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ASEAN and Transboundary Haze Pollution

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ASEAN and Transboundary Haze Pollution

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With Honors

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Political Science

By

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Capstone Faculty Approval Page

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ASEAN and Transboundary Haze Pollution

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Please have your advisor review your abstract for organization, content, grammar and spelling before submission.

This paper examines the Association of Southeast Asian Nations' (ASEAN's) response to the growing haze pollution problem in the region. With massive growth in industries and manufacturing, this problem is one that member states of the regional group must work together to solve. The paper will provide a brief overview of ASEAN and how it functions, and it will address the issue of haze pollution in the region and previous action the region has done to combat it. It will also look at different countries' responses to the pollution, including national laws. Finally, I will present different solutions that the organization can utilize to address the problem of haze pollution.

Introduction

In recent years, Southeast Asia has been a growing region of research and focus for many scholars, from political scientists to anthropologists. While my academic career has focused mainly on political science and systems, I wanted to take a different approach, so I decided to look at environmental and health problems. I came across the topic of my paper from my original capstone conference I had planned to host. I really enjoyed the topic and wanted to look at it in my personal view with my own research. This paper will first look at what ASEAN is, or the Association of Southeast Asian Nations, because I think it is vital to understand the regional bloc in order to understand the complex public health and environmental concern we will discuss. The main portion of the paper will focus on: what haze pollution is, a close look previous actions taken by ASEAN to combat the problem, and recent actions and attitudes towards the problem by nations with the region. Finally, by using my academic history, my knowledge of the region, and my experience in Model United Nation, I will determine some resolutions that I believe can help solve the crisis.

The Association of Southeast Asian Nations

The Association of Southeast Asian Nations, better known as ASEAN, formed in 1967 when the independent nations of Indonesia, Malaysia, the Philippines, Singapore, and Thailand came to together to promote political, economic, and social stability in the region. They also sought to stop the spread of communism. In 1976, the nation's signed the Treaty of Amity and Cooperation in Southeast Asia, which pushes for mutual respect and noninterference between nations in the bloc.ⁱ Throughout the eighties and nineties, the region saw relative peace compared to recent years, which led to the addition of five more nations to the group, Brunei in 1984, Vietnam in 1995, Laos and Myanmar in 1997, and Cambodia in 1999. In 1995, the group made a deal to refrain from developing, acquiring, or possessing nuclear weaponry. This body of nations

consists of all nation that are considered “Southeast Asia.” The group works with each other in economic policies as well, which we saw during the 1997 financial crisis, where the bloc and other Asian nations supported one another.ⁱⁱ The bloc holds close relationships with its neighbors and other Asian nations, India, China, Japan, and South Korea, as well as Australia and New Zealand. All these nations hold free trade agreements with the bloc. ASEAN is chaired a annually rotated nation and takes place in Jakarta, Indonesia. The bloc is well known for its take on sovereignty, as the nation’s agree not to interfere with each other’s internal affairs. ASEAN is a lot like the United Nations, the countries meet and attempt to peacefully solve problems in the region and have close ties in terms of economics. Going forward, it is important to understand ASEAN and the way it works, in order to understand the problems, they face with haze pollution.

Haze Pollution

According to the ASEAN website, Haze consists of smoke, dust, moisture, and vapors in the air that affects the ability to see and if serious enough, the ability to breath. They also claim that haze is transboundary, which means it does not stop at one nation’s borders.ⁱⁱⁱ If Laos is having problems with haze, it will transfer to Vietnam, Cambodia, Thailand, and the other nations. The site also says that haze is caused by particulate matter, such as smoke from forest fires or cars driving on unpaved roads. The smaller the particulate matter, such as ones from fire, the more likely it is to get into a person’s lungs and cause breathing problems. They connect haze to health crises such as premature death, difficulty breathing, aggravated asthma, and increased hospitalization.^{iv} The people most likely to be affected by haze pollution are children, the elderly, and people with pre-existing repertory problems. The haze of 1997 is noted to cost the region around USD1.4 billion in health care costs. Nearly 40,000 people in the region were hospitalized due to the haze.^v

