Compliance with, and Effective Implementation of Multilateral Environmental Agreements: Looking Back at the Transboundary Haze Pollution Problem in the ASEAN Region*

Ebinezer R. Florano **

Abstract

"Smoke haze" is a transboundary pollution problem which severely affected the Southeast Asian region during its most devastating occurrence in 1997-1998. As a response, the ASEAN implemented its Regional Haze Action Plan in 1997 backed up by a legal framework called ASEAN Agreement on Transboundary Haze Pollution which took effect in 2003. Looking back, this paper will attempt to explain the regulatory ability of the ASEAN to solve the problem by investigating the compliance of four countries (i.e., Indonesia, Malaysia, Singapore, and the Philippines) with the regional anti-haze pollution measures, and their implementation of domestic laws to stop forest fires.

Keywords: Smoke Haze/ Environmental and Disaster Management/ ASEAN

Introduction

In 1997-1998, the Southeast Asian (SEA) region suffered from what is called "smoke haze pollution." It is air pollution that consists primarily of "carbon dioxide, sulphur dioxide, other greenhouse emissions, and combustion particulates from proliferating smokestacks, forest fires, and motor vehicles in the newly-industrializing countries around the South China Sea" (Rosenberg, 1999, p. 119). Later, it was labelled as "transboundary haze pollution" (THP) to emphasize its international/ regional character, i.e., it reaches other countries, not just its country of origin. One author succinctly characterizes THP this way:

The word 'haze' seems more appropriate, particularly in the regional context as it drifts disastrously over other territories away from the source. It is the 'dirty cloud of haze' that gives the fire a regional or transboundary dimension and brings in the social dimension of health and safety. The term "haze" internalizes all the factors leading to the production of haze – the condition of forests, land clearing, combustible residues, and ignition source (Qadri, 2001, p.61).

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** *Assist.Prof. Dr., Center for Policy and Executive, National College of Public Administration and Governance (NCPAG), University of the Philippines, Diliman.*

In general, it is said that population explosion, rapid urbanization, economic growth, and increased material consumption are some of the leading causes of forest fires and the increase in smokestacks in the SEA region (Rosenberg, 1999, p. 119). The occurrence of the El Niño-Southern Oscillation is also blamed for this phenomenon (UNEP/NCAR/UNU/WMO/ISDR, 2000; and Heil and Goldammer, 2000, pp.24-37).

In response to the problems brought by the 1997-1998 THP, the Association of Southeast Asian Nations' (ASEAN) Ministerial Meeting on Haze[1] approved the implementation of the ASEAN Regional Haze Action Plan (RHAP) on 23 December 1997 in Singapore. The RHAP fleshed out the details of the broader provisions on transboundary air pollution in the 1995 ASEAN Cooperation Plan on Transboundary Pollution. Specific implementation guidelines for RHAP were further fleshed out through the so-called Operationalized Regional Haze Action Plan. Less than five years after the RHAP was approved for implementation in 1997, the ASEAN Ministers of Environment signed the ASEAN Agreement on Transboundary Haze Pollution (ATHP) on 19 June 2002 in Kuala Lumpur, Malaysia. It later took effect on 25 November 2003. Its main objective is to prevent, monitor, assess, and prepare for land and forest fires (Article 5).

As the ASEAN gears for regionalization by 2015, the case of the ATHP serves as a litmus test for regional environmental governance. First, the THP problem involves the big brothers in the ASEAN, i.e., Indonesia and Malaysia, and a small yet indubitably economic tiger Singapore. These countries are the acknowledged "key players" in the region (including Thailand and the Philippines). Second, this is one of those environmental problems whose solutions require regional cooperation sealed with a regional environmental treaty. Lastly, this thorny problem has sparked heated debates among Indonesia, Malaysia, and Singapore on how to totally prevent forest fires which are the main culprits of the THP, and the solution, it seems, is not yet in sight. Thereore, lessons in environmental governance can be learned to prepare ASEAN for the 2015 regional integration. In dealing with the concerns raised above, this paper aims to answer the following questions: (1) How effective is ASEAN in dealing with the THP? Do ASEAN countries comply with the ATHP? (2) What factors facilitate or hinder efforts of the ASEAN to curb the pollution? (3) What are the possible implications of ASEAN's environmental decision-making system and practices, as manifested in the way it deals with the pollution, to regional environmental governance? Thus, this paper aims to: (1) conduct a rapid assessment of the progress in eliminating the THP; (2) identify the factors that facilitate and hinder the ASEAN's efforts to curb this pollution; and (3) discuss the possible ramifications of the decision-making system and practices of the ASEAN to environmental governance in the region.

[1] *The ASEAN Ministerial Meeting on Haze (AMMH) is the highest policy-making body in the ASEAN directly tackling the haze issue.*

Compliance with Multilateral Environmental Agreements and Effective Implementation: A Review of Related Literature

The ratification of a regional environmental treaty that would govern the protection of the environment does not end with its signing by the contracting parties. The agreement has to be complied with and implemented effectively in the parties' jurisdictions. This section briefly reviews the literature on "Compliance," "Implementation," and "Effectiveness," specifically on their concepts, theories, processes, and factors that affect them.

Compliance

There are scholarly discussions on whether compliance comprises mere adherence to the legal standards and principles or changes in behavior (Victor et al. 1998, p.39, footnote 13). However, as can be seen from several of the definitions below, "compliance" is generally associated with both, i.e., adherence to the spirit and intent of the law and changes in behavior:

- "refers to whether countries, in fact, adhere to the provisions of the accord and to the implementing measures that they have instituted" (Weiss and Jacobson, 2000, p.4)
- "(a) state may be in compliance when it has taken the formal legislative and administrative steps" (Chayes and Chayes, 1993, p.193)
- "conduct that conforms with a rule of international law" (Fisher, 1981, p.2)
- "whether behavior conforms with the letter of an international commitment" (Cameron et al., 1996; and Mitchell, 1996)

Henkin's (1979) most-often quoted generalization, "almost all nations observe almost all principles of international law and almost all of their obligations all of the time," (quoted from Andresen et al., 1995, p. 21) has a modicum of truth because there are various ways by which contracting parties to international agreements comply or are made to comply. According to Peterson (1997), there are parties which comply on their own volition even if a regime does not exist (spontaneous compliance); there are passive parties which align their conduct with regime prescriptions because the regime has removed barriers to their compliance (regime-enabled compliance); and there are those recalcitrant parties whose behavior changes only after they are shamed, provided with rewards, or threatened with sanctions by others, etc. (induced-compliance) (Peterson, 1997, p.117). Then, there are those which comply with much zealousness, i.e., overcomply, and of course, those which do comply at all (Roginko, 1994, p.3).

Why do nations comply with their international obligations? Chayes and Chayes (1995) assert that compliance saves them transaction costs or serves their interests, or they simply want to follow the fundamental norm of *pacta sunt servanda* (Chayes and Chayes, 1995: pp. 4-8).[2] We could also add the following reasons listed

[2] *According to the Viena Convention on the Law of Treaties, states must comply with their obligations under the Convention in good faith (pacta sunt servanda).*

by Roginko (1994): the rules require no change; the rules are ambiguous; the rules codify preexisting interests; the rules codify existing behavior; and/or there are linkages to other issues (Roginko, 1994, pp.4-6).

