

## The Southeast Asian Politics of Natural Resource Use: Impacts on Food and Health Inequalities\*

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### Abstract

*How do current environmental policies and programs in Southeast Asia align with the ASEAN environmental goals? How do these on-going environmental efforts influence other priority areas on food and health? Through content analysis, we highlight the key themes in the ASEAN environmental policies and determine how existing policies and programs of select member countries align with the ASEAN environmental goals. We argue that member countries have limited commitment towards achieving the ASEAN's environmental goals and that there is a need to further strengthen current environmental policies and programs in the region. We also argue that the normative constraints in the region, as well as variations in their political interests, have strongly contributed to failures in attaining its environmental goals. The conclusions and implications of the paper link to discussions on governance and ASEAN regional cooperation mechanisms on managing natural resources and regional health dialogues.*

### Introduction

On 08 August 1967, the Association of Southeast Asian Nations (ASEAN), which was then composed of Indonesia, Malaysia, the Philippines, Singapore, and Thailand was established with the signing of the ASEAN Declaration (Bangkok Declaration). In the succeeding years, other Southeast Asian countries have joined, including Brunei (1984), Viet Nam (1995), Lao PDR (1997), Myanmar (1997), and Cambodia (1999) (ASEAN 2012a: 1). It was established to accelerate the economic growth, social progress, and cultural development in the region; promote regional peace and stability; promote active collaboration and mutual assistance on matters of common interest; provide assistance to each other in the form of training and research facilities; and collaborate more effectively for the greater utilization of their agriculture and industries; among others (ASEAN 2012a: 1).

Criticisms on the ASEAN have, however, noted various failures in the regionalism efforts in Southeast Asia. Previous studies have defined regionalism as "more than an institutional process of multilateral policy coordination and the negotiation of competing stakeholder interests... [It is a] collective and intersubjective identities" (Elliott 2003: 29-52). Recent regionalism efforts worldwide also worked either institutionally or through cooperation among governments (Anonymous2005: 2291-2313). The ASEAN's regionalism efforts were seen as more of cooperation among the governments rather than an institutional one. Even though a cooperation type of regionalism is perceived to have stronger implications, this may not seem evident in the ASEAN region.

Since countries are now becoming more interdependent, demands for regional cooperation and global governance are as well increasing. However, along with this is a rising complexity of political, economic, and social issues. Transboundary environmental issues also raise concern. The 1997 and 1998 haze events, wherein "*particulate-laden smoke from land-clearing fires in Indonesia*" spread across several other countries in Southeast Asia, questioned the ASEAN's capacity in addressing regional environmental concerns (Elliott 2000: 237-240).

Previous studies focused on regional environmental governance in northeast and central Asia, but only a few have discussed its importance in the ASEAN region. Recognizing the importance of natural resources for present and future generations, as well as the interdependence of living resources, the ASEAN has called its member countries to go hand-in-hand in addressing its major environmental concerns.

ASEAN member countries have agreed with the ASEAN vision 2020 of "*a clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the*

*sustainability of its natural resources, and the high quality of life of its people*" (ASEAN 2013). Prior to this, however, an agreement to conserve nature and natural resources has already been signed by the ASEAN member countries since 1985. This agreement was named as the "1985 ASEAN Agreement on Conservation of Nature and Natural Resource Use" and was the only legally binding agreement in the ASEAN. However, until present, it has not been implemented fully.

We assume that the heterogeneity in the governance systems and the multiple political interests of its member countries, particularly in terms of implementing the current environmental policies, hinders the full enforcement of the ASEAN environmental agreements. Hence, understanding the governance systems of the ASEAN member countries, particularly on its environmental policies, are essential to better understand why such agreed systems are not actually enforced.

This study examines how the ASEAN environmental policies and the current environmental policies and programs of its select member countries align with each other. Given a huge influence of current ASEAN environmental issues on health and food status in Southeast Asia, we also briefly examined how the ASEAN's current environmental efforts have influenced other priority areas of food security and health. In doing this study, we hope to add knowledge to the existing works in ASEAN and facilitate understanding of the key barriers and enablers for a successful regionalism in Southeast Asia. Further, in examining the ASEAN environmental policies and how such regionalism efforts have influenced areas of food and health, we seek to highlight the macroeconomic factors, including regionalism and globalization, and its role as key drivers of a population's health.

In this study, we argue that member countries have limited commitment towards achieving the ASEAN's environmental goals and that there is a need to further strengthen current environmental policies and programs in the region. We also argue that the normative constraints in the region, as well as variations in their political interests, have strongly contributed to failures in attaining its environmental goals.

We begin with a discussion of a background on the ASEAN, the theoretical framework, data and methods, followed by a section examining the key environmental issues in Southeast Asia that may have contributed to select ASEAN environmental actions. Then, we highlight how such actions are implemented in the national level and determine the barriers that hinder full implementation of the ASEAN environmental policies. Lastly, we discussed in brief how current environmental efforts influence other key priority areas on food and health inequalities.

**The ASEAN Way: Environmental Goals and Milestones.** Studies claimed that the so-called "ASEAN Way" with its "principles of non-interference, consultation, consensus, quiet diplomacy, symbolism, and organizational minimalism" lessened the control powers of the ASEAN, particularly in terms of its efforts to address environmental challenges (Nguitragool 2011a: 356-378). Such approach of non-interference and peaceful settlements was also viewed as more of a "Westphalian system", which became a major barrier towards the ASEAN's attainment of its environmental goals (Elliott 2003: 29-52). To understand better how the ASEAN works, we first need to discuss its goals and how it has evolved through the years.

