Prospects for Effective Marine Governance in the Northwest Pacific Region

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Prospects for Effective Marine Governance in the Northwest Pacific Region

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1. Introduction [1]

This paper looks at the prospects for effective regional action to protect the Northwest Pacific environment. Effectiveness is taken to mean that international provisions are established that are likely to influence state behavior and contribute to improved marine quality.

The region faces a wide variety of environmental threats, yet has not developed an adequate set of governance arrangements to significantly address the problems. The authoritative *Random House Atlas of the Oceans* lists a full array of regional marine degradation and resource scarcity problems in the Northwest Pacific.[2] Problems include pollution from a wide range of land-based sources?including industry, municipalities, and agriculture. The Yellow Sea, East China Sea, and Sea of Japan receive large amounts of waste from the extensive development along their respective coastlines. Specific contaminants range from chemicals, such as PCBs and DDT, to tar balls and heavy metals. These seas are also subject to extensive resource depletion. There is widespread fishing and mariculture (particularly of kelp). Threatened marine species include bowhead whales, northern right whales, humpback whales, fin whales, loggerhead turtles, green turtles, and short-tailed albatross. The coastal zones have heavy tanker traffic transporting crude oil to China, Korea, Japan, and Far Eastern Russia. This results in ongoing problems of operational oil pollution, and the risk of collisions and groundings. Low level radioactive waste dumping has occurred in the Sea of Japan. Potential offshore oil and gas deposits exist, creating potential threats from offshore exploration and drilling. The World Resources Institute reports that 50% of the marine catch in the region is at or above replacement limits.[3]

The region faces many of the generic political problems that often inhibit effective collective action on environmental issues in general and on marine issues in particular. For instance, decades of rapid national economic growth have generated environmental externalities in the region, and environmental legislation enacted since the 1970s has resulted in a kaleidoscope of incommensurate national standards which must be coordinated in order to yield effective governance. In addition to the fact that the states are not willing to sacrifice economic growth for the sake of environmental protection, they are also reluctant to modify pre-existing standards when such actions may entail additional economic costs and potentially threaten competitiveness. Chinese enforcement of environmental regulations, for instance, is in general quite weak, and subordinated to state interests in promoting economic growth.[4]

In order to evaluation the prospects for effective regional marine environmental governance in Northwest Pacific, this paper reviews the lessons and experience over the last 25 years from the United Nations Environment Programme (UNEP)'s Regional Seas Program with an eye to comparing them with the situation in Northeast Asia. UNEP has facilitated adoption of 34 treaties (of which 29 are in force) concluded between 1976 and 1996, as well as agreements to protect the North Sea and the Baltic Sea.[5] These cases span over a hundred countries across all levels of economic development, political systems, and cultural backgrounds. They reflect experiences from regions with highly disparate levels of economic development within the region, such as the Mediterranean and Caribbean, as well as cases where the climate of political antagonism was potentially quite high, such as the Mediterranean and Gulf of Kuwait.

2. Existing Regimes in the Northwest Pacific

A limited number of international environmental conventions are applicable to the Northwest Pacific region. Few of the arrangements, though, command strong support in the region, compliance is

meager, and no binding provisions yet exist for land-based sources of marine pollution. Even so, they provide a fragile basis on which to build effective regional marine environmental governance.

Three broad international environmental regimes apply to the Northwest Pacific Region. These are listed in Table 1, along with an indication of which countries have ratified the relevant treaties.

Table 1: International Environmental Marine Regimes Applicable to the Northwest Pacific

("x" = ratified, "--" = not ratified)

Country	MARPOL	Whaling Convention	London Dumping Convention
USA	x	x	x
Japan	x	x	x
Russian Federation	x	x	x
N Korea (DPRK)	x	x	--
S Korea (ROK)	1978 but not 1973	x	x
China	x	x	x

Source: CIESIN Environmental Treaty Database,. http://sedac.ciesin.org/prod/charlotte, visited 5/10/98.

The 1973 Convention for the Prevention of Pollution from Ships as modified by the Protocol of 1978 (collectively know as MARPOL 73/78) seeks to reduce oil in the oceans by establishing procedures for operational handling of oil on tankers. It also introduces design standards for new and existing tankers of specified sizes. A 1991 U.S. General Accounting Office survey found that only 30% of the members of the MARPOL Convention submitted reports.

The Convention for the Regulation of Whaling is currently in political turmoil due to fierce controversy over annual catch limits and is not likely to command Japanese support as a legitimate regime from which to build a broader governance framework.