On the other hand, states may choose not to comply if the above-mentioned rationales are absent. Specifically, Chayes and Chayes (1995) and Roginko (1994) tell us that non-compliance is brought about by the ambiguity and indeterminacy of the treaty language, by limitations on capacity, by the inflexibility of the agreement to adapt to changes in situations; by lack of domestic concern, inadvertence, and deliberate violations (Chayes and Chayes, 1995, pp. 10-16; and Roginko, 1994, pp. 7-10).

Implementation

For Najam (1995), international enviromental commitments have to be "domesticated" first before they can be implemented (Najam, 1995, p.2). He believes: that international factors will influence the implementation process together with domestic factors only; that the most important influence of international factors are their impacts on, and their potential to reshape domestic variables; and that the general explanatory variables that account for the implementation of international commitments are likely to be the same as those for the domestic implementation of domestic policies (Najam, 1995, p.2). Hence, he argues that to understand the implementation of international commitments, it is imperative to be true to, and potentially build upon, the accumulated learning on domestic implementation (Najam, 1995, p.2).

Policy implementation generally involves the creation and enforcement of programs/projects in line with the purposive course of action by the government to enable it to achieve its objectives which are usually sourced out from the inputs and demands of the society. This is reflected in the following definitions/concepts:

"Policies imply theories… Policies become programs when, by authoritative action, the initial conditions are created… Implementation, then, is the ability to forge subsequent links in the causal chain so as to obtain the desired results" (Pressman and Wildavsky, 1973, pp.xiii-xv)
"Policy implementation encompasses those actions by public or private individuals (or groups) that are directed at the achievement of objectives set forth in prior policy decisions" (Van Meter and Van Horn, 1975, pp.447-448)

"The point at which intent gets translated into action… (1) a declaration of government preferences, (2) mediated by a number of actors who (3) create a circular process characterized by reciprocal relations and negotiations" (Rein and Rabinovitz, 1978, p.308).

On "international implementation," Victor et al. (1998) equates it with "domestic policy implementation" because it cites the roles of various actors/stakeholders at the international level" (Victor et al. 1998, p.39).

Effectiveness

The literature on "Compliance" and "Implementation" has veered towards the study of the enforcement of international environmental commitments at the domestic level. However, the majority of the evaluative studies on the effectiveness of international environmental protection agreements still focus on the effectiveness of international environmental regimes. The major contributors in this area are Underdal (1980), Young (1982), and Kay and Jacobson (1983). Underdal (1980), for example, introduced the concept of the "law of the least ambitious program" that waters down the creation of robust environmental agreements due to the participation of several economically-, socially-, and politically-diverse parties (Underdal, 1980, p.7). Young (1982), on the other hand, produced evaluation criteria for the assessment of regime functions (Young, 1982, p. 8); and Kay and Jacobson's (1983) study focused on the role of international organizations on environmental protection activities (Kay and Jacobson, 1983, p.10).

Two themes (i.e., political impact and ecological impact) on the dependent variable "effectiveness" emerged out of the studies of the Darthmouth/Harvard and Oslo/Seattle projects. In particular, the political impact studies of the Darthmouth/Harvard (i.e. "behavioral impact") and of the Oslo/Seattle Project (i.e., "relative improvement caused by the regime") defined "effectiveness" as changes in the behavior of actors/stakeholders caused by a regime. On the other hand, the ecological impact dimension of the two projects suggest "problem solving" (Darthmouth/Harvard) and "distance to collective optimum" (Oslo/Seattle) as measures of "effectiveness." This dimension calls for improvement in environmental conditions (Andresen et al., 1995, pp.18-19).

The various definitions of "effectiveness" below reflect the continuing debates and diverse perspectives on what constitutes effective implementation of international environmental protection agreements. Is it the extent of behavioral changes of the target groups, or the extent to which the environmental conditions have improved, or both?

- "The condition of being able to solve a particular problem" (Weiss and Jacobson, 2000, p.5).
- "The degree to which international environmental accords lead to changes in behaviour that help solve environmental problems" (Victor et al., 1998, p. 1).
- "Solving the problem that motivated participants to establish a regime in the first place" (Young et al., 1991, p.8).
- "Success in attaining goals set forth in constitutive agreements" (Young et al., 1991, p.8).
- "Altering patterns of behaviour deemed relevant to the problem" " (Young et al., 1991, p.8).
- "Maximizing domestic compliance with rules articulated in international agreements" (Young et al., 1991, p.9).

In advocating for the use of the behavioral approach to explain why some international environmental agreements are more "successful" than others, Young (1994, and 1999a) explains that environmental concerns are collective-action problems

and those that are involved are unitary actors making choices on the basis of utilitarian calculations (Young, 1999a, p. 28). Therefore, the challenge is to identify the actors and stakeholders involved; their interests and roles in the issue; and the design mechanisms that would realign these interests and roles with the objectives of the environmental protection measures (Young, 1999a, p.28). In another book, Young (1999b) concludes that "the most productive approach is to focus on the behaviour of actors giving rise to problems, bearing in mind the need to think hard about the extent to which behavioural change serves to alleviate the problems under consideration" (Young, 1999b, pp.277-278).

Framework for Analysis

The framework of this paper draws heavily on the work of Weiss and Jacobson (2000) about compliance with binding treaties or "hard laws," as well as on Shelton's book (2000) on compliance with non-binding treaties or "soft laws."

In a book edited by Weiss and Jacobson (2000), they proposed a model with which the compliance with, implementation and effectiveness of, international accords could be analyzed. They called it "A Comprehensive Model of Factors That Affect Implementation, Compliance, and Effectiveness" (Weiss and Jacobson, 2000, p. 537). The model posits that the implementation and effectiveness of, and compliance with, international environmental accords could be explained by variables grouped into four broad categories:

1. characteristics of the activity involved;
2. characteristics of the accord;
3. features of the international environment; and
4. factors involving the country.

On the other hand, Weiss (2000), in her concluding remarks of the book edited by Shelton (2000), states that the compliance studies on non-binding instruments reveal that the variables used to assess compliance with hard laws are also applicable to soft laws. Aside from that, she also mentions that the soft laws' contents, contexts, and institutional mechanisms have significant effects on compliance. Specifically, Weiss (2000, pp. 535-553) cites the following factors:

1. the soft law's linkage to hard law and/or to placement within the context of a complex international regime;
2. the momentum brought about by the occurrence of rapid events and quick changes in the "landscape;"
3. when there is a continuing long-term relationship among participants in which they must interact;
4. when the law is supported by established social norms;
5. where there is a shared desire among the signatories to maximize welfare and minimize transaction costs;
6. when there is the threat of sanctions; and
7. when institutional structures encourage transparency and accountability.

