

Designing an Effective Environmental Regime Complex in Northeast Asia

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Environmental concerns, especially climate change, have emerged as one of the most pressing problems that the world faces today. Recognizing this fact, leaders of Northeast Asian states, albeit to a varying degree, have expressed their willingness to cooperate in order to address environmental problems. However, critics point out that amidst countless talks and promises, no extensive effort has been made in the region to form an effective, comprehensive regime that serves to facilitate cooperation in dealing with environmental problems.

One way to analyze this phenomenon is to examine the current state of international relations in Northeast Asia, casting some light on the possibilities for and limitations of cooperation in Northeast Asia. Most scholarly works to date have taken this approach, offering explanations based on such diverse factors as domestic politics, underdeveloped scientific research, historical legacies, and even the regional culture.¹ Thus, the existing literature largely deals with the question of given which independent variables it would be possible to build effective environmental regimes in Northeast Asia.²

Although this approach represents one of the most natural ways to formulate the

¹ See Laura B. Campbell, "The Political Economy of Environmental Regionalism in Asia," in T.J. Pempel, ed., *Remapping East Asia: The Construction of a Region* (Ithaca: Cornell University Press, 2005), pp. 216-35; Wakana Takahashi, "Problems of Environmental Co-operation in East Asia: The Case of Acid Rain," in Paul G. Harris, ed., *International Environmental Co-operation: Politics and Diplomacy in Pacific Asia* (Boulder: University Press of Colorado, 2002), pp. 221-47; Shin-Wha Lee, "Building Environmental Regimes in Northeast Asia: Progress, Limitations, and Policy Options," in Paul G. Harris, ed., *International Environmental Co-operation: Politics and Diplomacy in Pacific Asia* (Boulder: University Press of Colorado, 2002), pp. 203-20

² There are some exceptions that do not solely focus on positive analysis. See, for example, Sangbum Shin, "East Asian Environmental Cooperation: Central Pessimism, Local Optimism," *Pacific Affairs* 80(1): pp. 9-26. Some helpful references may be found in works on cooperation between the United States and China, which are recently budding in the realm of public policy research in the United States. See, for example, Asia Society, *A Roadmap for U.S.-China Cooperation on Energy and Climate Change* (Washington, D.C.: Pew Center on Global Climate Change, 2009).

problem, it is not the only way. It is equally important to consider how environmental regimes in Northeast Asia should change in order to become effective in facilitating cooperation. From the perspective of policymakers committed to environmental cooperation, for example, this question would bear substantial weight. This paper seeks to answer this question.

Several caveats should be noted. First, for the purpose of this paper, the boundary of Northeast Asia is restricted to China, Japan, and Republic of Korea. Although other states, especially Russia, possess both influence and interest in the region, they do not share the urgency of environmental problems that the other three countries collectively face, such as acid deposition originating from China. Second, this paper depends on the premise that China, Japan, and Korea are at least willing to take collective actions to lessen their contributions to environmental problems. Recent trends, such as China's decision to cooperate with Korea and Japan in monitoring yellow dust, continue to render such premise less far-fetched. Third, treating environmental regimes as independent variables that can be altered rests on the assumption that they are not completely subsumed under states' interests. Although the current literature documents a long history of important debates on this issue, such debates are not the primary concern of this essay.³

The paper starts by providing a brief overview of the existing environmental regimes in Northeast Asia. Then, I argue that the current regime complex in Northeast Asia has specific shortcomings in facilitating environmental cooperation, especially during the stages of implementation and enforcement. Then, the next section identifies and argues for several ways in which the current regime complex can change in order to correct its shortcomings. Most importantly, I argue that more efforts should be made to encourage cooperation outside of the

³ See, for example, John T. Mearsheimer, "The False Promise of International Institutions," *International Security* 19(3) pp. 5-49; Robert O. Keohane and Lisa L. Martin, "The Promise of Institutional Theory," *International Security* 20(1): pp. 39-51.

central government, including local governments as well as nonstate actors.