The London Dumping Convention (LDC) of 1972 requires permits for the offshore disposal of a wide range of industrial and municipal wastes, and bans the dumping of a "black list" of environmentally dangerous substances. Only about 60% of the parties to the 1972 London Dumping Convention complied with reporting obligations; and widespread violation of the regime is assumed by most observers and analysts of the LDC. Russia has been identified as one of the most flagrant violators.[6]

No regimes exist for addressing land-based sources of pollution in the region. The 1995 Global Programme of Action for the Protection of the Marine Environment from Land Based Activities provides broad guidelines, but is not legally binding. The only formal institutional arrangement that includes Japan, China, South Korea, and Russia is the Northwest Pacific Action Plan (NOWPAP), adopted in 1994 after three years of negotiation under the auspices of UNEP and the International Maritime Organization (IMO).[7] However, implementation of the principles laid down in NOWPAP has been slow for lack of high level commitment by the governments of the region. Governments have yet to commit funds for an operating budget, so the program has limped along from 1994 to 1996 with US$208,000 a year from the UNEP Environment Fund.

3. Factors in Marine Regime Creation

The experience from UNEP's Regional Seas Programme with regional marine governance suggests that five factors are key in constructing regional environmental regimes: 1) national leadership, 2) involvement of international institutions, 3) establishment of transnational scientific networks, 4) active presence of non-governmental organizations (NGOs), and 5) significant public concern. Each of these factors will be discussed in the sections below.

Different combinations of these factors have generated different regulatory forms and patterns of regime compliance. In the absence of any of these factors, collective efforts are likely to be weak and generate only commitments which are tolerable to the least interested party ("lowest common denominator" responses). The most effective regimes have been those with strong international institutions developed in conjunction with a transnational scientific network. (This is true, for instance, with the regional seas programs for the Mediterranean, Southeast Pacific, South Pacific, and possibly the Black Sea). Where this combination of factors has been present, comprehensive arrangements that take an effects-based approach to environmental protection have resulted.

Table 2: Examples of Regional Marine Environmental Governance

	institutionally strong	institutionally weak
Transnational scientific involvement	Mediterranean Persian Gulf South Pacific Southeast Pacific	
No transnational scientific involvement	Red Sea Black Sea (?) Baltic Sea North Sea (1987-)	Caribbean West Africa East Africa North Sea (1972-1987)

3.1. Public Concern and NGOs

While potentially contributing to effective regional governance, domestic pressure and NGOs have not played a strong role in regional marine management to date. In Europe, environmental concern was very modest until the late 1980s, and only took off in the rest of the world in the early 1990s.[8] A Gallup poll prepared for the United Nations Conference on Environment and Development (UNCED) demonstrated increased worldwide concern, but very little emphasis was placed on marine issues. Public opinion remained highly issue specific, oriented toward issues such as the siting individual factories rather than regional planning. In the North Sea regime moments of public concern about marine environmental quality offered opportunities for ambitious national environmental ministers to submit vigorous new proposals for collective action, but such a degree of public concern is rare, and few other regional regimes have shown evidence of significant public influence.

Surveys of public concern in Japan and South Korea are consistent with the global observations above. The surveys reveal only moderate levels of concern about marine pollution. While 66% of Japanese expressed "a great deal or a fair amount of personal concern about the environment," and 80% in South Korea; focused concern about marine issues was much lower, with 43% of Japanese surveyed responding that they thought pollution of rivers, lakes and oceans was "very serious," with 49% of South Koreans expressing such concern. In Japan only 12% volunteered environmental problems as the most important problem facing the nation, with 9% in South Korea.[9]

NGOs have also been generally absent in regional marine governance debates. In the 1990s Greenpeace International launched campaigns aimed at mobilizing public concern in the

Mediterranean and North Sea. In the Mediterranean, Greenpeace publicized violations of the marine regime, and pushed successfully for adoption of a protocol on the transport of hazardous wastes. In the North Sea, Greenpeace's Brent Spar campaign successfully induced Shell Oil to dispose of obsolete oil drilling platforms on shore, rather than at sea. However, such mobilization of NGO effort is the exception not the rule.