Taking all of these together, the framework for analysis for this paper is presented on **Figure 1**. The independent variables are the following:

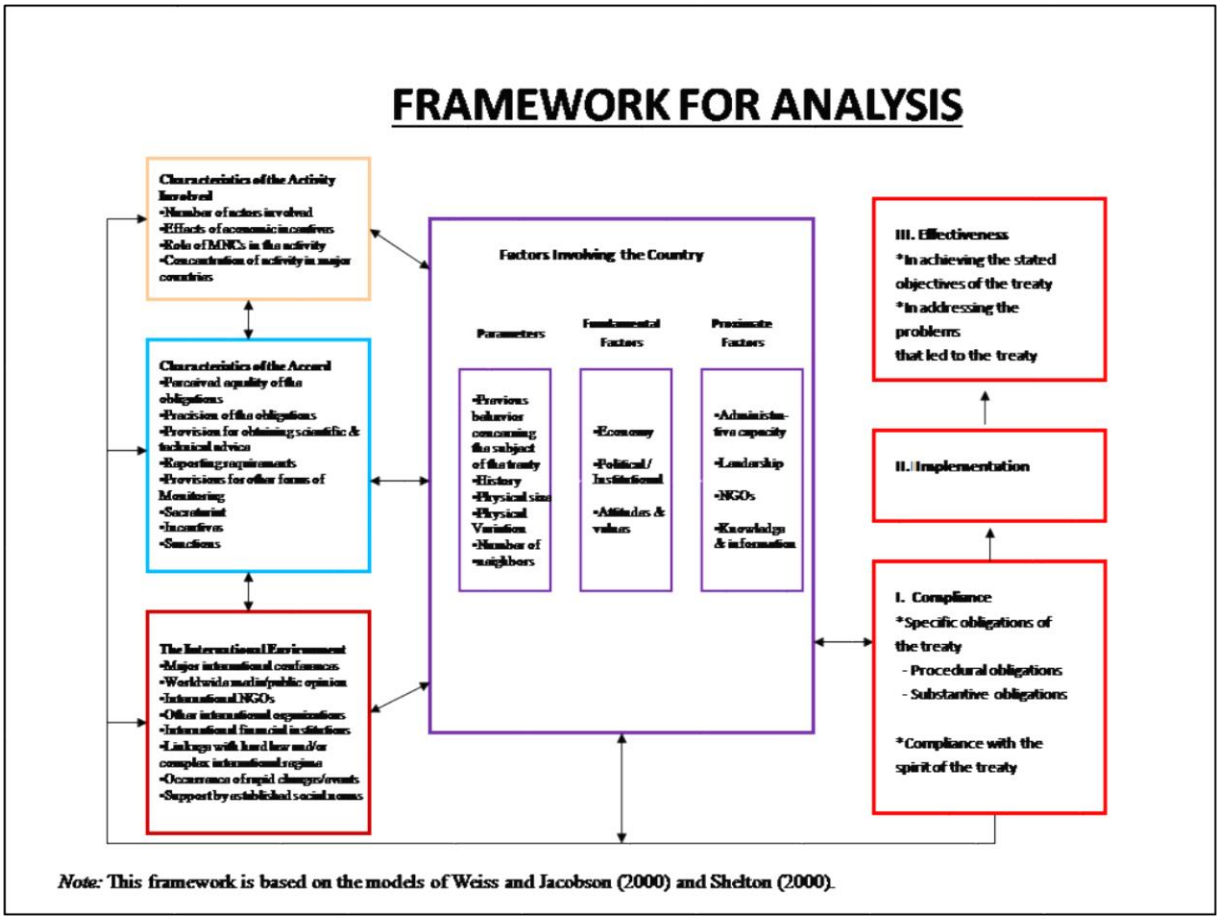
1. characteristics of the activities involved;
2. characteristics of the accord;
3. international environment; and
4. factors involving the country

The specific hypotheses from the Weiss and Jacobson study (2000) which are going to be tested include the following four groups:

Characteristics of the Activities Involved: An accord can be effectively implemented if

- there are smaller number of actors involved;
- there is a positive implementation cost-benefit ratio;
- large multinational corporations (TNCs) are monitored; and
- a regional hegemon provides good implementation examples to others.

Figure 1 Framework for Analysis



Note: This framework is based on the models of Weiss and Jacobson (2000) and Shelton (2000).

Characteristics of the Accord: An accord leads to effective implementation if

- it adopts the differentiated obligations principle;
- it has precise objectives and obligations;
- it utilizes scientific and technical advice from the epistemic community;
- it requires party-signatories to submit reports to the secretariat;
- it provides other forms of monitoring member-signatories' compliance;
- it provides for an effective and efficient secretariat; and
- there are incentive and sanction provisions.

International Environment: A conducive international environment for effective implementation is one where

- international conferences are held to discuss issues and problems;
- international media and informed public opinion and NGOs pressure governments to deal with environmental issues; and
- major international organizations and international financial institutions are able to provide moral persuasion and financial/technical assistance.

Factors involving the Country: Factors inherent to the country lead to effective implementation if:

- the countries' history and culture are pro-environment/eco-centric;
- the countries are democratic and rich;
- there is high local administrative and technical capability;
- there is active participation from local NGOs; and
- there are pro-environment political leaders.

From the Shelton study (2000), the following hypotheses are tested. A soft law can be effectively implemented if:

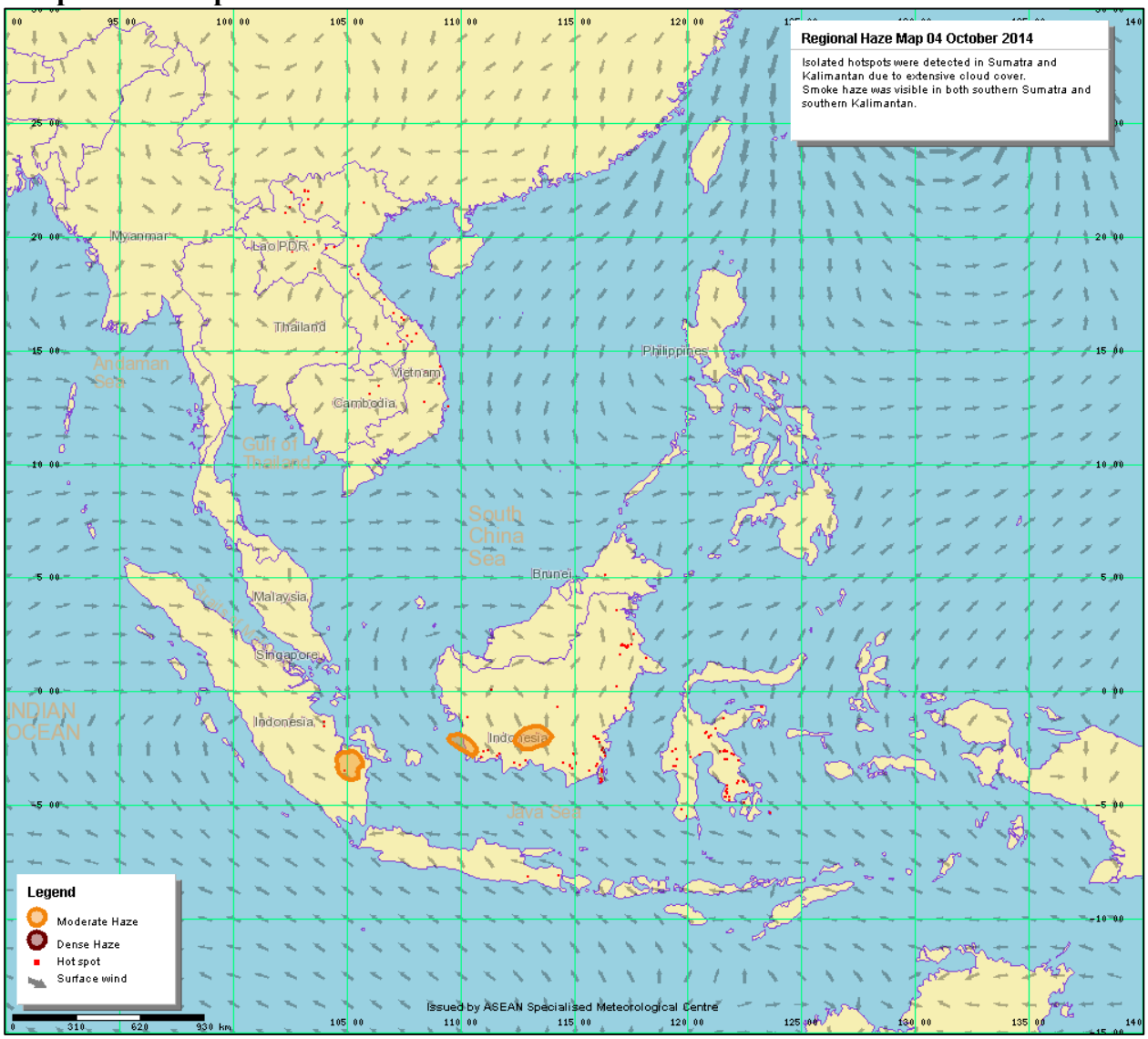
- it is linked to a hard law and/or placed within the context of a complex international regime;
- it has been brought about by the occurrence of rapid events and quick changes in the "landscape"; and
- it is supported by established social norms.