1. Overview of the Current Regimes

Generally speaking, the current regimes can be divided into two categories: (1) regimes that are embedded in the region broader than Northeast Asia and (2) regimes that include only Northeast Asian states and possibly a few neighboring states, such as Russia and Mongolia. This section provides a brief overview of the current regimes in each category.

(1) Environmental Regimes That Extend Beyond the Northeast Asian States

The late 1970s evidenced globalization of environmental problems, perceptions, and policy responses. As a result, the need for regional cooperation was increasingly recognized by international institutions as well as states in the Asia-Pacific.

In fact, the first regional approach to environmental problems was spearheaded by the United Nations Environment Programme, which lobbied the existing regional regimes to tackle environmental problems. Most notably, the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP), which had primarily been an economic regime, established the Environment Coordination Unit (ECU) in 1978. A few years later, in 1985, the ECU held the First Ministerial Conference on Environment and Development, resulting in the First State of the Environment Report for Asia and the Pacific. Since then, ESCAP has hosted meetings for environmental ministers in the region every five years. However, the frequency of such meetings was low and thus did not have any notable impact on regional cooperation.⁴

Since then, environmental initiatives have also been spawned by other regional institutions. For example, the Asia Pacific Economic Cooperation (APEC) forum produced a

⁴ Hideaki Shiroyama, "Environmental Cooperation in East Asia: Comparison with the European Region and the Effectiveness of Environmental Aid," in T. Terao and K. Otsuka, eds., *Development of Environmental Policy in Japan and Asian Countries* (New York: Institute of Developing Economies, 2007), pp. 252-276.

framework of principles for sustainable development and hosted several meetings of environmental ministers. However, despite Canada's proposal in 1994, APEC did not establish an independent working group for environmental policy. Instead, it was stipulated that every existing working group should take environmental problems into account when planning and executing its programme. This approach actually decreased the importance of environmental policy in the overall policy mix and hindered effective interaction between APEC and the ad hoc regimes. As a result, the role of APEC was restricted to information exchange and technology transfer, which was further constrained by APEC's consensus-oriented mechanism.

Another notable multilateral regime in the Asia-Pacific is the Environment Congress for Asia and the Pacific (ECO-ASIA). The establishment of this regime was led by the Japanese Environment Agency, which had become dissatisfied with the low frequency of meetings held by ESCAP and APEC. Not to be confused with Environmental Cooperation-ASIA, established by the United States Agency for International Development, ECO-ASIA has been annually hosted by Japan since 1991. According to its website, ECO-ASIA "aims to provide a forum for free and open exchange of views among environmental ministers in the region."⁵ In achieving this goal, the ECO-ASIA forum has proved to be more successful than any other regimes in the Asia-Pacific region. Furthermore, the audience of meetings held by ECO-ASIA has broadened to include not only environmental ministers but also local government officials, academicians, and various nonstate actors, such as nongovernmental organizations.⁶ Unfortunately, however, these interactions have not resulted in concrete action plans, mostly dwelling in the realm of possibilities.⁷

⁵ ECO-ASIA, "Mission Statement," ECO-ASIA website. http://www.env.go.jp/en/earth/ecoasia/main/reports_m.htm.

⁶ The role of nonstate actors in international governance has been studied by various scholars. For one example, see Anne-Marie Slaughter, *A New World Order* (Princeton: Princeton University Press, 2004).

⁷ Shiroyama, "Environmental Cooperation in East Asia," pp. 259-260.

