s reliance on fuel imports, besides being a pollution-resilient and affordable fuel. It reduces vehicular GHG emissions by undergoing complete combustion

¹⁹ In 2023, PM Modi formally announced the launch of the E-20 Fuels which is a landmark initiative in India’s transition towards attaining net-zero. The E-20 initiative calls for a 20 percent ethanol-blended petroleum that are to be produced by Public Sector Undertakings like the Hindustan Petroleum Corporation Limited (HPCL) by 2025.

(Rodrigues, 2023). Lying in the Tropical region, the latter (like Africa) also possesses “impressive natural potential for solar and wind power” that are furthered by investments in technological advancements to diversify its energy resources. As a member of the Gulf Cooperation Council (GCC) and the ISA, it seeks to invest in India’s Green Hydrogen Mission since the GCC countries possess affordable land and water resources to help in manufacturing green hydrogen and solar power projects (Rodrigues, 2023). Therefore, it focuses on areas for collaboration like reducing RE installation costs, diversifying its supply chains, low emission, green fuels that result in a sustainable energy transition. Henceforth, it can be safely stated that India aspires for collaborative projects in RE in its ambitious net-zero targets which will be accelerated during its G-20 presidency. Such trilateral and multilateral collaborations indicate gap-bridging between the GN and the GS with India’s catalysing role as a GS climate and RE leader. Along with that, it is noteworthy that India aligns its domestic RE goals with its international commitments through bilateral and multilateral cooperation with its partner countries to successfully initiate its projects at the grassroots level.

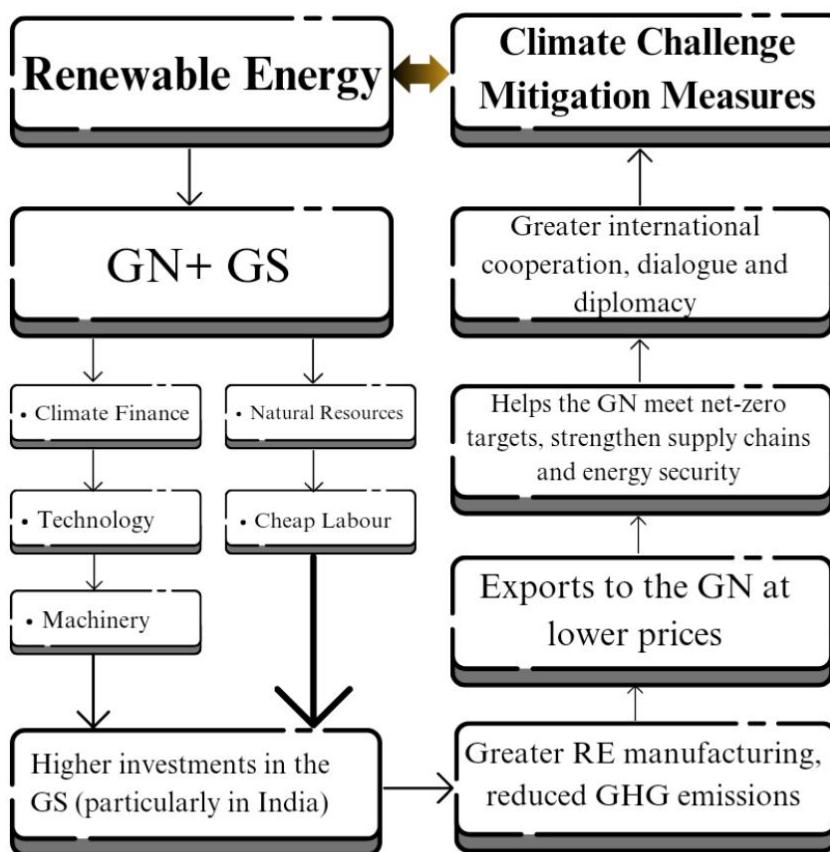
7. Findings

Using content analysis approach from international (multilateral and bilateral) and national perspectives, this paper highlights India’s Panchamrit vision and strategies to employ them for international collaboration in proposing to bridge the North-South divide towards energy security through sustainable means and mitigate climate catastrophes. India is undergoing several emission control mechanisms for which its transition from the conventional petroleum-based fuels towards biofuels is understood as mitigating temperature rise-related climate catastrophes in the post Covid-19 world. From its transition as a critic of the GN’s excessive anthropocentric activities to being a GS leader, India’s current RE strategies using solar energy and biofuels indicate that it is capable of leading the global climate regime towards emission reduction and prevention of temperature rise since they have successfully responded to the need of the hour. They have been successful in reducing India’s energy crisis in the form of installation of solar panels at regular intervals, biogas plants and ethanol-blended fuels usage that are not only cost-cutting but also environmentally sustainable. India’s adoption of the Panchamrit principles in its foreign negotiations and domestic commitments have led to greater opportunities for cooperation not only with itself but also towards bridging the North-South divide and memorising the idea of energy and climate as “glocal (global & local) commons”. By equipping the ports of BIMSTEC members with solar panels, collaborating with the ASEAN and the African Union nations, India has clearly shown that its commitments are not just on paper but have been successful in strengthening India’s ties with other GS nations. As the risks of climate change are expected to increase further in the

future and more co-operation on RE promotion is the need of the hour, the future researches could be conducted to find answers to the following questions:

- In which ways can biofuels strengthen India's climate and energy diplomacy? What is its role in community development?
- How does India help the GN meet its net-zero goals through its RE promotion initiatives?
- Can India's Panchamrit strategy help the EU in attaining net-zero by 2050 through its low-cost solar grids and photovoltaic cells?
- What does the GS, in general, and the African Union, in particular, offer to India in terms of RE?