Findings and Analyses: Learning from the Past, Looking Ahead in the Future

Assessments of the Effectiveness of ASEAN's Anti-THP Measures

Using the "problem-solving approach," this paper utilizes hotspots or hotspot counts as indicator of occurrence(s) of forest/plantation fires as reflected in a haze map (see sample map at **Picture 1**). These are sourced from the ASEAN Specialized Meteorological (ASMC) based in the Meteorological Service of Singapore.

Picture 1
Sample Haze Map

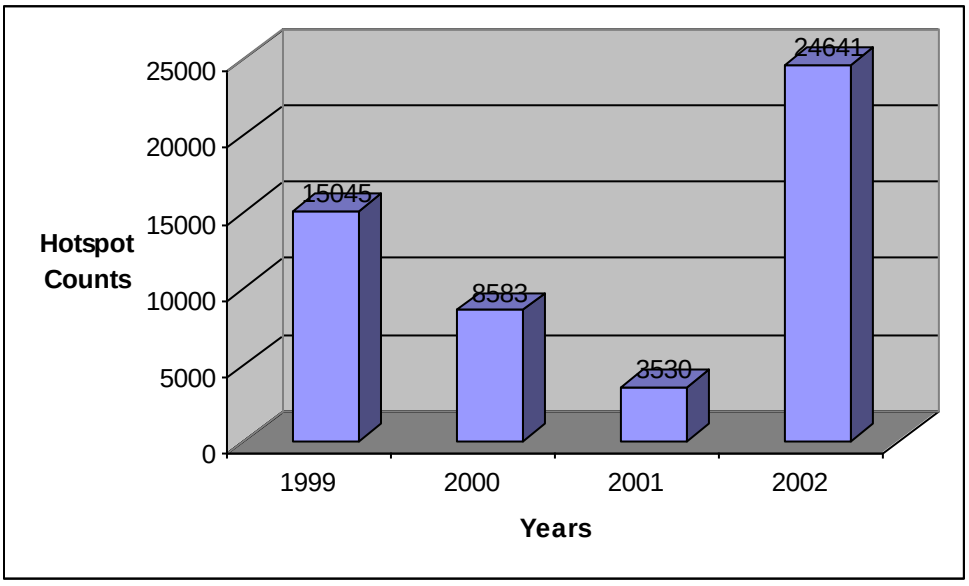


Source: ASMC (2014, 04 October).

1. The RHAP Years: 1999-2002

A look at **Figures 2** and **3** shows that there were reductions in the total number of hotspots[3] from 2000 to 2001 compared with those in 1999. However, there was almost 700% sudden increase in the number of hotspots in 2002, from 2001's 3,530 hotspots to 2002's 24,641 hotspots. Furthermore, the 2002 counts are also almost 164% higher than those in 1999. Hence, with those observations, **the author believes that the RHAP was <u>not convincingly effective</u> in preventing fires and haze in the SEA region from 1999 to 2002.** There have been substantial reductions from 1999 to 2001, hence, one could easily pass the verdict that the RHAP is an effective deterrent against fires and haze. However, the sudden increase in the number of hotspots in 2002 is a total surprise. A review of the ASMC reports and weather forecasts in the year 2002 reveal nothing unusual aside.[4] There were no reports about satellite error or malfunctions. Hence, the best strategy to explain this unconvincing effectiveness of the RHAP is to probe the compliance of and its implementation by two haze producing countries, i.e., Indonesia and Malaysia, and two victim countries, i.e., Singapore and the Philippines (read Part II.B).

Figure 2
Total Number of Hotspot Counts in Indonesia and Malaysia from 1999 to 2002



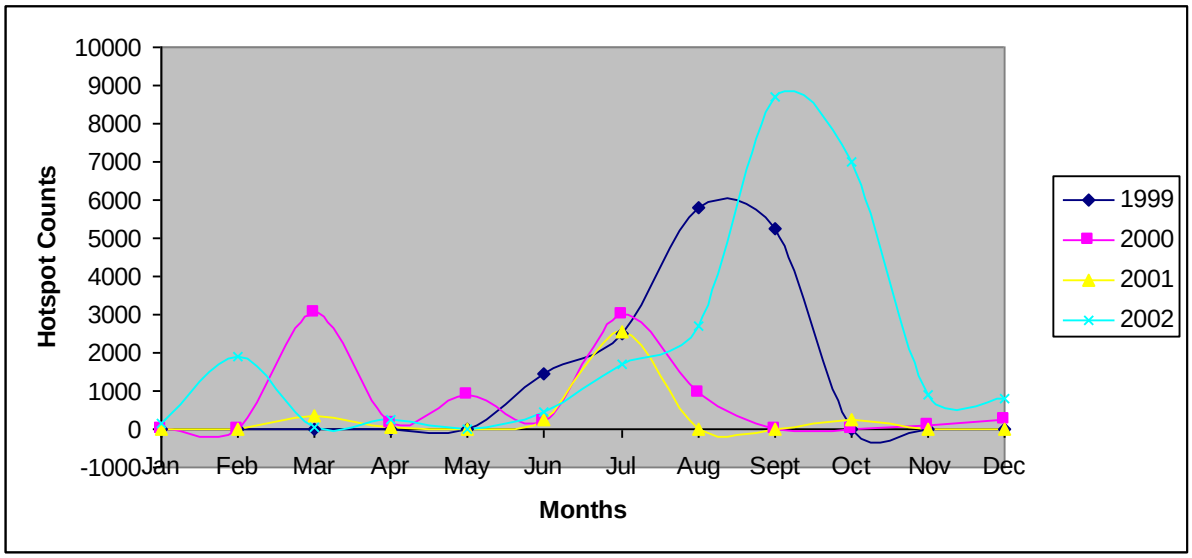
Notes: (1) Months without data may indicate that either there were no hotspots detected or the ASMC did not conduct satellite observation. (2) Data for Sumatra include hotspot counts for Malaysia, too. The ASMC combined the hotspot counts for Sumatra and Malaysia in their bar graphs, hence, there is no way to disaggregate them.