The overall goal of the ASEAN, the ASEAN Vision 2020, calls for "a clean and green ASEAN with fully established mechanisms for sustainable development to ensure the protection of the region's environment, the sustainability of its natural resources and high quality of life of its peoples" (ASEAN 2009: 1). The ASEAN Ministers has also identified the following priority areas to further strengthen environmental cooperation: a) global environmental issues, b) land and forest fires and transboundary haze pollution, c) coastal and marine environment, d) sustainable forest management, e) sustainable management of natural parks and protected areas, f) freshwater resources, g) public awareness and environmental education, h) promotion of environmentally sound technologies and cleaner production, i) urban environmental management and governance, and j) sustainable development, monitoring and reporting and database harmonization. For each of the priority areas, a lead/chair country is assigned (ASEAN 2010).

There were a lot of criticisms as to whether the ASEAN will be successful in attaining its vision. The long historical struggle of the ASEAN in ensuring its non-interfering control over its member countries has been both a success and a failure. To understand it further, we first reviewed the following significant milestones in ASEAN's environmental efforts.

Recent studies on ASEAN's environmental governance highlighted three periods: a) environmental assets and national resilience, b) conservation and the establishment of protected areas, and c) responsibility and stewardship. The first period focuses on the adoption of regional policies on the environment and other cooperative environmental initiatives from the period of 1977 to mid-to-late 1980s.

In 1978, the 1<sup>st</sup> meeting of the ASEAN Working Group on Environment was held but the agreements formed after were not enforced due to the perceived need for more technical assistance. In 1981, the Manila Declaration was created to ensure attention to key environmental concerns, ensure conservation of environmental assets, and promote sustainable development (Elliott 2003: 29-52). In 1985, ASEAN members signed the "ASEAN Agreement on the Conservation of Nature and Natural Resources". This was considered as the only direct hard law or legally-binding agreement relating to natural resources but has still not yet been fully enforced until today (Elliott 2003: 29-52; Koh 2007: 28 July 2013). Its objective is to "conserve the wild flora, fauna, and renewable resources (i.e., soil, vegetation, fisheries) through the protection of ecosystems, habitats, and endangered species, and by ensuring sustainable use of harvested ones" (Koh 2003).

To date, only three of the six signatory member states, namely Indonesia, the Philippines, and Thailand, have ratified it and as such, years after its beginnings, the agreement has still not yet been enforced (Koh 2003). Various reasons were raised for non-ratification. Most claimed that the agreement was not yet ready for implementation. Specifically, *"there are certain preconditions under the ASEAN agreement which was still not available at the time when the Agreement was signed"*. The lack of technical knowledge and expertise for implementation was also found to be a possible reason for non-ratification (Koh 2003).

During this period, the ASEAN Environment Program (ASEP) was also established. Later on, it was changed to the ASEAN Experts Group on the Environment (AEGE) and was renamed back to ASEP in the following years from 1982 to 1987 (ASEP II) and from 1988 to 1992 (ASEP III) (Elliott 2003: 29-52).

Conservation of natural resources was the key theme in the early cooperation arrangements on environmental protection. The focus transformed to eco-efficiency and environmental stewardship in recent years (Elliott 2000: 237-240). New areas of climate change and energy, freshwater resources and zoonotic diseases (i.e., avian influenza and SARS) have also been included in the regional concerns (Koh 2012).

The second period specified by Elliot (2010) was that of conservation and establishment of protected areas. During this period, an agreement for establishing heritage parks and nature reserves networks were set in place. It later on included ecological processes and alleviating pollution and addressing harmful environment effects (Elliott 2003: 29-52).

The last period was that of responsibility and stewardship. During this period, the ASEAN Strategic Plan on the Environment was created. In the same period, there were also some institutional changes within the ASEAN with its reorganization in 1992.

Specifically, responsibility and stewardship for the environment was given to the ASEAN Ministerial Meeting on the Environment (AMME). The AMME, which meets formally every three years, conducts the overall decision-making (Elliott 2000: 237-240). Meanwhile, policy recommendations are a function of the ASEAN Senior Officials on the Environment (ASOEN), which meets annually (Elliott 2000: 237-240) (see Figure 1: Institutional Framework).

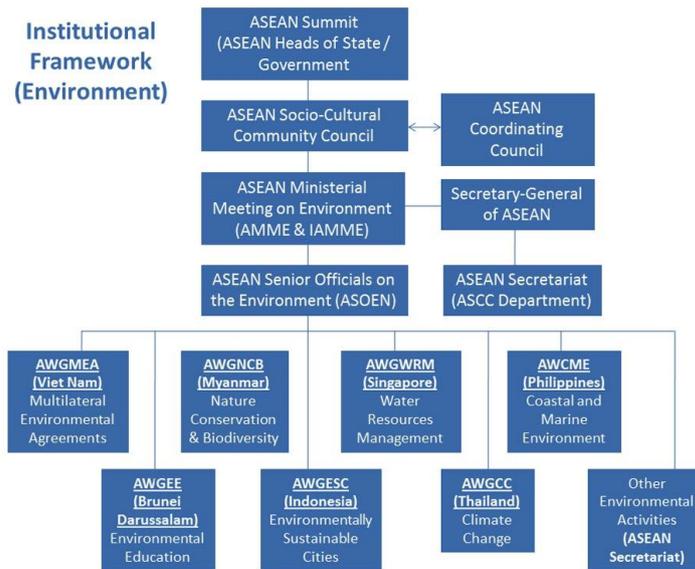


Figure 1. ASEAN Institutional Framework for Environmental Cooperation (Source: (ASEAN Cooperation on Environment 2012: 1)).

Other significant efforts of ASEAN cooperation include the 2000-2005 ASEAN Environmental Education Action Plan and the 2008-2012 ASEAN Environmental Education Action Plan II. Other than these, global environmental efforts include the 1992 United Nations Conference on Environment and Development and the sessions of the Commission on Sustainable Development (Elliott 2000: 237-240).