Although its membership lies mostly in Southeast Asia, ASEAN (Association of Southeast Asian Nations) is another regime that has taken a rather active stance with regard to environmental policies. Through various action plans, ASEAN has been successful in devising a blueprint for policy framework, most notably achieving harmonization of environmental quality standards. With the establishment of ASEAN Plus Three, Northeast Asian states have also partaken in ASEAN's efforts, providing various supports such as technology transfer.⁸ However, ASEAN's accomplishments in environmental cooperation have not been reflected within the Northeast Asian region itself.⁹

As this list suggests, almost all environmental regimes in the Asia-Pacific region have been developed as and into a forum for exchange of information. One possible exception can be found in the Asian Environmental Compliance and Enforcement Network (AECEN). AECEN was established in 2005 by environmental agency leaders from thirteen Asian countries "to promote improved compliance with environmental legal requirements in Asia through regional exchange of innovative policies and practices."¹⁰ However, it is telling that the means through which AECEN seeks to promote compliance is exchange of information and technology rather than mechanisms based on hard power that limit the authority of governments. As a result, although AECEN undoubtedly provides some means to ensure compliance in the general Asia-Pacific region, it has not seen much success in influencing its member states in Northeast Asia. Instead, the target of AECEN's efforts has been relatively weak and underdeveloped states in the region, such as Sri Lanka, Indonesia, and Vietnam.

(2) Environmental Regimes within Northeast Asia

⁸ ASEAN Secretariat, *Trade and Environment: Issues and Opportunities* (Jakarta: ASEAN, 1995), pp. 138-141.

⁹ ASEAN, "The Ninth ASEAN Ministerial Meeting on Environment," <http://www.aseansec.org/2819.htm>

¹⁰ Asian Environmental Compliance and Enforcement Network, "About AECEN," AECEN website. <http://www.aecen.org/about-aecen>.

The origin of environmental cooperation within the Northeast Asian region can be traced back to the Japan-Korea Environmental Symposium that took place in 1988.¹¹ With the cooperation of UNEP and participation from China, the Soviet Union, and Mongolia, the symposium developed into a forum for “exchanging information and exploring the possibilities for regional cooperation” between the five countries.¹² After the Rio Summit in 1992, the Japanese Environment Agency took the initiative to enlarge this symposium, leading to the creation of the Northeast Asian Conference on Environmental Cooperation (NEAC). However, since NEAC has not been successful in developing a comprehensive framework to promote deep forms of cooperation, the conference has remained merely as a forum for information exchange.

The launch of the NEAC was followed by creation of various environmental regimes for cooperation within Northeast Asia, at the average rate of one regime per year. For the most part, these subsequent regimes can be characterized as attempts to improve or supplement the NEAC.¹³ For example, the Northeast Asian Subregional Program on Environmental Cooperation (NEASPEC) was established in 1993 to provide a forum for senior officials, targeting on more specific environmental issues. The year 1994 saw the establishment of the Northwest Pacific Action Plan (NOWPAP), which narrowed its focus to coastal and marine pollution. This trend culminated in 2004 when the Tripartite Presidents Meeting (TPM) took place, generating high-level dialogues on general cooperation in the Northeast Asian region.

Although most environmental regimes in Northeast Asia are institutions established and driven by central governments, there are a few exceptions. The Association of Northeast Asia Regional Governments was established in 1996 with participation from 34 local governments. Nongovernmental organizations in the region have also established their own networks, such as

¹¹ “Whither NEAC?”

¹² Ibid.

¹³ Shiroyama, “Environmental Cooperation in Asia,” p. 262-263.

North Asia and North Pacific Environmental Partnership, formerly known as NEANPFF.

However, the achievements of such regimes have not been documented so extensively, as these regimes lack even their own websites.

However disorderly this development of Northeast Asian environmental regimes may seem, it is worth noting that environmental regimes that lie within the region have produced some of the most effective initiatives that target China, Japan, and Korea. For example, NEASPEC spearheaded the effort to mitigate air pollution from coal-fired power plants in Northeast Asia. Although the first phase represented only a weak form of cooperation, namely, technical assistance and training sessions, the subsequent phases have witnessed actual installation of pollution reduction mechanisms. Taking a step further, the NEASPEC has now turned its attention to improving efficiency of existing power plants. In this sense, compared to the regimes that broadly cover the Asia-Pacific region, Northeast Asian regimes are much more effective in influencing state behavior of Northeast Asian states.