Figure 1: A Diagrammatic Representation of the Close Relationship between Renewable Energy and Climate Security



Source: Author

By studying the reports uploaded by the Indians government, it is evident that India's ambitious climate and RE projects are marked by continuous research in areas like waste management, for example, using plant and animal wastes in

manufacturing biofuels. However, more researches are required in plastic waste management which is a pressing concern in India. India has shown that waste management is not only about minimising waste generation but also to sustainably use in order to end electricity crisis issues, especially in rural areas. This research also demonstrated the importance of Indian electrolyzers, solar panels and photovoltaic cells for the GN because of its reduced costs that highlights bioenergy development rooted in the local communities' upliftment. The concepts of INDCs, Panchamrit, L&D fund and net-zero are important to realise the reconstruction of the global climate and energy regime after Covid-19. For this reason, India's RE projects should work more towards achieving net-zero goals through community development that sets an example for other GS nations. By this proposed model, the government can initiate efforts to mitigate the GHG's emission impacts by promoting better waste management techniques from the national to the local level with the extensive support of the GN. The state governments are also participating actively to prevent the common threat of energy crisis by improving sustainable lifestyles in daily activities.

8. Conclusion: Future of India's RE

Recently, the U.S. Department of Energy and the Lawrence Berkeley National Laboratory predicted India's "energy independence by 2047" (India Today, 2023) by minimising fuel imports reliance, leading to 100 percent vehicular electrification by 2035, complete industrial decarbonisation, attaining 80 percent of clean grid by 2040 and 90 percent by 2047, consequently achieving net-zero targets ahead of 2070 which means that India's "green growth strategy" is focused on its LiFE and Panchamrit principles, thereby, aimed at creating a "cleaner, greener and more prosperous future" (Pullokaran, 2023) not only for India but for the entire world. These shall be facilitated by smarter technologies like agro-photovoltaics that would enable land usage for "both agriculture and power generation" that include "development of new educational programmes on renewables, targeted training, and skill development, including upskilling or reskilling, to keep up with the pace of technological advancement" (Mehta & Simi, 2023). Hence, India's investments in RE and waste management projects directed towards emission reduction and greener nation show that it is en route to net-zero and has played an important role in bringing both the GN and the GS together to act on rising temperatures, GHG emissions and industrialisation. Therefore, together with the international and national stakeholders involved in India's RE promotion, the Indian government is working on its well-crafted diplomacy of ensuring greater cooperation with the GN that will lead to greater technological advancements, along with offering its labour resources to utilise its natural resources for the betterment of the community that are concomitant to its agreements with the GN and the GS (being a voice of the GS) since Covid-19.

However, the government should also work more towards environmental restoration, including the preservation of forests and natural habitats that are essential for sustainable development and manufacture of biofuels which will inspire the other GS nations to explore their resources. Therefore, co-operation amongst multi-stakeholders (the international organisations, the national government, local governments, business sectors, civil society and the local communities) on deforestation control initiatives to respond to the intensification and frequency of climate catastrophes and energy security challenges.

The future of RE in India is a bright one with the GN's renewed interest in the nation's low cost solar panels, PV cells, cheap labour and readily available natural resources required for RE production. This would bring down the costs of electricity in the GN nations and help them accelerate their investments in the GS' RE manufacturing units, apart from vehicular emission reduction. At the same time, India would also be able to improve the common people's living conditions and the national economy of GS parties like the African continent. Greater RE manufacturing units means higher employment opportunities, poverty alleviation measures, improved living standards of people, reduced chances of electricity crisis and greater community engagement through sustainable development in the GS. Furthermore, India's role as a GS climate leader opens doors for greater cooperation and dialogue after the North-South divide has been bridged. Therefore, along with its own development, India's RE strategies, based on the 5-S principles, strives to work towards mitigating global challenges like increasing vehicular GHG emissions, rising temperatures, climate change challenges, waste management and energy security issues caused by supply chain disruption. Also, they have been successful in exploring the close relationship between climate change and energy security not only in the local levels but also in international agreements, dialogues and negotiations based on RE investments and transfer of L&D funds under which it has brought policy and diplomacy closer to each other, especially after Covid-19.

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แนวทางการจัดทำต้นฉบับบทความ เพื่อส่งขอรับการพิจารณาตีพิมพ์ในวารสารรัฐศาสตร์และรัฐประศาสนศาสตร์

วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์ มีกำหนดออกปีละ 2 ฉบับ ฉบับที่ 1 มกราคม-มิถุนายน และฉบับที่ 2 กรกฎาคม-ธันวาคม มีระบบการพิจารณาแล้วเสร็จในกรอบ 6 เดือน ตามขั้นตอนการพิจารณาคัดเลือกบทความตามที่ระบุไว้ในเอกสารนี้

1. ประเภทของบทความ และขอบเขตเนื้อหาของบทความที่รับตีพิมพ์

วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์ เปิดรับบทความทั้งภาษาไทย และภาษาอังกฤษ ซึ่งมีเนื้อหาทางด้านรัฐศาสตร์ การเมืองการปกครอง การระหว่างประเทศ และรัฐประศาสนศาสตร์ ตามประเภทต่าง ๆ ดังนี้