Sources of Data: ASMC. (1999-2002).

[3] *Hotspots are detected by the ASMC through its satellite. It depicts occurrence of fire. However, not all can be detected correctly due to atmospheric conditions like dense cloud covers.*
[4] *Based on the review of 15 ASMC reports submitted to ASEAN-CSU in 2003.*

If we look at the trend by months, **Figure 3** reveals that there were sudden hotspots in 2002 increases from September to December vis-à-vis the same months in 1999, 2000, and 2001.

Figure 3
Total Number of Hotspot Counts in Indonesia and Malaysia by Months from 1999 to 2002



Notes: Months without data may indicate that either there were no hotspots detected or the ASMC did not conduct satellite observation.

Sources of Data: ASMC. (1999-2002).

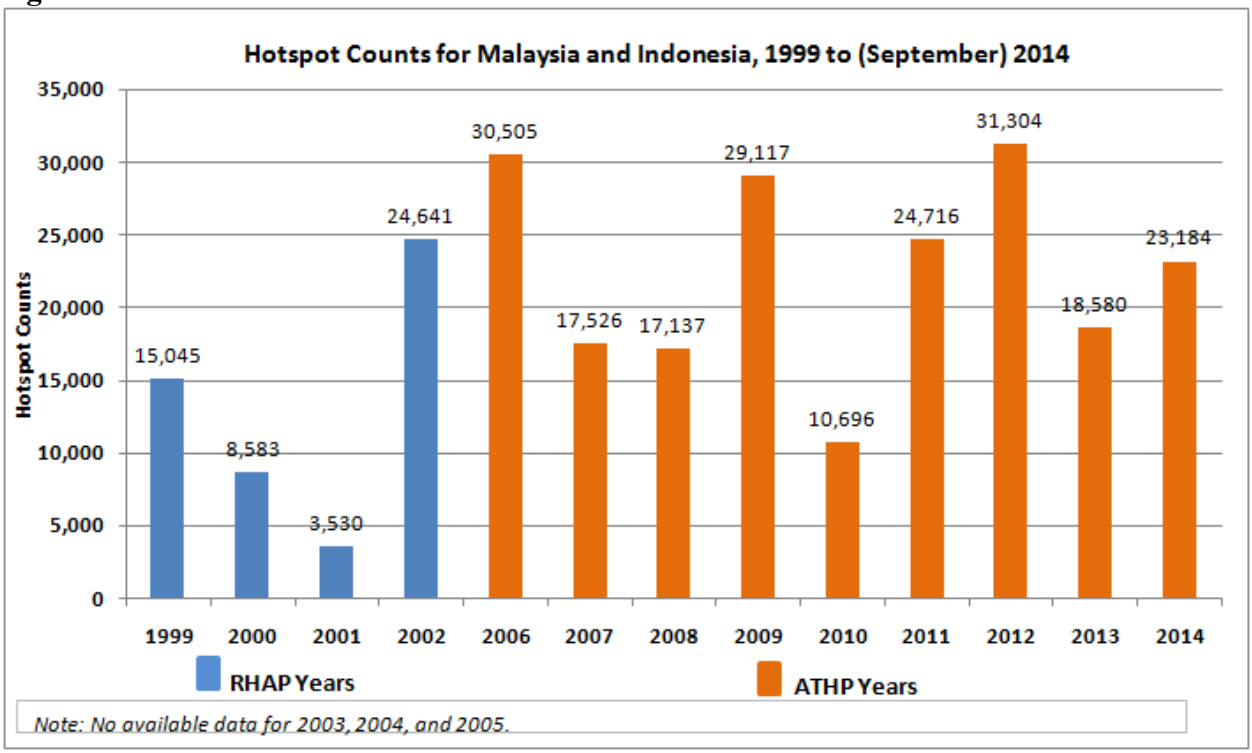
However, there are limitation to this finding, i.e., the period of analysis consists only of four years. The year 1998 was not included in the graphs because of very limited data.

The ATHP Years: 2006-2014

Eleven years after the ATHP took effect, have there been substantial reductions in hotspot counts? To answer this question, the author, once again, gathered hotspot counts from ASMC. Unfortunately, data from 2006 to September 2014 only were available as of this writing. Hence, there is a three-year gap between 2003 and 2005.

Figure 4 shows that even with the implementation of the ATHP, forest/plantation fires in Indonesia (Kalimantan and Sumatra) and Malaysia (Peninsular, Sarawak, and Sabah) are still unabated. During the RHAP Years (1999-2002), the hotspot counts averaged at around 13,000 a year. From 2006-(September) 2014, the average rose to around 23,000 a year. However, there is no clear pattern of increasing or decreasing number of hotspot counts. The only thing sure is that haze pollution still occurs.