At the same time, environmental regimes within Northeast Asia are not without problems. Most of the regimes are struggling to secure funding from states and other international organizations. In this respect, these regimes lag behind the ones that cover the Asia-Pacific region in general. Although Japan and Asian Development Bank have been regular financial and technological contributors, the number of regimes has grown rapidly, and their projects costlier. As a result, most environmental regimes within Northeast Asia have not been successful in executing long-term projects that require continuous environmental cooperation, such as monitoring compliance, collecting environmental data, and conducting long-term scientific research.

2. Shortcomings of the Current Regime Complex

Although the list of environmental regimes above is by no means meant to be exhaustive, it does provide a snapshot of the current status of environmental cooperation in Northeast Asia. The examination so far suggests that there is yet no integrated, comprehensive regime governing efforts to limit the extent of environmental problems in Northeast Asia. Instead, most discussions have taken place within the context of existing international organizations. Although these discussions have often resulted in the formation of various ad hoc regimes, they were “peripheral phenomena and did not play important roles in the actual development of the comprehensive environmental regime in East Asia.”¹⁴ In this sense, the system that currently exists can best be defined as a regime complex, characterized by Keohane and Victor as “a loosely coupled set of specific regimes.”¹⁵ As they further argue, environmental challenges create settings of high uncertainty and policy flux, in which regime complexes are not just politically more realistic but also offer some “significant advantages such as flexibility in substantive content and scope.”¹⁶

Some general observations can be made about this current regime complex. First, there is a noticeable lack of participation from nongovernmental organizations. Although some initiatives have been present, such as North Asia-Pacific Environmental Partnership, these regimes have not been successful in establishing themselves as visible actor groups in Northeast Asia. Furthermore, the regimes that do exist have focused on only shallow modes of environmental cooperation, such as information sharing, training, and limited transfer of technology. Even the one regime that focuses on compliance and enforcement, AECEN, seeks to

¹⁴ Hiroyama, “Environmental Cooperation in Asia,” p. 182.

¹⁵ Robert O. Keohane, and David G. Victor, “The Regime Complex for Climate Change,” Paper for Woods Institute, Stanford University, December 3, 2009, p. 2. Also, see Karen J. Alter, and Sophie Meunier, “The Politics of International Regime Complexity,” *Perspectives on Politics* 7(1): pp. 13-24.

¹⁶ Victor, and Keohane, “Regime Complex,” p. 28.

achieve its goal through exchange of information and technology.

Upon a closer examination, environmental regimes in the Asia-Pacific region have been revealed to be largely ineffective in affecting the behaviors of Northeast Asian states. Instead, most of their effective programs have targeted relatively less powerful and developed countries. On the other hand, although environmental regimes that lie within Northeast Asia have produced more concrete actions, they also suffer from lack of long-term support from the central governments.

Unfortunately, these general characterizations are not sufficient in answering the question of how to design an effective regime complex. Instead of such general observations, it is also necessary to highlight exactly in which areas the regime complex comes short of its expectations. In order to do so, this paper utilizes the framework provided by Mattli and Woods, who outline five stages of regulatory process: agenda-setting, negotiation, implementation, monitoring, and enforcement.¹⁷ Under this framework, different regimes and actor groups have differing competencies during each stage. For example, states may be especially effective in the negotiation stage, as they often face lower transaction costs than other actor groups and can rely on bureaucratic officials to make regular diplomatic contacts. On the other hand, states may be unwilling or find it costly to monitor compliance. Instead, they may choose to delegate the task to nongovernmental organizations, which are more integrated into global networks and are more motivated to tackle specific issues so as to be more effective in the monitoring stage than states.¹⁸ Thus, according to Mattli and Wood's framework, it is safe to say that no single group possesses all the competencies needed for effective regulation in the transnational context.¹⁹

¹⁷ Walter Mattli and Ngaire Woods, eds., *The Politics of Global Regulation* (Princeton: Princeton University Press, 2009), p. 24.