- บทความวิจัย (Research article)
- บทความวิชาการ (Academic article)
- บทความปริทัศน์ (Reviewed articles)
- บทวิจารณ์หนังสือ (Book review)
- บทความพิเศษ (Special article) หรือบทความรับเชิญ (Invited article)

2. คุณลักษณะของบทความที่รับตีพิมพ์

- บทความที่มีความยาวประมาณ 15-20 หน้า กระดาษ A4 ไม่รวมรูปภาพและตาราง และสำหรับบทความประเพณี บทความปริทรรศน์ หรือบทวิจารณ์หนังสือ ควรมีความยาวประมาณ 5-10 หน้า กระดาษ A4 (โดยมีระยะขอบของกระดาษ (Margins) ดังนี้ ขอบบนและขอบซ้าย 1.25 นิ้ว ขอบล่างและขอบขวา 1 นิ้ว และระยะห่างระหว่างบรรทัดเทากับ 1 (single space))
- จะต้องเป็นบทความที่เขียนขึ้นมาใหม่ (Original article) ไม่เคยตีพิมพ์เผยแพร่ที่ใดมาก่อน (Redundant publication) หากเป็นบทความที่เคยนำเสนอในที่ประชุมวิชาการ หรืองานสัมมนาวิชาการที่ได้ที่หนึ่งมาก่อน หรือเป็นบทความที่เป็นส่วนหนึ่งของวิทยานิพนธ์ หรือการแปลงงานจากภาษาอื่น จะต้องมีการอ้างอิงโดยระบุไว้ในเชิงอรรถ และบทความนี้จะต้องมีการปรับแก้ให้เป็นไปตามมาตรฐานทางวิชาการ
- ผู้เขียนบทความจะต้องไม่ส่งบทความเพื่อขอรับการพิจารณาตีพิมพ์มากกว่าหนึ่งวารสารในเวลาเดียวกัน (Simultaneous submission)
- จะต้องไม่เป็นบทความที่ลอกเลียนแบบ หรือคัดลอกผลงานของผู้อื่น (Plagiarism) รวมถึงการคัดลอกผลงานตนเองโดยมิชอบ (self-plagiarism)

5) จะต้องเป็นบทความที่มีการจัดรูปแบบ และจัดเตรียมข้อมูลครบถ้วนตามรายละเอียดที่กำหนดในเอกสารฉบับนี้

6) ในวารสารแต่ละฉบับอาจมีบทความพิเศษ (Special Article) หรือบทความรับเชิญ (Invited Article) ที่ไม่จำเป็นต้องผ่านการพิจารณาคุณภาพจากผู้ทรงคุณวุฒิ

3. การส่งบทความเพื่อขอรับการพิจารณาลงตีพิมพ์

ขอให้ผู้เขียนนำส่งเอกสาร / ข้อมูล ดังรายการด้านล่าง

1) แบบฟอร์มน้ำส่งบทความ ซึ่งผู้เขียนรับรองว่าบทความที่นำส่งมานั้นเป็นผลงานของผู้เขียนเอง ไม่เคยตีพิมพ์ที่ใดมาก่อน และไม่อยู่ระหว่างเสนอให้วารสารอื่นพิจารณาจำนวน 1 ฉบับ (ดาวน์โหลดแบบฟอร์มได้ที่ <https://so05.tci-thaijo.org/index.php/polscicmujournal>)

2) ไฟล์ดิจิตอลของ

(1) บทความต้นฉบับที่มีการจัดรูปแบบตามรายละเอียดที่วารสารกำหนด นามสกุล .pdf

(2) บทความต้นฉบับที่มีการจัดรูปแบบตามรายละเอียดที่วารสารกำหนด นามสกุล .doc หรือ .docx และ

(3) รูปภาพ ที่ใช้ประกอบในบทความ นามสกุล .jpg, jpeg หรือ RAW หรือ TIFF ความละเอียด 300 Pixel / High Resolution ขนาดไฟล์ไม่ต่ำกว่า 500KB

มายังกองบรรณาธิการโดยผ่านทางระบบ TCI-ThaiJO วารสารรัฐศาสตร์และรัฐประศาสนศาสตร์ เว็บไซต์ <https://so05.tci-thaijo.org/index.php/polscicmujournal>

ติดต่อสอบถามข้อมูลเพิ่มเติมได้ที่

กองบรรณาธิการวารสารรัฐศาสตร์และรัฐประศาสนศาสตร์ คณะรัฐศาสตร์ และรัฐประศาสนศาสตร์ มหาวิทยาลัยเชียงใหม่ ที่อยู่ 239 ถนนห้วยแก้ว ตำบลสุเทพ อำเภอเมือง จังหวัดเชียงใหม่ 50200 โทรศัพท์ 0-5394-2995 โทรสาร 0-5394-2988 อีเมล: polscicmujournal@gmail.com