Figure 4

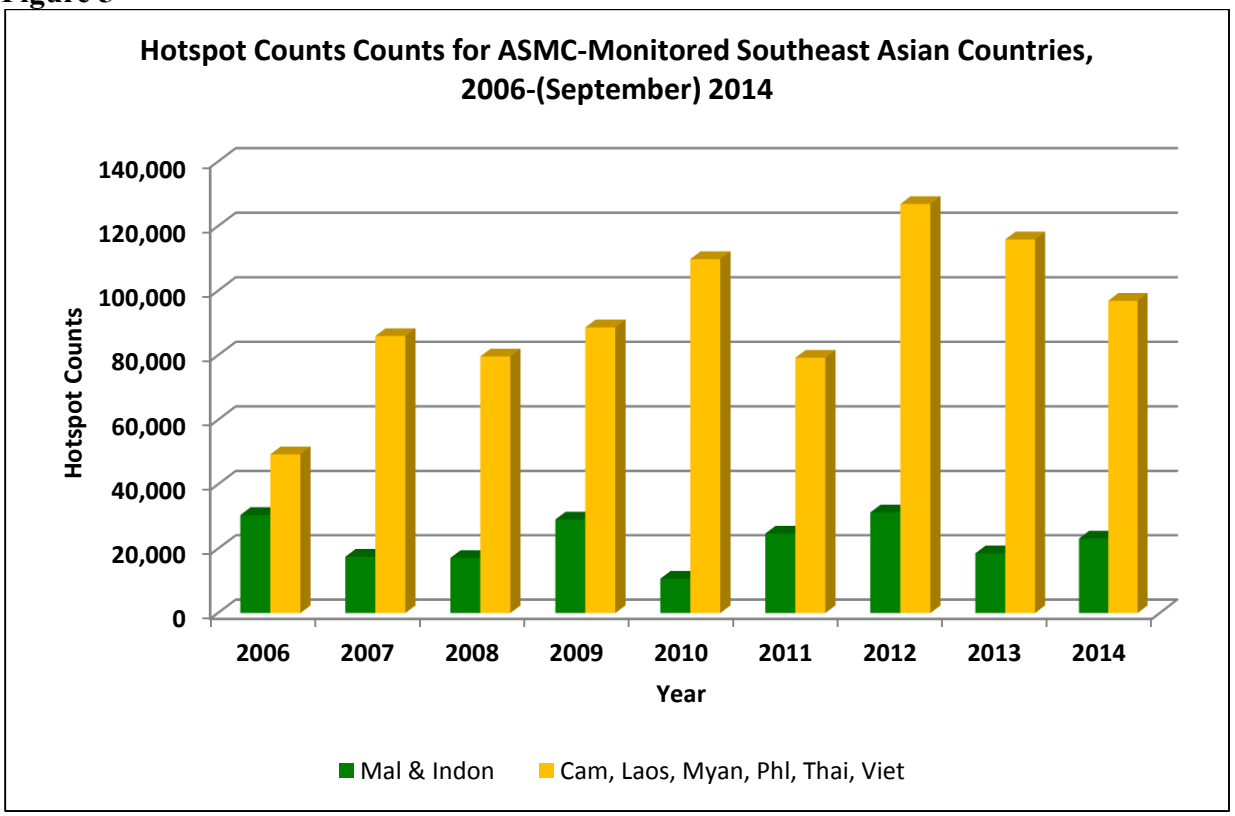


Note: Data for Indonesia include those for Sumatra and Kalimantan. For Malaysia, these include those from Peninsular Malaysia, Sarawak, and Sabah.

Sources of Data: Sources of Data: ASMC. (1999-2002), and ASMC. (2006-2014).

It should be noted, however, that forest/forest fires is not just detected in Indonesia and Malaysia. The ASMC, since 2003, has recorded hotspots in Cambodia, Laos PDR, Myanmar, the Philippines, Thailand, and Viet Nam. If their combined hotspot counts from 2006 to (September) 2014) are compared to those of Indonesia and Malaysia, theirs are up to ten times many than the latter (see **Figure 5**). From 2006 to (September) 2014, the average number of hotspot counts in Indonesia and Malaysia is around 23,000, while those in the six other countries, the average is around 92,000.

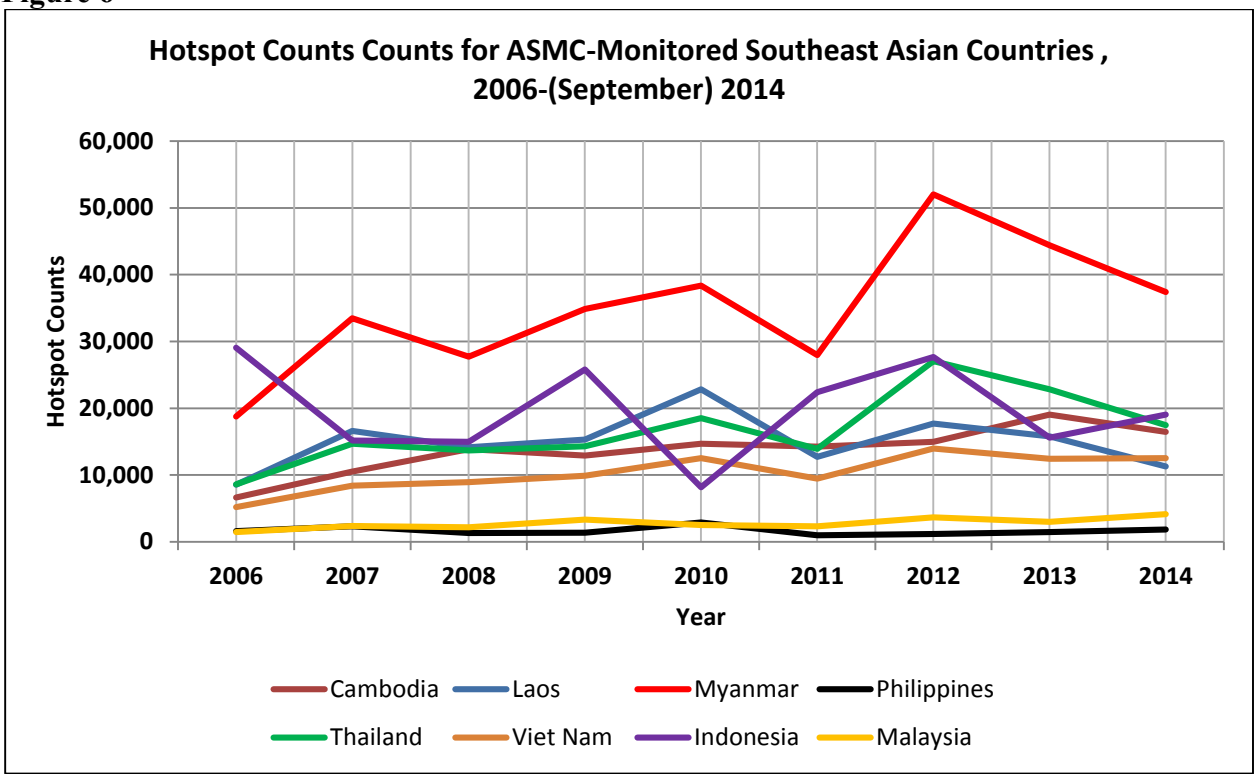
Figure 5



Sources of Data: ASMC. (2006-2014).

Among the new six countries being monitored by the ASMC through its satellites, which have the most number of hotspot counts between 2006-(September) 2014? On top of the heap is Myanmar with an average of 35,000 hotspot counts per year. Below it is a toss-up among Thailand (average of around 16,000 per year), Laos (average of around 15,000 per year), Cambodia (average of around 14,000), and Viet Nam (average of around 10,000 per year). The Philippines is at the bottom with an average of around 2,000 hotspot counts per year. Including Indonesia and Malaysia in the ranking, the countries with the most number of hotspot counts, averaged per year from 2006 to (September) 2014, are: (1) Myanmar, (2) Indonesia, (3) Thailand, (4) Laos, (5) Cambodia, (6) Viet Nam, (7) Malaysia, and (8) the Philippines. Notice that Indonesia is second to Myanmar in terms of the most number of hotspot counts, while Malaysia is now second to the Philippines in terms of the least number of hotspot counts (all averages). Refer to **Figure 6.**

Figure 6



Source of Data: ASMC. (2006-2014).

The foregoing discussions have shown that ASEAN has not yet totally solved the THP problem. Moreover, there are new haze pollution emitters from the region which made the problem worse. With the planned ASEAN integration by 2015, does this bode well for the region? What lessons can learned from the past that can be used for a more effective regional environmental governance in the future? The succeeding parts attempt to answer this.

Factors that May Affect Compliance with and Effective Implementation of the ATHP: Looking Back at the Experiences and Lessons in Implementing the RHAP

This section answers the second research question of this study, i.e., "What are the factors that may facilitate and hinder their (ASEAN countries') compliance with the ATHP?"

From the four groups of independent variables (i.e., characteristics of the accord, characteristics of the international environment, characteristics of the activities involved, and factors involving the country), obtained from the Jacobson and Weiss (2000) and Shelton (2000) studies, the author is of the opinion that the ASEAN's major objectives of preventing fires and haze are strongly impeded by the **forces of**

global capitalism, the **profit motive to seize the financial gains from the global demand for more palm oil products**, and these factors are reinforced by the inherent weakness of the **"ASEAN Way,"** now embedded in the ATHP, in that the "ASEAN Way" is unable to deal with the haze pollution problems (or any problem) head on.