Despite all these efforts, the above regional agreements have not been fully enforced and were considered as “soft law instruments” (Koh 2007: 28 July 2013). Recent literature has emphasized that the heterogeneity in the governance structures and the lack of a central ASEAN bureaucracy may have led to the inadequate enforcement of these agreements (Koh 2007: 28 July 2013). Critiques also found that these efforts have not been successful in addressing the social and economic drivers, particularly of transboundary environmental issues in the region (Elliott 2000: 237-240). The culprit for its inefficient enforcement was found to be both institutional and political (Elliott 2000: 237-240).

Institutional challenges remain a severe barrier to an effective regional cooperation (Elliott 2000: 237-240). Since the ASEAN environmental committee remains small, environmental cooperation was placed as a responsibility of the member countries’ environment ministers. Across the Southeast Asian region, however, environmental issues are not given the highest priority. Other than these, political challenges also hampered efficient implementation of the environmental regional cooperation strategies. Despite the growing democracy movement in Southeast Asia, countries also remained non-pluralists (Elliott 2000: 237-240).

Since there is no central ASEAN bureaucracy in place, implementation of the above policies is entirely placed under the functions of the member countries (Koh 2007: 28 July 2013). Despite extensive efforts, ASEAN member countries are still reluctant to enforce the agreements set in protecting its natural resources. Since natural resource use itself is very political in nature, it is also highly reliant on the countries’ governance structures. Considering all these and with the ASEAN member countries having highly heterogeneous political and economic structures, collaborative efforts and agreements on natural resource use have not been fully enforced. Other than the lack of central bureaucracy, there was also a huge gap in the literature on the politics of Southeast Asian regionalism, particularly on how it aligns with current regionalism efforts (Elliott 2013: 38-57).

Hence, critics of the “ASEAN way” have argued that its normative framework led to its weak institutionalism and lack of central bureaucracy. Its non-interference and lack of binding agreements also limited the powers of the ASEAN and hindered its potential to do more for its member countries. Without addressing these institutional and political issues in each of the member countries, the ASEAN’s efforts to strengthen its capacity to work towards environmental sustainability will not be as effective as desired.

With the hope of enlightening further how effective is the ASEAN way, we determine whether such claims are true by examining current policies and programs of select ASEAN member states and understanding how these are in line with the ASEAN regional policies. We argue that member countries with weak political and social institutions strengthen transformations towards market-oriented production and service decentralization, and that more open and localized governance of natural resources, particularly of resource-use rights, are beneficial only at a certain level; after which, its drawbacks may outweigh its benefits.

### **Theoretical Framework**

To reach our goals, we used the theoretical framework of Nguitragool (2011), which incorporates the approaches of rational institutional design and multilateral negotiation.

Among the widely used approach in understanding regionalism, as well as international institutions, is that of the “rational institutional design”. The said approach “focuses on the incentives or interests, which drive state actors to solve common problems such as when they take collective action” (Nguitragool 2011a: 356-378). Although our approach to understanding the ASEAN environmental policies and programs are using that of a rational institutional design, we have as well taken into consideration other normative elements.

Similar with Nguitragool (2011), we also used the theory of multilateral negotiation. The said theory used the “process of negotiating an international treaty on the first or interstate level”. According to Nguitragool (2011), it uses the following three overlapping stages: “agenda formation or agenda setting; problem definition; and negotiation or policy outcome” (Nguitragool 2011a: 356-378).

Specifically, we assume that the ASEAN shares a common interest to address the key environmental issues, particularly those that are transboundary. In the first stage of the multilateral negotiation, it was as well assumed that an environmental issue has emerged that moved stakeholders to act on the issue collectively (Nguitragool 2011a: 356-378). Following this assumptions, we first identified the key environmental issues that may have contributed to the move towards a collective action for the Southeast Asian countries, and hence, the ASEAN actions to address such issues.

In the second stage of the theory, it highlights the mechanisms by which select actors play a role in addressing the environmental issue from setting the goals to creating agreements and treaties (Nguitragool 2011b: 356-378). Similarly, we highlighted how ASEAN member countries have devised means to address the environmental issues and concluded with the ASEAN goals on ensuring environmental sustainability. In light of these, we hope to determine how past actions on addressing environmental issues in Southeast Asia relate to these goals.

The last stage in the theory focused on bargaining over the content of the agreements and treaties. To do so, we conducted an analysis of the current national environmental policies and programs of select ASEAN member countries and determined how these are in line with the overall ASEAN environmental goals. After reviewing select member countries’ environmental policies and programs, we categorized it into three fundamental elements of regional governance: actors, processes, and outcomes.

### **Data and Methods**

Following the theoretical framework above, we first identified the key environmental issues in the Southeast Asian region. To do these, we reviewed 30 publications with the “ASEAN environment” as its theme and 159 ASEAN documents, which includes agreements, declarations, and other statements. Then, we highlighted the overarching environmental issues that were identified in the sources. In particular, we selected those issues that were the main theme in the ASEAN agreements and declarations and were transboundary in terms of their consequences. All data were inputted into the software NVivo for analysis.

Since answers cannot be inferred from direct observations, we used content analysis to infer answers for our research questions. We also used content analysis to build a model that describes the emerging governance systems at the international and national levels and how these are in line with the current goals.

It is also worth noting to point that the study aims to understand only the vertical relationship between ASEAN and its member countries and not among the member countries. This, therefore, limits our understanding of the multiplicity of political interests, as well as the depth of cooperation, among its members. However, since the plurality of interests is an important issue in discussing the ASEAN, we have considered its influence in terms of its role in the ASEAN environmental institutional framework, as well as its key actions towards achieving the ASEAN goals. Further, since our study has only included select member countries, it may not be a considered a full evaluation of the member countries' implementation mechanisms. However, to be as encompassing as possible, the member countries used in this study were selected based on the depth of their involvement with the selected transboundary environmental issues, as well as the extent of their participation in achieving the ASEAN environmental goals.

## **Discussion**

### **Key Environmental Issues in Southeast Asia and Corresponding ASEAN Actions**

Before examining how the ASEAN environmental policies align with the national policies and programs of select member countries, it is apparent that we first look at the key environmental issues and highlight how ASEAN has responded to address such.