Aside from the obvious health concerns haze brings to the region, the economies of the nation are also at risk, according to the ASEAN website. The loss of visibility effects the production industry, such as agriculture and manufacturing, transportation, and tourism. The global climate is also at risk, as haze has several gaseous compounds.^{vi} Haze has affected the economies of the nations by delaying flights, decreasing tourist numbers, and a rise in air and maritime travel accidents. As recent as 2014, Malaysia took a huge hit in rice production, as the haze from that year caused a cooling affect thus lowering the effectiveness of photosynthesis in the nation and cutting rice production by fifty percent.^{vii} This is a huge blow to an economy where agriculture plays a big role.

The problem of transboundary haze pollution is very serious according to the ASEAN. In 1997, the fires that affected Brunei, Indonesia, Malaysia, the Philippines, Singapore, and Thailand, burned more than nine million hectares, six and half of which were forested areas. This cost more than nine billion USD in terms of economic, social, and environmental loss.^{viii} In the dry season in 2006-07, Thailand experienced fires which spread to most of mainland Southeast Asia. The fires that happen in one country can have adverse effects on its neighbors, costing huge economic losses, and loss of life.

Peatlands are a big cause of the transboundary haze pollution, as the region is home to sixty percent of the worlds tropical peatlands. These peatlands are mainly made up of partly decomposed plant material and when drained and dried up, are extremely flammable. These fires are hard to extinguish as they are under ground. These fires release a large amount of haze and carbon into the atmosphere.^{ix} According to an article from UNICEF, more than ten million children are at risk from the peatland fires in Indonesia. Due to their rapid breathing and undeveloped immune systems, these children are more susceptible to the health problems caused by the fires. More than 2.4

million children under the age of five live in the areas of Indonesia that are known for the peatland fires.^x UNICEF also warns that unborn children are also affected, as when the mother breathes in the haze, the chances of an underdeveloped baby are higher. The low air quality in this part of Indonesia affects more than 7.8 million school aged children.^{xi} UNICEF also claims that the fires are more aggressive in recent years due to extended droughts and global warming.

Overall, the situation of transboundary haze pollution is a serious problem in all of Southeast Asia. From affecting crop growth in Malaysia to harming school kids in Indonesia, this is a problem that the entire region must come together and fight. The next section will look at the steps the bloc has took in recent years to combat the problem of transboundary haze pollution.

Previous Actions Taken by ASEAN

ASEAN has not been idle in its role in tackling the problem of haze pollution. In 2002, the ten countries signed the ASEAN Agreement on Transboundary Haze Pollution. This agreement requires the signatories to:

- (i) cooperate in developing and implementing measures to prevent, monitor, and mitigate transboundary haze pollution by controlling sources of land and/or forest fires, development of monitoring, assessment and early warning systems, exchange of information and technology, and the provision of mutual assistance;
- (ii) respond promptly to a request for relevant information sought by a State or States that are or may be affected by such transboundary haze pollution, with a view to minimizing the consequence of the transboundary haze pollution; and
- (iii) take legal, administrative and/ or other measures to implement their obligations under the Agreement.^{xii}

The agreement also established the ASEAN Coordinating Centre for Transboundary Haze Pollution Control encourage cooperation in combatting fires that cause haze pollution.