4. การจัดเตรียมต้นฉบับบทความ

4.1 รูปแบบของตัวอักษร

ขอให้ผู้เขียนใช้ตัวอักษรที่มีขนาด ชนิด และการจัดรูปแบบ ดังนี้

รายการ	ภาษาไทย (TH Sarabun PSK)			English (Times New Roman)		
	ขนาด	ชนิด	การจัดเรียง	Size	Type	Alignment
ชื่อเรื่อง / Title	20	หนา	ตรงกลาง	15	Bold	Center
ชื่อผู้เขียน / Author (s)	16	หนา	ชิดขวา	12	Bold	Right Alignment
สังกัดผู้แต่ง / Affiliation (s) (แสดงในรูปแบบ footnote)	14	ธรรมดา	ชิดซ้าย	11	Regular	Justify
หัวข้อบทคัดย่อ / Abstract Title	16	หนา	ตรงกลาง	12	Bold	Center
เนื้อหาบทคัดย่อ / Abstract	16	ธรรมดา	กระจายแบบไทย	12	Regular	Justify
คำสำคัญ / Keywords	16	หนา	ชิดซ้าย	12	Bold	Left Alignment
หัวข้อเรื่อง / Heading	16	หนา	ชิดซ้าย	12	Bold	Left Alignment
หัวข้อย่อย / Sub headings	16	หนา+ เอียง	ชิดซ้าย	12	Bold+Italic	Left Alignment
เนื้อหา / Content	16	ธรรมดา	กระจายแบบไทย	12	Regular	Justify
ชื่อตารางและชื่อรูปภาพ / Table or Figure title	16	หนา	ชิดซ้าย	12	Bold	Left Alignment
หัวตาราง / Heading row	14	หนา	กลาง	11	Bold	Left Alignment
ข้อความในตาราง หรือภาพ / text in the table or figure	14	ธรรมดา	ชิดซ้ายหรือขวา	11	Regular	Left or Right Alignment
เชิงอրรถ / footnote	14	ธรรมดา	กระจายแบบไทย	11	Regular	Justify
หัวข้อเอกสารอ้างอิง / References Title	16	หนา	กลาง	12	Bold	Left Alignment
เอกสารอ้างอิง / References	16	ธรรมดา	กระจายแบบไทย	12	Regular	Justify

4.2 องค์ประกอบของบทความ

รายการ	คำอธิบาย
ชื่อเรื่อง / Title	ระบุชื่อเรื่องทั้งภาษาไทย และภาษาอังกฤษ ชื่อเรื่องไม่ควรยาวเกินไป และครอบคลุมสาระของบทความ และมีความสอดคล้องกันระหว่างภาษาไทยและภาษาอังกฤษ หมายเหตุ: หากผู้เขียนประสงค์ระบุชื่อแหล่งทุนได้ให้การสนับสนุนการทำวิจัย สามารถระบุได้โดยการเพิ่มอีกรอบไว้ที่ท้ายชื่อเรื่อง
ชื่อผู้เขียน / Author (s)	<ul style="list-style-type: none"> ระบุชื่อผู้แต่งทั้งภาษาไทยและภาษาอังกฤษ ไม่ควรระบุตำแหน่งทางวิชาการ ยศ ตำแหน่งทางทหาร คำนำหน้าชื่อ รวมทั้งสถานภาพ (อาทิ นักศึกษาปริญญาเอก, อาจารย์ที่ปรึกษา, คณบดี) ทั้งที่ด้านหน้าและท้ายชื่อผู้แต่ง
สังกัดผู้แต่ง / Affiliation (s)	<ul style="list-style-type: none"> ระบุชื่อหน่วยงาน หรือตำแหน่งทางวิชาการ และชื่อหน่วยงานที่ผู้แต่งสังกัด ในเชิงอรรถ โดยเรียงจากหน่วยงานระดับต้นไปจนถึงหน่วยงานหลัก และจัดเรียงบุจังหวัด รหัสไปรษณีย์ ประเทศ และอีเมล (ขอให้ระบุอีเมลอย่างน้อยสำหรับผู้แต่งหลัก (Corresponding author)) หากหน่วยงานที่ผู้แต่งสังกัดเป็นภาษาไทย ให้ระบุรายละเอียดหน่วยงานที่ผู้แต่งสังกัด เป็นภาษาอังกฤษ ในบรรทัดถัดจากชื่อหน่วยงานที่สังกัดภาษาไทย
บทคัดย่อ / Abstract	<ul style="list-style-type: none"> บทคัดย่อภาษาไทย ควรมีเพียง 1 ย่อหน้า ความยาวไม่เกิน 250 คำ บทคัดย่อภาษาอังกฤษ ควรมีเพียง 1 ย่อหน้า ความยาวไม่เกิน 150-250 คำ และมีเนื้อหาสอดคล้องกับบทคัดย่อภาษาไทย โดยในบทคัดย่อจะต้องประกอบไปด้วย <ol style="list-style-type: none"> ความสำคัญของการศึกษา (main argument or thesis statement) วัตถุประสงค์ (research purpose) ระเบียบวิธีวิจัย/วิธีการศึกษา (research methodology) หรือกรอบแนวคิด (conceptual framework) ผลการวิจัยหรือผลการศึกษา (research finding) หรือข้อค้นพบที่สำคัญ (main finding) หรือข้อเสนอแนะเชิงนโยบาย สรุปและประโยชน์ที่ได้จากการศึกษา (conclusion and contribution)
คำสำคัญ / Keywords	ระบุคำสำคัญจำนวนไม่เกิน 5 คำ โดยคำสำคัญแต่ละคำ ให้แสดงทั้งภาษาไทยและภาษาอังกฤษซึ่งมีความหมายตรงกัน
เนื้อหา / Content	<ul style="list-style-type: none"> ควรประกอบด้วยส่วนของความนำ เนื้อหา และบทสรุป การใช้คำศัพท์เฉพาะทางวิชาการ <ol style="list-style-type: none"> กรณีคำภาษาอังกฤษที่มีการใช้ทับศัพท์ภาษาไทยอย่างแพร่หลาย ให้เขียนเป็นภาษาไทยตามที่มีการบัญญัติศัพท์ในพจนานุกรมฉบับราชบัณฑิตยสถาน โดยไม่ต้องแสดงคำศัพท์ภาษาอังกฤษประกอบ อาทิ อินเทอร์เน็ต อิเล็กทรอนิกส์ กรณีคำภาษาอังกฤษที่ยังไม่มีการใช้แพร่หลาย ให้เขียนคำแปลภาษาไทย หรือคำทับศัพท์ โดยแสดงคำศัพท์ภาษาอังกฤษ และอักษรย่อ (ตัวมี) ประกอบใน