As an overview, Southeast Asia is abundant with rich natural resources and a variety of ecosystems such as the Ha Long Bay, Mekong River Base, Palawan Underground River, and Lake Toba. It takes pride in its long coastline of about 173,000 kilometers, 5.675 billion cubic meters of internal renewable water resources, and a 45% of forest cover (ASEAN Cooperation on Environment 2012: 1). It has its distinct ecosystems of both maritime and continental types shared by its member countries (Elliott 2003: 29-52). However, these great ASEAN environmental potential is now challenged by persistent degradation.

Among all the environmental issues in Southeast Asia that were discussed in the sources gathered, we selected the top two transboundary environmental issues. Since our focus is more on the ASEAN interventions, we only briefly discussed the key issues and highlighted more on the succeeding events that moved ASEAN to call for collaborative efforts to address the issues. Hence, these issues were as well among those that have been given definitive actions, if not prioritized, in the ASEAN declarations and agreements.

***Transboundary Atmospheric Pollution: Haze Events.*** Previous studies have identified the Southeast Asia haze events as an indicator of the ASEAN's failure in attaining its goals for regional cooperation. Caused by land and/or forest fires, which refer to fires such as coal seam fires, peat fires, and plantation fires, were a key environmental issue in Southeast Asia since 1980s up to present. It has caused severe haze pollutions, which "causes deleterious effects of such a nature as to endanger human health, harm living resources and ecosystems, and material property, and impair or interfere with amenities and other legitimate uses of the environment (ASEAN 2012).

Some have claimed the haze events to have first occurred in the 1980s, wherein particulate-laden smoke as a result of land-clearing fires in Indonesia's four Kalimantan provinces on the island of Borneo were noted (Elliott 2000: 237-240; Nguitragool 2011a: 356-378). Repeated events eventually resulted to great impacts on health and transportation problems in Malaysia and Singapore (Nguitragool 2011a: 356-378). A series of collaborative events then followed to address the issue.

In the 1990s, the issues have led to the 1995 ASEAN Cooperation Plan on Transboundary Haze Pollution, the 1996 Regional Haze Action Plan, the ASEAN Urban Air Pollution Monitoring and Control Program, and the ASEAN Contingency Plan for the control and mitigation of marine pollution (Elliott 2000: 237-240). The Year 1995 was declared as the first ASEAN Year of the Environment (Elliott 2000: 237-240).

In 1997, the ASEAN responded to the crisis by endorsing the Regional Haze Action Plan, which includes the National Haze Action Plans that made countries responsible to creating plans to combat the haze events (Severino 21 June 1999). It also created fire-fighting arrangements that will assist collaborations among nearby areas in urgently addressing fires (Severino 21 June 1999).

In 1999, the ASEAN conducted a *Regional Technical Assistant Project on Strengthening ASEAN’s Capacity to Prevent and Mitigate Transboundary Atmospheric Pollution* to strengthen ASEAN’s capacity to “prevent and mitigate transboundary atmospheric pollution”. In the speech of the then Secretary-General Rodolfo Severino, he emphasized:

*“According to the World Wide Fund for Nature, the land and forest fires in 1997 cost US\$494 million in timber losses, US\$470 million in losses to agriculture, US\$1.8 billion in lost direct and indirect forest benefits, US\$30 million in loss capturable biodiversity, US\$25 million for fire-fighting, and US\$272 million in carbon releases (Severino 21 June 1999)”*

In 2002, the haze events triggered the creation of the *ASEAN Agreement for Transboundary Haze Pollution* (Nguitrageol 2011a: 356-378). Although several countries have joined the endeavor, the agreement was not able to prevent further events that occurred between 2004 and 2010 (Nguitrageol 2011a: 356-378). At present, the current ASEAN Institutional Framework for Cooperation on Transboundary Haze Pollution is as follows:

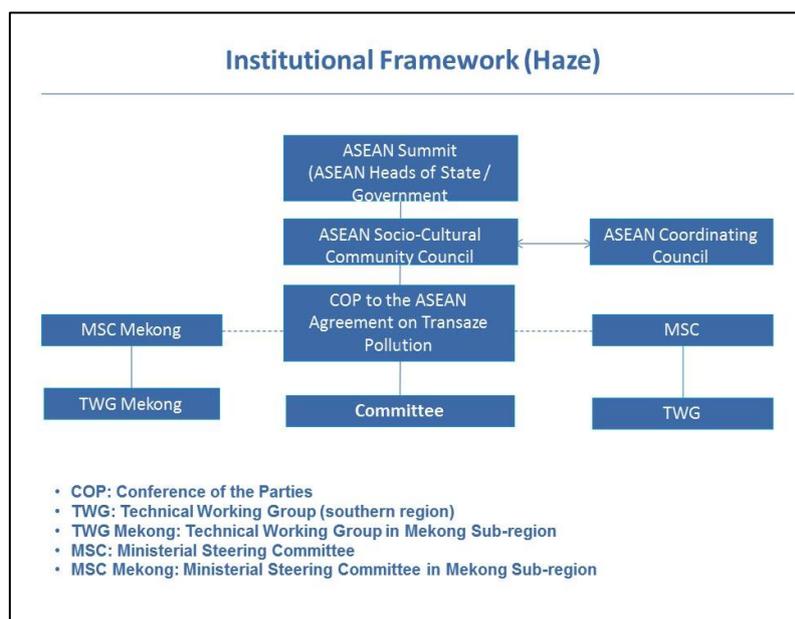


Figure 1. Current ASEAN Institutional Framework for Cooperation on Transboundary Haze Pollution (Source: (ASEAN Cooperation on Environment 2012: 1))

The Agreement has highlighted preventive mechanisms, as well as emergency response interventions to address the issue. Generally, countries were obliged to “cooperate in developing and implementing measures to prevent and monitor transboundary haze pollution, as a result of land and/or forest fires ... and take legislative, administrative and/or other measures to implement their obligations under the Agreement” (ASEAN 2012). Suggested preventive measures include: “a) developing and implementing legislative and other regulatory measures, b) developing other appropriate policies to curb activities that may lead to land and/or forest fires”, c) identifying and monitoring areas prone to occurrence of land and/or forest fires; d) strengthening local fire management and firefighting capability and coordination to prevent the occurrence of land and/or forest fires; e) promoting public education and awareness-building campaigns and strengthening community participation in fire management to prevent land and/or forest fires and haze pollution; f) promoting and utilizing indigenous knowledge and practices in fire prevention and management, and g) ensuring that legislative, administrative and/or relevant measures are taken to control open burning and to prevent land clearing using fire” (ASEAN 2012).