The RHAP (and subsequently, the ATHP) is **no match for global capitalism** which buttresses the economic policies of major fire and haze-producing countries like Indonesia and Malaysia to invest more in palm oil plantations. The International Monetary Fund (IMF) and some European and North American financial institutions, provided the capital and loans to spur further growth in the production of palm oil products in Southeast Asia in the 1990s. Some ASEAN countries like Malaysia and Singapore also financed joint ventures with Indonesian palm oil plantation companies to gain more profit from the lucrative palm oil industry.

Moreover, Malaysia and Indonesia, both top global producers of palm oil products, cannot let the **profits from the global boom in palm oil** pass by. It is forecasted that palm oil product demands are going to rise from the current 22.5 million tons a year to 40 million tons per year by 2020. The revenues from palm oil exports would certainly help its domestic industry be firmly buoyed and help the employment rate be stable during years.

The use and practice of the principles of non-intervention and the non-confrontational approach to problem solving embodied in the **"ASEAN Way" serve as hindering factors** towards the effective monitoring, evaluating, and chastising of laggard ATHP signatory-states. Although the ASEAN Way's principles are not clearly written in the text of the ATHP, it is being practiced in decision- and policy-making of haze-related ASEAN unit meetings. Furthermore, the principles of ASEAN Way have been explicitly included in the provisions of the ATHP. Thus, the ATHP does not contain provisions giving its secretariat the power to monitor states' compliance; mechanisms for dealing with non-compliance, power to observe or inspect states' performance, the setting up of explicit performance standards, and instituting liability assessment procedures. Legal provisos, if they had been written in the ATHP, would have strengthened it to deal with laggard and intentionally non-complying signatory-countries. Thus, the ATHP, for its shortcomings, is labeled "**a blind and toothless paper tiger"** (for a lengthy discussion on this, see Florano, 2003).

The other factors which could have aided the ASEAN in the fight against fires and haze were also no match for the powerful influences of global capitalism and the obstructionist principles of ASEAN Way's diplomacy.

Environmental NGOs and the media, although they have played important roles, especially during the early phase of the 1997-1998 smoke haze episodes, have had **limited influence** in the fight against fires and haze. Environmental NGOs, which are neither fund raisers nor academic think tanks, do not get invited to participate in policy-making at the ASEAN level, and even much less at the national level. The Malaysia government, for one, is suspicious of NGOs foreign connections and sources of funds.

The international media became the mouthpiece of experts and commentators regarding the causes, effects, and solutions to the fire and haze problems. However, their counterparts at the national level, e.g., in Malaysia, have experienced censorship from the national government in order to save the tourism industry from collapsing due to news about the haze gripping the SEA region.

The **financial and technical contributions of the international community**, i.e., UN agencies, bilateral aid institutions, and research think tanks/academics, **useful** as they were in facilitating research about fires and haze, in undertaking capacity-building projects, in upgrading monitoring facilities and equipments, etc., in the final analysis, implementation at the national level (aside from the obstructionist global capitalism and the ASEAN Way) is the key factor that determines the success of anti-fire and haze policies, laws, regulations, activities, etc. The four country case studies below prove this argument.

In general, **Table 1** below suggests that among the variables of factors affecting countries compliance and implementation of the RHAP, **high environmental awareness of the people including strong political will from national leaders, high national income, and bureaucratic efficiency are important. Democracy and participatory governance are not necessary prerequisites for full/ partial environmental accord compliance and effective implementation.** The succeeding paragraphs provide detailed explanations.

Table 1
Cross-Country Comparison on Factors that Affect Countries' Compliance with and Implementation of the RHAP

VARIABLE	FULL/PARTIAL COMPLIANCE		LOW/HALF-HEARTED COMPLIANCE	
	SINGAPORE	MALAYSIA	INDONESIA	PHILIPPINES
Environmental awareness	High	Medium	Low	Low
Democracy	Low	Medium	High	High
Economic wealth	High	Medium	Low	Low
Admin. & tech. capability	High	Medium	Low	Low
Participation of NGOs	Medium	Low	High	High
Political will of leaders	High	Medium	Low	Low

Source: Created by the author based on his dissertation.

More specifically, the four case studies have confirmed the hypotheses that countries which are not so successful in enforcing multilateral environmental agreements are those which:

1. are geographically fragmented which makes uniform governance impossible;
2. are historically non-compliant with other related multilateral environmental agreements,
3. have economic development policies that are not anchored in sustainable development;
4. have societies whose perceptions and attitudes towards their environments and natural resources are slanted more towards materialistic anthropocentrism;
5. do not have or lack political leaders and/or political parties with the political will to uphold and implement no non-sense national environmental laws and activities;
6. have inadequate manpower and financial resources to sustain environmental protection/ conservation laws and activities; and
7. do not encourage multi-stakeholder participation in policy making and implementation about matters that concern the environment and natural resources.

The four ASEAN countries in this study exhibited weaknesses in varying degree in some or all of the above. Their specific weaknesses are:

- Indonesia – all factors
- Malaysia – all except factors # 3 and 7
- Singapore – factor # 4 only
- Philippines - all factors except # 7

Indonesia's case is well-researched and documented because it is the number one producer of fires and haze. Hence, the specific factors that affect its effective enforcement of fire and haze-related policies, laws, and regulations are very much identified which are: lack of political will in the government at all levels; unclear and weak policies and regulations; overlapping and conflicting roles and responsibilities of different agencies and institutions; bureaucratic procedures and poorly coordinated activities at all levels; are sectoral approach, mainly focused on suppression instead of prevention; vested interests that marginalize issues relating to fire and haze to favor a particular sector; and inadequate resources to enforce laws and regulations. Thus, with these, it is no wonder that Indonesia was the last one to have ratified the ATHP on 16 September 2014, in response to Singapore's "Transboundary Haze Pollution Act," which penalizes companies — both foreign and domestic — that are responsible for causing haze overseas. The law was approved by Singapore's Parliament in August 2014.

Malaysia, although can be considered as the leader in the fight against fires and haze, has problems with regards to anti-haze measures implementation especially in its states of Sabah and Sarawak and sometimes in Peninsular Malaysia. Malaysia is only in partial compliance because Malaysian palm oil plantation owners are required by law to practice the zero-burning technique in clearing lands and forests. But effective implementation of the ATHP can be hindered by the pursuit of the

government to earn more from the global demand for palm oil products. Sustainable development takes a back seat for economic progress in Malaysia.

Singapore is no longer bothered at all with compliance and enforcement because its geographical size and efficient government have enabled it to protect of what is left of its natural resources. Because of this, it is busy providing monitoring services to its neighboring AMCs to save itself from the clutching smoke haze.

Environmental law enforcement in the **Philippines** suffers the same fate of Indonesia. Poverty, graft and corruption in the government, multi-ethnic population scattered in the islands of the archipelago make national environmental governance extremely difficult.

Implications to ASEAN Regional Environmental Governance

In this study, it was confirmed that Jacobson and Weiss' (2000) hypothesis that **"an economically strong country is in a position to play a key role in the formation of environmental accords and in promoting compliance with them"** (Weiss and Jacobson, 2000, p. 537) is true. Although Malaysia is not the country with the most robust economy in the ASEAN, still it had enough resources to help neighboring Indonesia and lead the ASEAN during the RHAP's formative years. Its leadership was not based on military power (correlated with robust economy) but the power of persuasion and leadership by example with assistance from Singapore and Brunei Darussalam.