¹⁸ *Ibid.*, p. 27.

¹⁹ Hiroyama, "Environmental Cooperation in Asia," p. 190.

Furthermore, an effective regime complex should be structured in a way that there are various competent regimes during each stage.

In this light, it becomes possible to illuminate which stages of the regulatory process concerning environmental mitigation are inadequately addressed by the current regime complex. First, it has been noted that the current environmental regimes are mostly concerned with exchange of information and technology. Although this limited may act as an indicator of inactivity, it simultaneously suggests that these regimes face rather low costs for transaction as well as negotiation. This leads to an increased competency in the negotiation stage, as the regimes possess the ability to bring together actor groups with various interests. For example, as NEASPEC is currently pursuing the agenda of increasing the efficiency of existing power plants, it has not taken more than a year to produce a concrete action plan.²⁰ By hosting numerous meetings between officials, researchers, and business leaders, NEASPEC has been successful in promoting dialogue and negotiation.

Some positive signs are also emerging in the monitoring stage. As Northeast Asian states continue to gather for exchange of scientific research, they are beginning to establish regimes with the capability of monitoring environmental problems. For example, EANET was established to carry out monitoring acid deposition by harmonized methodologies in East Asia and provide scientific basis for further steps to reduce harmful impacts of acid deposition.²¹ By upholding the principle of internal funding for national monitoring activities, this regime has been rather successful in establishing a common database for acid deposition in East Asia while also providing various opportunities for training of related experts. Similar trend has been developing regarding other environmental issues, culminating in the establishment of Northeast

²⁰ Kazu Kato, "Wither NEAC?" Paper for 9th Northeast Asian Conference on Environmental Cooperation, 19.

²¹ EANET, "About EANET," EANET website. <http://www.eanet.cc/index.html>.

Asia Centre for Environmental Data and Training (NEACEDT) with the purpose of acting as a clearinghouse of monitoring and analyzing environmental data. It should be noted that these monitoring regimes have been created at the initiative of central governments, rather than nongovernmental organizations or other advocacy groups.

On the other hand, the current regime complex lags behind in other areas of regulatory process. For example, during the agenda-setting stage, the majority of current regimes are hindered from setting innovative agendas, instead pursuing modest goals. This can be attributed to several factors. For one, there are not many advocacy groups in Northeast Asia that collectively or independently lobby regional actors for international environmental cooperation. In addition, the current regimes are unable to set ambitious agendas, as they are endowed with responsibilities and missions that are rather shallow and not burdensome. This seems to be a response to the fact that the Northeast Asian states have divergent views on the issue of environmental cooperation.²² For example, China's perception of deep forms of environmental cooperation entails high sovereignty costs.²³ Consequently, both Korea and Japan become reluctant to pursue new agendas that require commitments from the central governments beyond information sharing. Cumulatively, these factors result in less effectiveness during the agenda-setting stage of environmental cooperation.

Similar problems plague the implementation and enforcement stages. Not many existing regimes possess the political will or capability to implement and enforce environmental cooperation, as most of them simply function as forums and database centers. As mentioned above, the one regime whose explicit purpose is to enforce cooperation seeks to do so by exchanging information. Furthermore, Northeast Asian states themselves are not so willing to

²² Kato, "Whither NEAC?" 29.

²³ Ibid.

devote their political or financial capital to aid the stages of implementation and enforcement. One exception was Korea in 1999 when it “tried to establish legal instrument to have an impact on the so-called pollution producing-activities in China.”²⁴ However, this proposal was opposed by both China and Japan, and Korea had to give up the hope of pushing for a legalized solution.