**Commercial and Illegal Logging.** Related issues to the haze events were its underlying causes of commercial and illegal logging and deforestations (Nguitrageol 2011a: 356-378). Other than being one of the causes for environmental degradation and transboundary haze events, it is also one of the reasons that impedes the attainment of the Millennium Development Goals on Environmental Sustainability, which includes the proportion of land area covered by forest (ASEAN Cooperation on Environment 2012: 1). From 1990 until present, only Brunei shares the biggest proportion of land area covered by forest with 80% in 1990 and 75% in

2010. The lowest ever recorded is in Singapore with 3.20% followed by the Philippines with forest land area coverage ranging from 19% in 1995 to only 23% in 2010. See Table 1 below.

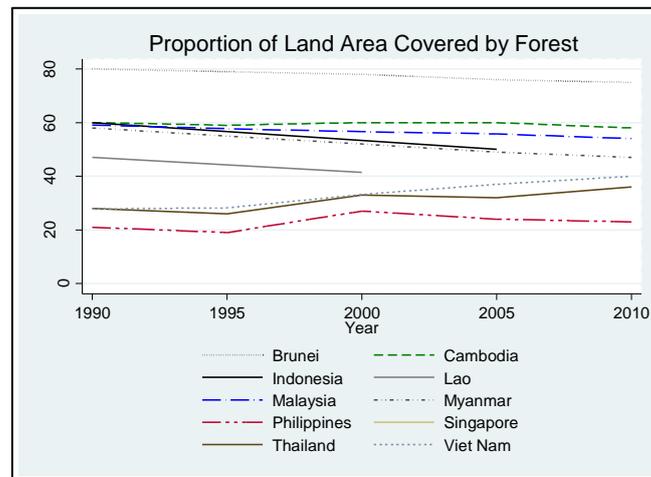


Figure 2: Proportion of land area covered by forest (Author's computation based on ASEAN environmental data)

As we can note from the table above, at a high risk countries are those who are among the mega diverse countries in Southeast Asia with the Philippines being the top country with the lowest proportion of land area covered by forest. This is followed by Indonesia and Viet Nam with almost one third of its forests disappearing in the last twenty years. In Southeast Asia alone, a continuous loss by 48 per cent from 1990 to 2000 has been noted. Along with land clearance for plantation, urbanization, and also industrial agriculture development, the rate of deforestation was estimated to increase by 1.8 per cent per year and (Elliott 2003: 29-52). Hence, it is but proper that the issue of commercial and illegal logging be seriously taken as a significant environmental issue in Southeast Asia.

The AMME has articulated the guiding principles and objectives for environmental cooperation. In 1987, the Jakarta Resolution was set in place in response to the demands for action towards such environmental issues. It was then that they established a regional body on the environment to take responsibility, give policy recommendations, and monitor environmental quality (Elliott 2003: 29-52). The succeeding resolutions then began considering eco-efficiency and environmental stewardship. Other efforts that were created were the formation of the ASEAN Committee on Science and Technology. A Jakarta Resolution on Sustainable Development was also created to improve collaboration among member countries (Elliott 2003: 29-52). In 1992, "GATT and the International Tropical Timber Organization to oppose and defeat what they perceived as Austria's environmental unilateralism in requiring labeling of all tropical timber products" (Elliott 2003: 29-52). In the succeeding years, the ASEAN has also released an annual environment state report and has been active in developing regional conferences on environmental sustainability.

Other than the above efforts, we, however, did not find any ASEAN agreements or resolutions that will directly address the main cause of the transboundary haze, which is perceived as the biggest environmental challenged in Southeast Asia.

**Other Environmental Issues.** Other than the above, ASEAN has been challenged by various other environmental issues such as soil and water pollution, fossil fuel combustion, and serious water quality problems. All these have been highly influenced by the rapid urbanization in Southeast Asia. The inefficient energy use has also led to higher rates of fossil fuel combustion that was accompanied by even harmful health and social consequences. Not only is the demand for water high, but also at a higher risk is the quality of water used for both domestic and industrial purposes. Water has been accompanied with various chemical run-offs from agriculture and industry and untreated wastewater. Smuggling was also an issue as it has led to dumping of hazardous wastes and other environmentally destructive practices. Previous studies have estimated that environmental decline costs an average of 3-8 per cent of the member countries' gross domestic product each year (Elliott 2003: 29-52).

In response, the ASEAN ministers developed minimum regional standards for air and river water quality, as well as created the ASEAN Urban Air Pollution Monitoring and Control Program.

Various factors have been attributed to the continuous environmental degradation in Southeast Asia. Among these are the rapidly increasing population and urbanization. Among the rapidly urbanizing countries are located in the ASEAN region and three of its member countries, namely Indonesia, Malaysia, and the Philippines are considered to be among the top mega diverse countries in the world.