รายการ	คำอธิบาย
	<p>วงเดิบ ทั้งนี้ การเขียนคำศัพท์ภาษาอังกฤษในวงเดิบ ให้ใช้ตัวพิมพ์เล็กทั้งหมด ยกเว้นคำที่มีอักษรย่อหรือคำเฉพาะ จึงจะขึ้นต้นคำด้วยตัวพิมพ์ใหญ่ และ การเขียนคำภาษาอังกฤษทำกับครั้งแรกเพียงครั้งเดียวครั้งต่อๆ ไปไม่จำเป็นต้อง เขียนภาษาอังกฤษกำกับอีก เช่น องค์การสหประชาชาติ (United Nations: UN)</p> <p>(3) กรณีที่คำทั้งภาษาไทยและภาษาอังกฤษที่มีการใช้อักษรย่อ ให้ระบุคำเติมและ อักษรย่อในครั้งแรกที่มีการกล่าวถึง และครั้งต่อไปให้ใช้อักษรย่อเพียงอย่างเดียว อาทิ องค์กรปกครองส่วนท้องถิ่น (อปท.) ครั้งต่อไปใช้ อปท., องค์การ สหประชาชาติ (United Nations: UN) ครั้งต่อไปใช้ UN</p> <ul style="list-style-type: none"> ▪ การแสดงตราง รูปภาพ หรือแผนภาพ <ul style="list-style-type: none"> (1) ให้แสดงชื่อตราง รูปภาพ หรือแผนภาพ ด้านบนตราง รูปภาพ หรือแผนภาพ และใส่หมายเลขกำกับตราง รูปภาพ หรือแผนภาพ โดยเรียงตามลำดับ การนำเสนอในเนื้อเรื่อง (2) หากเป็นตราง รูปภาพ หรือแผนภาพที่อ้างอิงมาจากแหล่งข้อมูลอื่นให้อ้างอิง ที่มาโดยแสดงที่มาไว้ใต้ตราง รูปภาพ หรือแผนภาพ (ใช้รูปแบบการอ้างอิงแบบ นามปี) และดำเนินการให้เป็นไปตามข้อกำหนดเกี่ยวกับลิขสิทธิ์ (3) หากมีหมายเหตุประกอบตราง รูปภาพ หรือแผนภาพ ให้ใส่หมายเหตุไว้บรรทัด ใต้ที่มา ▪ เชิงอรรถ (footnote) ในเนื้อหา ใช้สำหรับการอธิบายขยายความจากในเนื้อหา เท่านั้น ไม่ใช้สำหรับการอ้างอิงเอกสารในเนื้อเรื่อง (การอ้างอิงเอกสารในเนื้อเรื่อง ใช้รูปแบบการอ้างอิงในเนื้อหา (In-text citation))
การอ้างอิงเอกสาร ในเนื้อหา / In-text citation	ใช้รูปแบบการอ้างถึงในเนื้อหา (In-text citation) แบบนามปี (Name-and-year system) ในระบบ American Psychological Association 6 th edition (APA6) (ดูรายละเอียดในหัวข้อ การอ้างถึงในเนื้อหาและการลงรายการเอกสารอ้างอิง)
เอกสารอ้างอิง / References	<ul style="list-style-type: none"> ▪ ให้แสดงรายการเอกสารอ้างอิงท่อนท้ายของบทความ โดยใช้รูปแบบเอกสารอ้างอิง ในระบบ APA โดยผู้เขียนต้องตรวจสอบข้อมูลการอ้างอิงให้ครบถ้วนสมบูรณ์ รวมทั้ง รายการเอกสารอ้างอิงจะต้องครอบคลุมรายการที่มีการอ้างอิงในเนื้อหา ▪ ให้แสดงรายการเอกสารอ้างอิงโดยเรียงลำดับตามตัวอักษร และให้เรียงรายการ เอกสารอ้างอิงที่เป็นสิ่งพิมพ์ภาษาไทยก่อน และจึงตามด้วยรายการเอกสารอ้างอิง ที่เป็นสิ่งพิมพ์ภาษาต่างประเทศ ▪ คณะกรรมการวัสดุศาสตร์และวัสดุประสาสนศาสตร์ มหาวิทยาลัยเชียงใหม่ ไม่รับผิดชอบต่อ เนื้อหาที่นำมายกเว็บไซต์ภายนอกที่ถูกอ้างอิงในบทความในวารสาร ความถูกต้อง ของ URL ที่ถูกอ้างนั้นสามารถสืบค้นได้เมื่อวันที่ผู้เขียนเขียนบทความ

4.3 การอ้างถึงในเนื้อหา และการลงรายการบรรณานุกรม

4.3.1 การอ้างถึงในเนื้อหาแบบนามปี ในระบบ APA

(1) การอ้างถึงในเนื้อหาแบบนามปี ในระบบ APA สามารถทำได้ ดังนี้

- อ้างถึงโดยชื่อผู้แต่งอยู่ในเนื้อความ เช่น เก่ง เขียนดี (2559, น. 1) ได้ให้ขอเสนอแนะ กี่วักบ..., Smith (2016) defines public policy as...,
- อ้างถึงโดยลงรายการชื่อผู้แต่ง, ปี, เลขหน้าในเครื่องหมายวงเล็บ เช่น (เก่ง เขียนดี, 2559, น. 1), (Smith, 2016, p. 1)