In this section, I argued that the current regime complex has strengths and weaknesses within the five stages of regulatory process and is subject to further improvements. More specifically, the current regime complex is relatively well prepared during the stages of negotiation and monitoring, but not so effective during the stages of agenda-setting, implementation, and enforcement. Therefore, those seeking to advance the current regime complex to become more effective should focus on the stages of agenda-setting, implementation, and enforcement.

3. How to Strengthen the Current Regime Complex

Having established the shortcomings of the current regime complex, this section proceeds to examine several concrete steps that can be taken to address those shortcomings. More specifically, I consider three actor groups in Northeast Asia, namely, central governments, local governments, and nongovernmental organizations. Each subsection examines these groups and makes several recommendations to facilitate environmental cooperation in Northeast Asia.

(1) Central Governments

There are many steps that central governments can take in order to promote environmental cooperation in Northeast Asia. First, the findings of this paper suggest that more focus should be placed on developing and supporting environmental regimes that lie within the

²⁴ Shiroyama, “Environmental Cooperation in East Asia,” p. 264.

Northeast Asian region rather than those of the Asia-Pacific. This is because the former is much more specific to the region and thus more equipped to address regional problems, such as dust sandstorms and acid deposition. Furthermore, the fact that Northeast Asian states are more powerful than most other Asian states means that regimes covering the Asia-Pacific region will not effectively influence the behavior of the Northeast Asian states. In this sense, if central governments in Northeast Asia wish to develop a more effective regime complex, they should support the regimes that primarily deal with the region.

Second, environmental cooperation in Northeast Asia is often characterized as a top-down approach. In other words, senior officials meet and talk, without meaningful involvement from organizations in the lower levels of the governance pyramid. Furthermore, although central governments have shown much willingness to cooperate with one another, it seems that they have not found many effective means to do so that satisfies the interests of all states involved. In this case, they should consider the possibility of encouraging development of other means of cooperation. In other words, successful environmental cooperation should engage actor groups on all levels, from advocacy groups to local governments to government bureaucracies. Development of these “weak ties” has the potential to facilitate environmental cooperation and innovative approaches to environmental problems in general.

This recommendation is supported by insights that can be gained from the field of sociology. In a relatively new field of research on social networks, scholars have found that innovation and exchange of information are facilitated in an environment with various “weak ties.”²⁵ This can be explained by the fact that social agents achieve cooperation through socializing processes, such as mimicking, persuasion, and social influence. When the ties are

²⁵ Alastair Iain Johnston, *Social States* (Princeton: Princeton University Press, 2007), pp. 2-36.

formed at higher levels of governance, however, it may become harder for these socializing processes to take hold. Instead, “weak ties,” such as cooperation between local governments, nongovernmental organizations, and experts, can lead to more effective forms of cooperation as well as innovative approaches in solving environmental problems. In this sense, central governments should support the development of these kinds of ties among lower-level actor groups that can play substantial roles during the stages of agenda-setting, implementation, and enforcement.

(2) Local Governments

Under most circumstances, local governments are less effective and less powerful than central governments. However, local governments may possess several advantages especially when it comes to issues as complex as environmental cooperation. More specifically, local governments are able to tackle the issues in a more microscopic manner, cutting out for themselves a manageable slice of the problem. In fact, local governments have been rather active in seeking cooperation to address various environmental issues. For example, as early as 1996, the Association of Northeast Asia Regional Governments was established as an effort to facilitate dialogues and cooperation.

Also, the success of cooperation between two cities of Dalian and Kitakyushu cast some bright light on the prospect of environmental cooperation at the level of local governments. The two cities reached a “sister-city” agreement as early as in 1979 with the objective of engaging in economic and cultural exchanges. However, environmental exchanges did not take off until the early 1980s when the Kitakyushu International Techno-Cooperative Association (KITA) was established in 1980. Within years of its existence, KITA was able to address most of the environmental goals set out by the Kitakyushu municipality, and started looking for ways to

apply its experience and technology to other cities. In this particular case, as Shin argues, “ad hoc style intercity cooperation was developed into a more institutionalized and formal network.”²⁶

The case of Dalian and Kitakyushu demonstrates that local governments can act on their own during all stages of environmental regulation. Recently, such forms of cooperation have become more prevalent, and local governments have been active in setting agendas that are specific to themselves. One significant challenge that local governments may face in the future is the question of how to expand their own efforts to the national government level. In other words, even if local governments are successful in achieving cooperation at a small scale, such success may not be carried over to the higher level. For now, however, successful cooperation at the level of local governments should be considered as an achievement in itself and encouraged accordingly.