Previous studies have also examined environmental decline in Southeast Asia as a “consequence of the region’s changing political economy and modes of production”. This was claimed to suggest that “regional cooperation on environmental challenges is more likely to be successful if it reflects some form of bounded cosmopolitanism embedded in a regional community of rights and duties” (Elliott 2003: 29-52). There were also claims that the continuous environmental degradation in the ASEAN was caused by the failure of ASEAN regional cooperation, particularly in terms of providing a regional identity and credibility within ASEAN (Elliott 2003: 29-52). Such studies claim that the region’s political economy and modes of production have contributed to the decline (Elliott 2003: 29-52).

In light of these, we reviewed environmental programs and policies from select member countries to determine whether the above claims of the ASEAN’s ineffective interventions were true.

#### **Select Member Countries Environmental Programs and Policies and its Alignment with the ASEAN Environmental Framework**

The ASEAN envisions its member countries to have common interests and purposes in protecting its environment and addressing its environmental concerns. While these are admirable, previous studies, however, claimed that it is still too far from reaching its goals. Without interference from the ASEAN, criticisms have argued that member countries’ commitment towards fulfillment of the ASEAN vision will be unlikely.

With this, we therefore ask the question: To what extent do institutional and political arrangements translate into better regional environmental governance? Using (Komori 2010: 1-25) three elements of governance (actors, process, and outcomes) in evaluating the status of emerging environmental governance in Northeast Asia, we examined the emerging regional governance systems in the ASEAN region to highlight the member countries’ environmental programs and policies.

**Actors: Heterogeneity of Member Countries.** Komori (2010) emphasized that the states that are more vulnerable to transboundary pollutions are more likely to create the initiative to seek international environment protection. Hence, we analyzed the current status of the member countries and emphasized variety in its political institutions. These differences have also led to the unequal level of commitment on the ASEAN environmental agenda.

Since its establishment, ASEAN has been questioned for its “light institutionalization”. At present, it still has not made any significant institutional reforms and innovations. Politics among the ASEAN member countries considers a full spectrum from liberal democracy to full authoritarianism and totalitarianism (Carlson, Turner 2009: 377-398). Others argue that such lack of ASEAN consolidated political institutions were primarily rooted in the reason that the emergence of ASEAN integration did not come from the member countries themselves, but was motivated by the European region (Jetschke 2009: 407-426).

In contrast, others argue that ASEAN has emerged as the most successful regionalism effort outside Europe with its prime mover being the threat posed by Vietnam. Further, others argue that the pressing and critical issues faced by the ASEAN have motivated its member countries to prioritize its collective welfare and interest rather than its national interests (Buszynski 1997b: 555-577).

Despite these contrasting ideas, both circumstances has undoubtedly led to the birth of the “old” and “new” ASEAN regionalism with the first as a product of cold war and the latter as a product of demands of state as

well as nonstate actors (Buszynski 1997b: 555-577). These state and non-state actors are a product of widely heterogeneous foreign policy orientations and are shaped by varied historical experiences (Buszynski 1997a: 555-577).

Political actors, who “engage in resource exchange over public policy as a consequence of their resource interdependencies” is highly influenced by the national interests, domestic politics, and leaders’ political interests (Wong, Mistilis & Dwyer 2011: 882-899). Each ASEAN member country, however, has its own primary political actors on environmental concerns, varying from nation states, economic ministries, and environment ministries, among others. These actors each have a varied degree of control over resources, degree of influence, and degree of commitment towards achievements of the ASEAN environmental agenda (Wong, Mistilis & Dwyer 2011: 882-899). Other than the political actors, other non-state actors are also important in achieving ASEAN vision.

In the ASEAN region, however, most member countries are still in the developing states. In line with the theory of subaltern realism, developing world states are weak and internally divided. Previous findings further found that such states “*formulate regional relations from the perspective of doing what is needed to further the state-building process*”. This, however, places ASEAN member countries in less control of prioritizing national interests over regional interests (Narine 2009: 369-386).

ASEAN member countries have also recently experienced major political and institutional reforms. Viet Nam, although gradually, had its major reforms in the 1980s with its prize liberalization and move towards market-oriented production. Similarly, Indonesia and the Philippines underwent trade liberalization in the 1980s boosting the country towards economic competitiveness. Drivers of Indonesia’s effectiveness were attributed to an authoritarian regime and absence of major domestic resistance to reforms. The resulting slower growth in the Philippine economy was, however, attributed to long years of financial crisis, including the transitions from authoritarian rule to a more democratic political system. By the late 1970s, the World Bank provided a major program of structural adjustment assistance to the Philippines in its fight against liberalization (Hill 2013: 108-130). These reforms were, however, insufficient to create a consolidated interplay of political and institutional actors across member countries.

Previous studies on the interplay between the ASEAN governance and its member countries also predict that such ASEAN integration will not be the “top priority of its leaders in the near future” (Kim 2011: 407-435). Hence, we support that the ASEAN’s future depends on its institutional consolidation (He 2006: 189-214). It is truly difficult for the ASEAN to create a collaborative and stronger effort on environmental regional governance with a highly diverse set of institutional situations. Strong political leadership and will is essential to realize the perceived benefits of ASEAN integration since governance systems are more likely to be effective if they are deeply embedded in the concerned institutions that will implement it (Hill 2013: 108-130). However, compared to findings of Hill (2013), we argue that very weak bureaucracies are still an essential consideration for ASEAN integration and the successful implementation of the environmental agenda.

***Processes: Insufficient Collaborative Actions.*** Similar with the findings of Komori (2010), our analysis pointed out that the insufficient collaborative action among the ASEAN member countries hinders achievement of the ASEAN environmental goals.