According to the agreement itself, ASEAN recalled previous agreements on combatting haze pollution, namely the Kuala Lumpur Accord on Environment and Development and the 1995 ASEAN co-operation Plan on Transboundary Pollution. These two previous agreements focused on transboundary pollution and establishing procedure and mechanisms for co-operation among ASEAN members in combatting land and forest fires and haze.^{xiii} This agreement was not perfect though, as it took Indonesia, one of the larger producers of haze pollution, eleven years to sign the treaty and ratify it. The underlying reason why it took the nation so long was the belief by the government officials that haze from forest burning was a disaster, but merely a result of it. They also held the belief that their own local national laws, such as the 2014 Law on Plantations and 2009 Law on Environmental Protection and Management, would satisfy the need for regulation.^{xiv} Although, these laws share the sentiments with ASEAN's treaty about land clearing using fire, it did not address haze pollution as a result of it. In ASEAN's treaty, it was hopeful for a "haze-free ASEAN" by 2020, but due to Indonesia's slow progress, it is very unlikely.^{xv}

The ASEAN Peatland Management Strategy (APMS) of 2005 is another step that ASEAN has took to combat the problem of haze pollution. As mentioned previously, sixty percent of the world's peatlands are in the region, with seventy percent residing in Indonesia.^{xvi} Peatlands provide homes to three thousand plant species and unique animal species like fishes and dragonflies. But they also are a home for large amount of carbon storage, and when burned can lead to the emissions of two billion tons of CO₂ a year. This strategy recognizes the dangers of the burning of peatlands and follows the path set forward by the 2003 ASEAN Peatland Management Initiative. Covering 2006 to 2020, the strategy guides countries to manage the peatlands in their

state and reduce fires and haze within the framework of the ASEAN Agreement on Transboundary Haze Pollution, which is mentioned above. The strategy, according to the ASEAN website, focuses on the four-following objective: (i) enhance awareness and knowledge on peatlands; (ii) address transboundary haze pollution and environmental degradation; (iii) promote sustainable management of peatlands; and (iv) enhance and promote collective regional cooperation on peatland issues.^{xvii} In 2009, to implement APMS on a regional level, ASEAN implemented the ASEAN Peatland Forest Project to, “demonstrate, implement and upscale integrated management of peatlands in Southeast Asia through mainstreaming and improved governance, strengthened capacity and increased awareness, enhanced multi-stakeholder partnerships and innovative approaches to maintain and rehabilitate identified critical peatland sites.”^{xviii}

As we can see from the aforementioned treaty and strategy implemented by ASEAN, the region has taken the problem of transboundary haze pollution very serious. Although there are some gray areas based around what some governments believe, they have taken the steps to try and combat the problem through discussion, legal documents, and strategies.

Recent actions by nations to haze pollution

In 2019, the Indonesian Environment Minister made headlines for denying the transboundary haze problem. She claimed that the haze entering Malaysia came from Malaysia itself, with some partly from Indonesia, “Because the fact is that the smoke entering Malaysia, into Kuala Lumpur, comes from Sarawak [in Malaysian Borneo] and also from the Malay Peninsula, and maybe also partly from West Kalimantan [in Indonesian Borneo],” she was reported saying. Her counterpart in Malaysia claimed the facts showed the opposite. She uses ASEAN official data to show that Indonesia had more hot spots than Malaysia, and then the next day, while Malaysia’s number decreased, Indonesia’s soared, nearly tripling in Borneo. The Malay minister also stated,

“The data clearly shows that the haze is from Indonesia,” and then added she had spoken to the Malay Prime Minister who agreed to discuss the matter with the Indonesian President.^{xix}

Even with all the incredible work and cooperation done by ASEAN to combat the problem, there still seems to be some disconnect within Indonesia. We can speculate this is because Indonesia does not want to claim responsibility for the haze pollution, as they do create a lot of it. We can also speculate that Indonesia feels threatened in terms of sovereignty, as they could feel the other ASEAN members are forcing them to follow these treaties, so by denying the problem they will not have to take part in the solution.