(3) Nongovernmental Organizations

In 2002, Rohrschneider and Dalton conducted a survey of environmental NGOs across the world, compiling various indices to measure their activity and effectiveness.²⁷ Among such indices was the communication index, which measures the frequency of meetings and conferences. Surprisingly, the value of index was very high in Northeast Asia (81.5), which was comparable to Western Europe (82.3). This result confirms the previous observation that nongovernmental organizations in Northeast Asia are rather competent in the negotiation stage, as their transaction cost is lowered by various opportunities for communication and exchange of information.

²⁶ Shin, “Local Optimism,” 26.

²⁷ Robert Rohrschneider and Russell J. Dalton, “A Global Network? Transnational Cooperation among Environmental Groups,” *The Journal of Politics* 64(2): pp. 510-533.

Still, there are more works to be done. First, in order to increasing their effectiveness during the stages of agenda-setting, implementation, and enforcement, environmental NGOs in Northeast Asia should work toward developing more organization and structure. For example, it seems unreasonable for various regimes to hold their own annual conferences at different times of the year. Instead, regimes can seek to hold back-to-back or joint conferences, which would enable them to produce solid agendas that they can pursue collectively. Similarly, different regimes should seek to achieve more interactions among one another. This would enable the NGOs to become generally more effective in each stage.

Furthermore, during the agenda-setting stage, NGOs should assume a more global outlook and turn their focus to international issues, which include environmental cooperation. Rohrschneider and Dalton's research also found that less than 5 percent of nongovernmental organizations in Northeast Asia were focused on international issues over national issues, compared to North America where the figure was 40 percent. Therefore, in order to become more effective in the agenda-setting stage, environmental NGOs should recognize and advocate the importance of cooperating across the border.

4. Conclusion

Cooperation among central governments, local governments, nongovernmental organizations, and various other actor groups can play a significant role in overcoming environmental challenges that the world faces today. Unfortunately, however, not many actor groups in Northeast Asia have taken an active stance in promoting environmental cooperation. Still, cooperation is not unachievable. Identifying which stages of cooperation are most deficient can lead to productive efforts that ultimately result in effective cooperation.

It is in this light that this paper attempted to provide a new perspective toward

environmental cooperation in Northeast Asia. Analysis of the existing current regime complex revealed that much work remains to be done during the stages of agenda-setting, implementation, and enforcement. Then, it was argued that nongovernmental organizations and local governments can facilitate this process by taking a more active role in influencing decision making process of the central governments. Furthermore, nongovernmental organizations and local governments can tackle simpler and more manageable problems.

Admittedly, this paper leaves several questions unanswered. For example, how should these recommendations be implemented, given the current political constraints? How will the desire for continued economic growth, especially from China, affect the possibility of cooperation among Northeast Asian states? Would it be effective to incorporate other states into the regime complex, such as Mongolia, Russia, and even the United States? Is there a role for private actors, such as multinational corporations? Future research should clarify these questions and provide deeper insights into the question of how to develop effective environmental regimes in Northeast Asia.

More significantly, critics may also argue that recommendations of this paper will be meaningless unless the underlying conditions of the Northeast Asian region change so as to become more conducive to environmental cooperation. However, from a public policy perspective, it is also undesirable to keep one's hands behind the back and wait until the tide is favorable. Instead, recommendations like those presented in this paper should act as a guideline that provides a sense of direction so that when the tide comes around, the prow is pointing in the right direction.

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