However, the contention that "**democratic and rich countries could have higher levels of compliance with international environmental accords"** (Weiss and Jacobson, 2000, p. 542) **is challenged here**. It is true that rich countries could have higher level of compliance because they have sufficient resources to use, as in the case of Singapore, but a more democratic country would not necessarily attain the same level. Take the case of the relatively more democratic Indonesia which has not attained satisfactory compliance and effective implementation of its anti-burning-related laws, regulations, and activities. Or even the Philippines, which has complied only half-heartedly.

Turning now to the hypotheses associated with compliance with and effective implementation of **soft laws**, the findings in this study validate some of them, while others need further qualifications.

First, it was found that the physical presence of the **"fear factor"** or **"sense of crisis"** [5] through the annual occurrences of forest and land fires, and subsequently haze, has helped keep RHAP signatories to be more vigilant and to comply with the Plan's directives with their utmost best. It must also be remembered that the "fear

[5] *Interview with the Secretary-General of the ASEAN, H. E. Ong Keng Yong, ASEAN Secretariat, Jakarta, Indonesia, 7 August 2003. The Secretary-General used the term **"sense of crisis"** which was also mentioned by WALHI Executive Director Longgena Ginting in an interview on 11 August 2003.*

factor" of the 1997-1998 smoke haze episodes helped fan the flames of cooperation among the ASEAN countries against it. Thus, the author is of the opinion that this "fear factor" can be utilized to continuously warn fire and haze-producing countries about their danger and strengthen the anti-haze ASEAN cooperation policies and efforts in the future. This could also be used to "outwit" the obstructionist principles of the "ASEAN Way" towards a more open, frank, and straightforward regional cooperation against THP.

Second, **hypotheses about a soft law's linkage to a hard law and their placement within the context of a complex international regime should not be accepted immediately at their face value.** These hypotheses **need further qualifications** for the following reasons. One, a hard law should compliment a soft law's weaknesses because the former is the legal framework with which the latter will fall back on if all "soft" corrective measures are inadequate to deal with laggard and/or non-complying member-countries. Such was the not the case with the hard law ATHP which should provide legal support to the RHAP on matters regarding the monitoring, evaluation, reporting, and correcting the compliance performance and levels of the signatory-countries. Two, the relationship between a specific environmental law and a specific international regime should also be complementary, i.e., an international regime should be legally binding to support a non-legally binding environmental accord. Such was the not the case between the relationship of the issue-specific forest protection international regime and the RHAP.

Conclusions and Recommendations

The prognosis for effective environmental governance in the ASEAN region, at least in the case of the THP problem, is not good, and does not bode well for the 2015 integration. The assessments on the effectiveness of the anti-THP measures, i.e., RHAP and the ATHP, reveal that forest/plantation fires remain unabated despite efforts on the part of the ASEAN and its member-countries to douse them through domestic laws and fire-control measures. What is worrying is that, with the aid of satellites, other new haze emitters from other members have been detected. Smoke haze emanating from them, through the years, have been noted to be on the rise.

Despite efforts on the part of the ASEAN and its member-countries to curb the forest/ plantation fires, the region is entangled in a complex labyrinth of socio-economic-legal factors that make it hard to put a stop to this problem. Hence, the author believes that the experiences and lessons in the implementation of the RHAP and the ATHP, the following policy recommendations, both at the regional and local levels, would somehow help untangle the web of problems.

Region-Wide Level Recommendations

Amend or draft a protocol for the RHAP and ATHP that would provide its Secretariat the power and functions to inspect, monitor, evaluate, report, assist, and/or chastise laggard, non- complying parties, and violators of the Agreement.

In connection with the recommendation above, the ASEAN Secretariat should **invite the cooperation of the scientific or epistemic communities in formulating policies** to prevent, monitor, and mitigate fires and haze. Not only that they could help in formulating accurate, objective, reliable, and cost-effective information for policy-making, they could also provide countervailing force against obstructionist social norms,[6] like the "ASEAN Way," for effective regional environmental cooperation. Once informed of the causes and effects of the smoke haze problem from impartial experts, it would not be hard to convince ASEAN leaders to set aside obstructionist norms and thinking for a more effective regional environmental governance.

Require ASEAN countries to submit annual accomplishment reports to the Secretariat. These reports should be evaluated and commented on by the Secretariat's oversight committee, reported to the international press, and posted on the Internet to pressure the parties to perform better.

Invite the participation of more stakeholders in the meetings of appropriate haze-related ASEAN units, especially advocacy and lobbying environmental NGOs, not just those which can provide funds.

In addition, the ASEAN should explore the possibility of using **third-party dispute settlement mechanism** to monitor national compliance and implementation efforts of signatory-countries. It is one of the newest approaches to settling international environmental agreement disputes (Kalas, 2001, p.88).

Measures Directed at ASEAN Member-Countries

Based on the findings and analyses above, i.e., compliance does not result in effective implementation for so many reasons, among which are: lack of capacity, inadvertence, lack of domestic concern, etc., the author agrees with Jacobson and Weiss (2000) that compliance should be linked with the countries' intention and capacity for each international agreement. Thus, countries which are parties to an international agreement could be classified into four: (1) those with a strong intention to comply and a strong capacity, (2) those with a weak intention but a strong capacity, (3) those with a weak capacity but a strong intention, and (4) those with a weak capacity and a weak intention (Weiss and Jacobson, 2000, p. 548). For each of these situations, there are strategies to enhance a country's compliance and effective implementation, i.e., sunshine methods, coercive measures, and positive incentives, which are written in the order of their importance in each quadrant in **Figure 7.** Primary strategies are listed first, followed by back-up strategies in parentheses. Briefly, these strategies are explained as follows:

Sunshine methods are aimed at bringing the behavior of parties and targeted actors into the open to be scrutinized, e.g., monitoring, reporting, on-site inspections, access to information, and NGO participation (Weiss and Jacobson, 2000, p. 543).

[6] *Kimball (1996) argues that scientific and technical advisory process in environmental management "has the potential to refocus the programs of existing institutions" if there are "accurate, objective, reliable, and cost-effective information and analysis to support decision-making." See Kimball, 1996, p. 84.*

Positive incentives are utilized to induce countries to join and to comply with an international agreement, e.g., special funds for financial or technical assistance, training programs, or access to technology (Weiss and Jacobson, 2000, p. 546).

Coercive measures aim to punish laggard or non-compliant parties in the forms of penalties, sanctions, and withdrawal of membership (Weiss and Jacobson, 2000, p. 547).

Figure 7
Strategies to Strengthen ASEAN Member-Countries' Compliance with the ATHP

Intention	Capacity: *Strong*	Capacity: *Weak*
Strong	***I Quadrant*** **Malaysia** **Singapore** Sunshine (Sanctions)	***II Quadrant*** **Indonesia** Incentives (Sunshine)
Weak	***III Quadrant*** Sanctions Sunshine (Incentives)	***IV Quadrant*** **Philippines** Incentives Sanctions Sunshine

Source: Created by the author based on Tables 15.3 and 15.5 in Weiss and Jacobson, (1998, pp.539-550).

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