(2) กรณีผู้แต่ง 1 คน ผู้แต่งที่เป็นชาวไทยให้ใส่ทั้งชื่อ และนามสกุล หากผู้แต่งเป็น ชาวต่างประเทศ ให้ใส่เฉพาะนามสกุล อาทิ (เก่ง เขียนดี, 2559, น. 1), (Smith, 2016, p. 1)

(3) กรณีผู้แต่ง 2 คน ให้ลงรายการด้วยชื่อผู้แต่งทั้งสองคนทุกครั้งที่อ้าง โดยผู้แต่งชาวไทย ให้คั่นระหว่างชื่อด้วยคำว่า “และ” เช่น (เก่ง เขียนดี และขยัน ออดทน, 2559) และผู้แต่ง ชาวต่างประเทศ ให้คั่นระหว่างชื่อด้วย “and” เช่น Smith and Adam (2016) และถ้าชื่อ ผู้แต่งอยู่ในวงเล็บ ใส่เครื่องหมาย “&” แทนคำว่า “and” เช่น (Smith & Adam, 2016)

(4) กรณีผู้แต่ง 3-6 คน ครั้งแรกให้ลงรายการด้วยชื่อผู้แต่งทุกคน โดยคั่นระหว่างชื่อ ด้วยเครื่องหมาย “,” และครั้งต่อไปให้ลงเฉพาะชื่อคนแรก และตามด้วยคำว่า “และคณะ” สำหรับผู้แต่งภาษาไทย และ “et al.” สำหรับผู้แต่งชาวต่างชาติ เช่น ครั้งแรก (เก่ง เขียนดี, ขยัน ออดทน, และมานะ พยายาม, 2559, น. 1) ครั้งถัดไป (เก่ง เขียนดี และคณะ, 2559, น. 3), ครั้งแรก (Smith, Adam, & Potter, 2016, p. 101) ครั้งถัดไป (Smith et al., 2016, p. 102)

(5) กรณีผู้แต่ง 7 คนขึ้นไป ให้ลงรายการด้วยชื่อผู้แต่ง คนที่ 1 และตามด้วยคำว่า “และคณะ” สำหรับผู้แต่งภาษาไทย และ “et al.” สำหรับผู้แต่งชาวต่างชาติ เช่น (เก่ง เขียนดี และคณะ, 2559, น. 1), (Smith et al., 2016, p. 101)

(6) สิ่งพิมพ์คนละรายการ พิมพ์คนละปี แต่มีผู้แต่งคนเดียวกัน หรือกลุ่มเดียวกัน และผู้เขียน ต้องการอ้างถึงพร้อมๆ กัน ให้ลงรายการด้วยชื่อผู้แต่ง ตามด้วยปีที่พิมพ์ โดยเรียงลำดับ ปีที่พิมพ์จากเก่าไปใหม่ และคั่นระหว่างปีด้วยเครื่องหมาย “,” เช่น (เก่ง เขียนดี, 2555, 2559), (Smith, 2014, 2016)

(7) สิ่งพิมพ์คนละรายการ พิมพ์ปีเดียวกัน แต่มีผู้แต่งคนเดียวกัน หรือกลุ่มเดียวกัน และ ผู้เขียนต้องการอ้างถึงพร้อมๆ กัน ให้ลงรายการด้วยชื่อผู้แต่ง ตามด้วยปีที่พิมพ์ โดยลงอักษร ก, ข, ค กำกับหลังปีที่พิมพ์สำหรับผู้แต่งคนไทย และ a, b, c สำหรับผู้แต่งชาวต่างประเทศ และคั่นระหว่างปีด้วยเครื่องหมาย “,” เช่น (เก่ง เขียนดี, 2555ก, 2555ข), (Smith, 2014a, 2014b)

(8) การอ้างถึงสิ่งพิมพ์หลายรายการ ผู้แต่งต่างกัน พร้อมกัน ให้ค้นแต่ละรายการด้วยเครื่องหมาย “;” เรียงลำดับตามตัวอักษรซึ่ง (หรือนามสกุล) ผู้แต่ง เช่น (เกง เอียนดี, 2559; นานะ พญาณ, 2558), (Adam, 2014; Smith & Potter, 2016)

(9) กรณีผู้แต่งที่เป็นหน่วยงานหรือสถาบัน ให้ลงรายการครั้งแรกด้วยชื่อเต็มของหน่วยงาน/สถาบัน และตามด้วยชื่อย่อในวงเล็บ “[...]” และการอ้างครั้งต่อไปใช้แต่ชื่อย่อ ยกเว้น การอ้างชื่อมหาวิทยาลัยให้สืบเชื่อต่อกันครั้ง เช่น ครั้งแรก (สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ [สสส.], 2558) ครั้งถัดไป (สสส., 2558)

(10) กรณีที่เป็นเอกสารไม่ปรากฏชื่อผู้แต่ง ให้แสดงรายการโดยระบุชื่อสิ่งพิมพ์นั้นแทนชื่อผู้แต่ง โดย หากเป็นสิ่งพิมพ์ประเภทความ ให้ใส่ชื่อบทความ ในเครื่องหมายอัญประกาศ เช่น (“นโยบายสาธารณะ”, 2559) หากเป็นสิ่งพิมพ์ประเภทหนังสือให้ใส่ชื่อหนังสือโดยใช้ตัวอ่อน เช่น (มาตรฐานการเผยแพร่ผลงานวิจัยและผลงานทางวิชาการ, 2555)