Historically, ASEAN was initially a subregional organization representing the non-communist part of Southeast Asia. Later, it expanded to include Indonesia and Myanmar and such expansion has led to dilution of cohesion that will create a regional consensus among the member countries (Buszynski 1997a: 555-577). With the fall of communism in Eastern Europe and at the end of the Cold War, however, the following changes occurred:

*“There was no longer a pressing need for ASEAN countries to fear their Communist neighbors such as Vietnam, Cambodia, and Laos. These countries had started to abandon central planning and market-oriented economic reforms since the early 1980s, changes which implicated trade and investment opportunities and indicated that ASEAN regional grouping needed to be enlarged to maintain relevance (Wong, Mistilis & Dwyer 2011: 882-899).”*

This circumstance has also led to the insufficient and lack of collaborative and collective actions from the ASEAN member countries. This includes the lack of commitment to ratify the agreements on conservation of nature and natural resources, as discussed above.

Although some may argue that the ASEAN has undertaken vast collective regional efforts to strengthen management of natural resources, including arrangements on “research, training, education, information exchange, and promotion of public awareness”, we believe that such efforts are still insufficient to provide a much wider and intensive action among its member states (Thia-Eng, Garces 1993: 190-195).

This, therefore, calls for coordination mechanisms set into place to organize the existing environmental efforts. Regionalism will only be effective if it will win its constituents’ support. Among the key components of a collaborative action include trust, cohesion, and communication (Wong, Mistilis & Dwyer 2011: 882-899).

**Outcomes: Need for Clearer Measures and Outcome Indicators.** Other than considering actors and processes, a better look at outcomes is also needed to create a more effective ASEAN action towards environmental sustainability. Such measures may include an overall commitment to indices similar to the Environmental Performance Index (EPI), which has been introduced since 2006 to depict the environment performance for most of the countries in the world. Such indices also include not only the ecosystem sustainability across the region, but also its health and nutrition impacts (Abdullah, Ismail 2013: 42-52).

Overall, similar with the Northeast Asian region, the ASEAN also has its weaknesses in environmental governance mechanisms, particularly on: “1) the primacy of national governments and the limited role of nonstate actors; 2) the lack of a coordinating mechanism among overlapping environmental initiatives; and, 3) the lack of effectiveness and efficiency in promoting collective environmental goals.”

Further, we argue that select countries in the region with: 1) weak political and social institutions strengthen transformations towards market-oriented production and service decentralization; and that 2) the more open and localized governance of natural resources, particularly of resource-use rights, are beneficial only at a certain level; after which, its drawbacks may outweigh its benefits. This is particularly evident in countries wherein local political and social institutions are highly reliant on national transfers and aid to govern their resources. Hence, such systems may even contribute to food scarcities and health inequalities.

We highlight the limitations of the current ASEAN environmental agreements using the Philippines as a case. Our goal here is to emphasize how lack of efforts to strengthen the ASEAN environment agreements has inseparable impacts on food scarcities and health inequalities.

### **ASEAN Environmental and Regional Challenges**

Although members have a shared history and even a shared ecosystem to protect, member countries have multiple political interests and institutional arrangements, which impede ASEAN growth. With this widely differential political systems and weak modes of production, we support previous studies that addressing environmental degradation in Southeast Asia is still too far from being achieved. Indeed, other than attributing continuous environmental decline and resource scarcity with the “industrialization of Asia within the world economy” (Elliott 2000: 237-240), we also argue that the ASEAN way was not enough driver for its member countries to act accordingly.

Based on our findings, ASEAN member countries are faced with poor planning and coordination systems, as well as weak implementation of the environmental regulations, lack of enough human and financial resources, and technical expertise to address the issues. Since the ASEAN plays under normative structures, there is not enough incentive and even disincentives for its member countries to commit in the implementation of the regional regulations. Hence, the lack of regional enforcement measures in the ASEAN level has indeed made it easy for its member countries to prioritize other tasks and carry with them the burden of compliance or even non-compliance (Elliott 2003: 29-52).

### **Influence on Other Priority Areas**

This section discusses the limitations of the current regional arrangements on environmental governance in addressing the inseparable issues of food scarcities and health status using Philippines as a case. We assume that food scarcities and health status are inseparable from environmental concerns. Our goal here is to increase awareness how such limited regional efforts on environmental governance can be linked with a slow improvement in food and health concerns.

**Health Sectors.** Mortality rates from air pollution, along with the incidences of chronic respiratory illnesses are continuously increasing in Southeast Asia. These have been notably evident in its three megacities – Jakarta, Manila, and Bangkok. Recent studies have emphasized the World Bank’s estimates of pollution-related health costs to be as high as “15-18 per cent of urban income and up to 7 per cent of GDP in countries such as the Philippines” (Elliott 2003: 29-52).

The haze events, in particular, have been found to cause serious health conditions such as cancer in the long run. Recent studies have found that the ambient air pollution resulting from fossil fuel combustion in Southeast Asia has been associated with increased lung cancer incidences”

*“The excess lung cancer risk associated with ambient air pollution (relative risks of 1.0 – 1.6) is small compared with that from cigarette smoking (relative risks of 7 – 22) but comparable to the risk associated with long-term environmental tobacco smoke exposure (relative risk of 1.0 – 1.5) (Ostermann, Brauer 2012: 1)”*

Indeed, the ASEAN’s interventions to address environmental issues will not only improve its environmental status, but also address the inseparable health consequences. Improving its haze management plans can be a good start through informing the public and the authorities about its air quality, advising the public on actions to be taken and ensuring medical and health supplies, among others. Hence, the ASEAN agreements and treaties should not only address the direct consequences of such environmental challenges, but also its accompanying health and social consequences.

**Food Sectors.** A wide range of goods and services can be found in highly productive natural systems; thereby, leading to better food securities. However, the increasing demands on these resources result to environmental degradation and resource-use conflicts, which are primarily due to lack of adequate planning and management of resources (Thia-Eng, Garces 1993: 190-195).

ASEAN countries have initially been abundant with a “major expansion in trade – foodstuffs and fibres in exchange for tropical products, petroleum and labour intensive manufactures”, among others (Leeks 1987: 402-403). Tony (1987) predicts that rice production in the ASEAN region will be increasingly constrained by labour shortages and a high import dependence on other commodities such as livestock, wheat, and sugar.