In September 2019, Singapore’s air quality had been brought down to “unhealthy” levels, due to Indonesian fires that raged on. The winds had blown the haze from the fires in Sumatra over to Singapore, causing their Pollution Standard Index to reach 106 (100 is considered unhealthy.)^{xx} Many Singaporeans chose to stay indoors on a Saturday due to the grey haze that cloaked the city. Singapore prides itself on clean, sufficient air so much that they passed a cross-border air pollution law in 2014, where those who cause the haze pollution are considered both criminally and civilly responsible. The law claims the possibility of fines for companies that cause haze pollution regardless of where they are located. The Singaporean Government, after proving the party at hand guilty, can impose a fine up to \$100,000 per day of smoke, up to a maximum of \$2 million, on companies or individuals who cause Singapore’s air levels to enter the “unhealthy” level.^{xxi} Singapore, did in fact take legal action against five Indonesian companies who were blamed for the fires that covered the city in 2015.^{xxii} This law shows us how Singapore went beyond ASEAN’s response to the haze pollution problem. They enacted a law that focuses directly on transboundary pollution.

What I think can be done

I believe that ASEAN has a good starting point, with the treaties and strategies it has already implemented. I believe a big reason why progress is lacking is due to Indonesia's consistent denial of it being a problem. I think an initiative to educate the people of nations, especially in the most effected part of Indonesia would be a good start. If Indonesian can see what is happening to their country and be shown why so many get sick each year, then there is a good chance they will demand their government take action, or face being elected out. I also believe working with other blocs to tackle the problem would be beneficial to ASEAN. For example, they could ask for more assistance from China, who is a heavy investor in the region, to aid in providing better fire fighting technology. I believe a resolution like this could pass, because most nations in ASEAN are other friendly or neutral with China. I also think the UN's WHO can get involved, as this is a health problem for the region. They can provide masks for high population cities who experience the haze pollution and help provide air purifiers for schools and offices. I think that this is something each ASEAN nation will get behind as well because they are all in good standing with the UN. The major problem I see with getting resolutions through is the sovereignty of the nations. These are nations who have all faced some sort of colonization from the west and/or east and fear that one day it could come back. That is why I think working through other bloc like the UN would be beneficial, as the UN would not allow the recolonization of these nations. In the end, ASEAN must balance the desire their need to rid the region of the dangerous haze pollution and each nation's desire to remain sovereign and follow their own rules. I can see a future where ASEAN looks more like the EU, like a large country who all share the same goals and work together to make them happen.

Conclusion

Haze pollution has been a problem in Southeast Asia for decades, especially since the region began its industrial revolution and has boosted its manufacturing and production industry. Since its inception, ASEAN has accomplished quite a lot, and in the area of haze pollution, they have taken great strides. Like all things political, it is difficult to get others to follow suit with the crowd. But some nations have gone above and beyond in protecting their air quality. In my research during this project, as well as my three years as an undergraduate focusing on the region and political science, I do think there are ways that ASEAN can solve this horrible problem. In all times of public health crises, such as now, it is important that sovereign nations and its leaders work together to solve it.

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Endnotes

ⁱ Albert, "What is ASEAN?"

ⁱⁱ Albert, "What is ASEAN?"

ⁱⁱⁱ ASEAN, "Fire and Haze"

^{iv} ASEAN, "Fire and Haze"

^v ASEAN, "Fire and Haze"

^{vi} ASEAN, "Fire and Haze"

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- vii Sung, "Vegetation"
- viii ASEAN, "Fire and Haze"
- ix ASEAN, "Fire and Haze"
- x Rose, "10 million Children"
- xi Rose, "10 million Children"
- xii ASEAN, "Agreement"
- xiii ASEAN, "AATHP"
- xiv Tobing, "Indonesia Drags"
- xv Tobing, "Indonesia Drags"
- xvi ASEAN, "Peatland"
- xvii ASEAN, "Peatland"
- xviii ASEAN, "Peatland"
- xix Jong, "Indonesian Minister"
- xx Shen, "Singapore's Haze Law"
- xxi Shen, "Singapore's Haze Law"
- xxii Bora, "Singapore Haze Leads to Legal Action"