(11) กรณีการอ้างถึงสิ่งพิมพ์ที่ปรากฏในเอกสารอื่น ให้ลงรายการโดยภาษาไทยใช้คำว่า “อ้างถึงใน” และภาษาต่างประเทศใช้ “as cited in” เช่น (เกง เอียนดี, 2555 อ้างถึงใน นานะ พญาณ, 2559), (Smith, 2015 as cited in Adam, 2016) ในการนี้ให้ผู้เขียนแสดงรายการเอกสารอ้างอิงท้ายบทความเฉพาะรายการที่ตนเองอ่านมาโดยตรง เช่น จากตัวอย่างรายการเอกสารอ้างอิงท้ายบทความจะมีเฉพาะรายการของ “นานะ พญาณ, 2559” เท่านั้น ไม่ต้องแสดงรายการของ “เกง เอียนดี, 2555”

(12) การอ้างถึงข้อมูลจากการสัมภาษณ์ การติดต่อทางโทรศัพท์ หรือทางช่องทางอิเล็กทรอนิกส์ เช่น อีเมล เว็บบอร์ด ให้ใส่ตำแหน่งงานหรือสถานะของผู้ให้ข้อมูลหรือกลุ่มผู้ให้ข้อมูล ตามที่นำเสนอไว้ในการศึกษาวิจัย เช่น ประชาชน/ข้าราชการตามด้วยคำว่า “การสื่อสารส่วนบุคคล” สำหรับชาวไทย และ “personal communication” สำหรับชาวต่างประเทศ เช่น (ผู้บริหารคณะรัฐศาสตร์และรัฐประศาสนศาสตร์ มหาวิทยาลัยเชียงใหม่, การสื่อสารส่วนบุคคล, 20 กันยายน 2559), (1st student, personal communication, September 20, 2016) ทั้งนี้ หากผู้เขียนต้องการอ้างอิงชื่อผู้ให้สัมภาษณ์ข้อมูลโดยเปิดเผยชื่อผู้ให้สัมภาษณ์ ผู้เขียนจะต้องได้รับการอนุญาตจากผู้ให้สัมภาษณ์เป็นลายลักษณ์อักษรเท่านั้น

4.3.2 การลงรายการบรรณานุกรม ในระบบ APA

- รายการเอกสารที่ปรากฏใน เอกสารอ้างอิง (Reference) ท้ายบทความ จะต้องเป็นรายการเอกสารที่มีการอ้างถึงในเนื้อหาบทความ (Citation in text) เท่านั้น
- การลงรายการบรรณานุกรมสำหรับสิ่งพิมพ์แต่ละประเภท มีรายละเอียดดังนี้

ประเภทสิ่งพิมพ์	รูปแบบการลงรายการบรรณานุกรม
หนังสือ / ตำรา (Book)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อเรื่อง./สถานที่พิมพ์./ชื่อสำนักพิมพ์.
บทความในหนังสือรวม บทความ (Chapter in book)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อบทความ./ใน/ชื่อบรรณาธิการ/(บก.)./ชื่อหนังสือ./ (น./เลขหน้า-เลขหน้า)./สถานที่พิมพ์./ชื่อสำนักพิมพ์. Author(s)./(year of publication)./Article title./In/Editor/(Ed. ถ้ามีหลายคน ใช้ Eds)./Book title./ (p. ถ้ามีหลายหน้าใช้ pp./page number- page number)./Place:/Publisher.
บทความในวารสาร (Journal Article)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อบทความ./ชื่อวารสาร./ปีที่/(ฉบับที่),/เลขหน้าที่ปรากฏ บทความ-เลขหน้า. Author(s)./(year of publication)./Article title./Journal, / Vol/(No), / page number-page number.
รายงานการวิจัย (Research Report)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อเรื่อง/(รายงานการวิจัย)./สถานที่พิมพ์./ชื่อสำนักพิมพ์. Author(s)./(year of publication)./title./(Research report)./Place:/Publisher.
เอกสารการประชุมทาง วิชาการ (Proceedings, Symposium)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อบทความ./ใน/ชื่อการประชุมหรือการสัมมนา/ (น./เลขหน้า-เลขหน้า)./สถานที่พิมพ์./ชื่อสำนักพิมพ์. Author(s)./(year of publication)./Article title./In/Title of Conference./ (pp./page number-page number)./Place:/Publisher.
ผลงานนำเสนอในงาน ประชุมวิชาการ (Paper Presentation)	ชื่อผู้แต่ง./ (ปีที่นำเสนอ,/เดือนที่นำเสนอ)./ชื่อผลงาน./การนำเสนอในชื่อ การประชุมหรือการสัมมนา./สถานที่จัดการประชุม. Author(s)./(year of publication/month)./title./In/Title of Conference./Place.
หนังสือแปล (Translated Book)	ชื่อผู้แต่งหนังสือต้นฉบับที่แปลเป็นภาษาไทยแล้ว./ (ปีที่พิมพ์หนังสือแปล)./ ชื่อหนังสือที่แปลแล้ว/[ชื่อหนังสือต้นฉบับ]/(ชื่อผู้แปล,/ผู้แปล)./สถานที่ พิมพ์หนังสือแปล:/สำนักพิมพ์./(ต้นฉบับพิมพ์/ปี/ค.ศ. หรือ พ.ศ. ที่พิมพ์ต้นฉบับ)
วิทยานิพนธ์ และ ปริญญา ni พนธ (Thesis)	ชื่อผู้แต่ง./ (ปีที่พิมพ์)./ชื่อวิทยานิพนธ์หรือปริญญา ni พนธ./ (วิทยานิพนธ์ชื่อ ปริญญา),/ชื่อสถาบันการศึกษา. Author./(year of published)./Doctoral dissertation or Master's thesis Title./(Doctoral dissertation or Master's thesis)./Institute.
บทความจาก หนังสือพิมพ์ (Newspaper)	ชื่อผู้แต่ง./ (ปีที่พิมพ์,/วัน/เดือน)./ชื่อบทความ./ชื่อหนังสือพิมพ์, น./เลขหน้า. Author./(year of published, /mm/dd)./ Article title./Newspaper Title, p./page number.