In the Philippines, for example, agriculture has faced tremendous number of policy reforms, particularly on its rice production and other agricultural concerns. Despite government incentives, however, flooding and other environmental conditions have led to rising food insecurities in the region. With a collective environmental action, however, farmers were able to initiate strategies of “increasing the height and weight of dikes”. This had increased potentials to improve “accessibility to irrigation water, integrated fish into the rice crop, served as seedbed, improved the sustainability of rice production, impounded fresh water, and increased utilization of farm resources” (Lopez, Mendoza & Genio 2008: 111-131).

The above case shows how such collective actions to support the environment with strategic techniques on conservation of natural resources can lead to increased food production and thereby, better food securities. Placed on a wider regional scale, these collective actions can then have bigger impacts on ensuring food security across the ASEAN region.

## **Conclusion**

Our findings suggest that environmental goals for the ASEAN region will only be realized if an assertive action will be exerted to address as well the institutional and political problems of the member countries. Hence, we argue that select countries in the region with: 1) weak political and social institutions strengthen transformations towards market-oriented production and service decentralization; and that 2) the more open

and localized governance of natural resources, particularly of resource-use rights, are beneficial only at a certain level; after which, its drawbacks may outweigh its benefits. This is particularly evident in countries wherein local political and social institutions are highly reliant on national transfers and aid to govern their resources. Hence, such systems may even contribute to food scarcities and health inequalities. Current local reforms are also not enough to address the continuous exploitation of natural resources. The conclusions and implications of the paper link to discussions on governance and ASEAN regional cooperation mechanisms on managing natural resources and regional health dialogues.

Unless effective measures are taken to address the political and institutional concerns in implementing the ASEAN agreements, preventing further resource depletion and environmental degradation may seem impossible. Further, the ASEAN needs to focus on creating better incentives of sustainable development that will increase each member countries' value for natural resources. Policymakers are then called to be reminded of the environmental regional agreements and cooperation arrangements and to support its implementation across the states.

## Appendix

**Table 1. Select ASEAN Environmental Policies and Major Agreements**

<b>Agreements</b>	ASEAN Agreement on Transboundary Haze Pollution Agreement on the Establishment of the ASEAN Center for Biodiversity
<b>Action Plans</b>	ASEAN Environmental Education Action Plan 2008-2012 ASEAN Strategic Plan of Action on Water Resources Management ASEAN Action Plan on Joint Response to Climate Change
<b>Statements and Declarations</b>	Bangkok Resolution on ASEAN Environmental Cooperation (2012) New Delhi ASEAN-India Ministerial Statement on Biodiversity (2012) Joint Statement of ASEAN Environment Ministers for the Eleventh Meeting of the Conference of the Parties to the Convention on Biological Diversity (2012) ASEAN Leaders' Statement on Climate Change to COP-17 to the UNFCCC and CMP-7 to the Kyoto Protocol (19 <sup>th</sup> ASEAN Summit, 2011) ASEAN Leaders' Statement on Joint Response to Climate Change (16 <sup>th</sup> ASEAN Summit, 2010) ASEAN Joint Statement on Climate Change to COP-15 to the UNFCCC and CMP-5 to the Kyoto Protocol (15 <sup>th</sup> ASEAN Summit, 2009) Singapore Resolution on Environmental Sustainability and Climate Change (11 <sup>th</sup> AMME, 2009) Ministerial Statement of the Inaugural EAS Environment Ministers Meeting (2008) ASEAN Declaration on the 13 <sup>th</sup> session of the Conference of the Parties to the UNFCCC and the 3 <sup>rd</sup> session of the CMP to the Kyoto Protocol (2007) Singapore Declaration on Climate Change, Energy and the Environment (3 <sup>rd</sup> EAS Summit, 2007) ASEAN Declaration on Environmental Sustainability (2007) Cebu Resolution on Sustainable Development (2006) ASEAN Declaration on Heritage Parks (2003) Jakarta Declaration on Environment and Development (18 September 1997) Bandar Seri Begawan Resolution on Environment and Development (1992) The Kuala Lumpur Accord on Environment and Development (1992) Jakarta Resolution on Sustainable Development (1987) Agreement on the Conservation of Nature and Natural Resources (1985) Bangkok Declaration on the ASEAN Environment (1984) ASEAN Declaration on Heritage Parks and Reserves (1984) Manila Declaration on the ASEAN Environment (1981)
<i>Source: (ASEAN Cooperation on Environment 2012: 1)</i>	

**Table 2. Overview of ASEAN Cooperation on Environment**

<b>ASEAN Facts and Figures</b>	
Land Area	4.46 million square kilometers (3% of the world's total)
ASEAN Forest Cover	2.1 square kilometers (2000)

	1.9 square kilometers (2007)
ASEAN Coastline	173,000 kilometers
ASEAN Peatland Area	25 million hectares (60% of global tropical peatland)
Population (2011)	604,803,100
Projected Population in 2020	650 million
ASEAN GDP per Capita (2008)	USD465-USD37,597
Policy Framework for Sustainable Development Cooperation	ASEAN Vision 2020 (15 December 1997) – ASEAN Concord II (7 October 2003) – ASEAN Charter (15 December 2008) – Roadmap for an ASEAN Community (1 March 2009)
<i>Source: (ASEAN Cooperation on Environment 2012: 1)</i>	

**Table 3. Proportion of Land Area Covered by Forest**

Year	Brunei	Cambodia	Indonesia	Lao	Malaysia	Myanmar	Philippines	Singapore	Thailand	VietNam
1990	80	60	60	47	59.1	58	21		28	27.8
1995	79	59			57.7		19		26	28.2
2000	78	60		41.5	56.6	52	27		33	33.2
2005	76	60	50		55.8	49	24		32	37
2010	75	58			54	47	23	3.2	36	40
<i>Source: (ASEAN 2012b: 1)</i>										

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