ประเภทสิ่งพิมพ์	รูปแบบการลงรายการบรรณานุกรม
ราชกิจจานุเบkaชา (Royal Thai Government Gazette)	ชื่อกฎหมาย./ (ปี,/วัน/เดือน)./ราชกิจจานุเบkaชา./เลม/เลขเลม/ตอน/เลขตอน./หน้า/เลขหน้า-เลขหน้า.
เอกสารอิเล็กทรอนิกส์ หรือเอกสารจากฐานข้อมูล (Databases)	ชื่อผู้แต่ง./ (ปี)./ชื่อเอกสาร./สืบค้นเมื่อ/วันที่/เดือน/ปี,/จาก/URL (แบบย่อ*) หรือชื่อร้านข้อมูล Author./(year of published)./Title./Retrieved/mm/dd,/year,/from/URL or name of database
ข้อมูล/เอกสารจาก Facebook	ชื่อผู้แต่ง./ (ปี,/เดือน/วัน)./ชื่อเรื่อง/[Facebook status update]./สืบค้นเมื่อ/วันที่/เดือน/ปี,/จาก/URL Author./(year of published,/month/day)./Title./[Facebook status update]./Retrieved/mm/dd,/year,/from/URL
ข้อมูล/เอกสารจาก Twitter	ชื่อผู้แต่ง./ (ปี,/เดือน/วัน)./ชื่อเรื่อง/[Tweet]./สืบค้นเมื่อ/วัน/เดือน/ปี,/จาก/URL Author./(year of published,/month/day)./Title./[Tweet]./Retrieved/mm/dd,/year,/from/URL

■ การระบุชื่อผู้แต่ง มีรายละเอียดดังนี้

- (1) ผู้แต่งชาวไทย ลงรายการด้วยชื่อ แล้วตามด้วยนามสกุล และผู้แต่งชาวต่างประเทศ ลงรายการด้วยนามสกุล ตามด้วยชื่อแรกและชื่อกลางซึ่งใช้อักษรย่อ
- (2) ผู้แต่ง 2 คน ให้ลงชื่อผู้แต่งทุกคน โดยใช้คำว่า “และ” (สำหรับคนไทย) และ “&” (สำหรับชาวต่างประเทศ) คั่นระหว่างชื่อ
- (3) ผู้แต่ง 3-6 คน ในครั้งแรกให้ลงชื่อผู้แต่งทุกคน คั่นระหว่างชื่อด้วยเครื่องหมาย “,” และคั่นก่อนชื่อคนสุดท้ายด้วย “, และ” ในภาษาไทย และ “, &” ในภาษาอังกฤษ ในการอ้างข้าครั้งต่อไป ลงเฉพาะชื่อผู้แต่งคนแรก ตามด้วยคำว่า “, และคณะ” สำหรับงานเขียนภาษาไทย หรือ “, et al.” สำหรับงานเขียนภาษาต่างประเทศ
- (4) ผู้แต่ง 7 คนขึ้นไป ให้ลงชื่อผู้แต่งคนแรก ถึงคนที่ 6 และตามด้วย “, และคณะ” หรือ “, et al.”
- (5) สิ่งพิมพ์ที่ไม่ปรากฏชื่อผู้แต่ง ให้ใส่ชื่อสิ่งพิมพ์ (หนังสือ หรือวารสาร) ด้วยตัวอ่อนแทน และตามด้วยปีที่พิมพ์ เช่น ชื่อหนังสือ./(ปีที่พิมพ์)./สถานที่พิมพ์:/สำนักพิมพ์.

■ คำย่อสำหรับการลงรายการเอกสารอ้างอิง

ภาษาไทย		ภาษาอังกฤษ	
อักษรย่อ	ย่อมาจาก	อักษรย่อ	ย่อมาจาก
ม.ป.ป.	ไม่ปรากฏปีที่พิมพ์	n.d.	no date
ม.ป.ท.	ไม่ปรากฏสถานที่พิมพ์	N.P.	no place
ม.ป.พ.	ไม่ปรากฏสำนักพิมพ์	n.p.	No publisher

■ สิงพิมพ์ที่อยู่ระหว่างรอพิมพ์ ให้ใช้ขอความ “(อยู่ระหว่างรอพิมพ์)” สำหรับภาษาไทย และ “(in press)” สำหรับภาษาอังกฤษ

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จากการทบทวนงานวิจัย (Author, forthcoming) พบร้า.....

(2) การอ้างอิงในรายการเอกสารอ้างอิง (References)

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