Some environmental NGOs are present in the Northwest Pacific region. At least two NGOs attended UNCED in 1992 from each of the following countries: Japan, USA, South Korea, and Russia. But NGOs are unlikely to exercise a strong political role in marine governance in Northeast Asia for two reasons. First, few of the environmental NGOs focus on problems of the appropriate regional geographic scale. Most are organized locally or globally, focusing on global issues such as global warming, or local issues such as industrial siting.[10] Second, NGOs lack political access and legitimacy in many of the region's countries. Only in Japan and South Korea are environmental NGOs significantly engaged in the domestic political process.

These political circumstances are not unique to Northeast Asia. In 1989 Eastern Europe faced many similar conditions, and foreign aid agencies quickly recognized that effective environmental protection efforts which would involve local participation required the creation of local social and political institutions (i.e., creation of "civil society").[11] In 1990 the USA, The European Union (EU), and Hungary helped establish the Regional Environmental Center for Central and Eastern Europe (RECC), in Szentendre, Hungary. The center helps to establish and support NGOs in Eastern Europe.[12] It will be necessary for Northeast Asian countries to develop stronger civil societies before NGOs will be able to play a significant role in regional marine environmental governance.

3.2. National Leadership

The guidance of any one country capable and willing to exercise leadership is often regarded as a key ingredient of successful regional cooperation and governance. State leadership may be important for agenda setting, guiding negotiations, and for enforcing compliance. If the leader commands respect it may be able to exercise leadership without expending a great degree of political influence, and inducing support and compliance through positive inducements. However, if other states are suspicious of the leader, or fearful about the distribution of costs from compliance then political leadership is much more challenging and enforcement may well rely on threats of sanctions, and the governance arrangements may well collapse once the leader's hegemony erodes or if it fails to pay close attention to state's compliance. In the Mediterranean, France helped to unilaterally provide the collective good of diplomatic leadership in designing and guiding early negotiations. The United States has selectively chosen to lead talks in the Caribbean, but not in other regional seas programs in which it is a member.

The Northwest Pacific region appears to lack a leader state. Most of the governments in the region are distracted by economic issues and are still responding to the Asian financial crises. Japan would seem like a logical leader state, but has not yet chosen to focus intently on regional marine issues. The U.S. has geopolitical reasons for being a constructive world leader on marine issues, and has immediate national interests in maintaining unhindered navigation in the region.

3.3. International Institutions

International institutions, when permitted by their member states, can play an important role in promoting regional governance. International institutions can help build more comprehensive regimes and encourage compliance by providing a venue for international cooperation, by building national capacity, and by building political will. The ESENA Project identified the following minimal needs for institutional measures to protect the Northwest Pacific marine environment:

1. cooperation in developing a regional marine monitoring network,
2. cooperation in developing systems of integrated coastal zone management,
3. cooperation in developing sea vessel traffic control schemes in the straits of the region, especially the Korean/Tsushima Strait between South Korea and Japan,
4. cooperation in standardizing port management practices for ship wastes, and
5. cooperation in developing oil spill response mechanisms in the region.

Northeast Asia is one of the most under-institutionalized regions of the world. And few if any institutions in the region are readily able to effect the above measures. There are no regional-scale environmental institutions; environmental campaigns have been only briefly waged by outside international institutions with much larger membership, such as the Asia-Pacific Economic Cooperation Forum (APEC), the Association of Southeast Asian Nations (ASEAN), the Economic and Social Commission on the Asia-Pacific (ESCAP), the United Nations Environment Programme (UNEP), the World Bank, the International Maritime Organization (IMO), the United Nations Development Programme (UNDP), and the Asian Development Bank (ADB)); and regional marine efforts are swamped by broader concerns such as economic cooperation around the Pacific Rim or global climate change. In the area of global climate change, for instance, membership in the institutions addressing this problem are so large as to make regional efforts ungainly.[13]

The primary functions performed by international institutions in facilitating regional marine governance are 1) establishing the contractual setting, 2) enhancing national capacity for addressing environmental threats, and 3) building national concern. Each of these areas will be discussed below.

Contractual Environment

Improvement in the "contractual environment" within which environmental diplomacy is conducted can be obtain through such efforts as providing regular meetings to small numbers of parties, supplying environmental monitoring data, verifying national policies and compliance, conducting talks at an appropriate level, linking negotiations and discussions to other areas of collective concern and thus improving the possibility for compromise, and nesting discussions within an overarching shared framework. The small number of countries involved in the Northwest Pacific region greatly facilitates the logistics of meetings, and of monitoring and verifying national actions. It can also facilitate horizontal linkages between marine issues and issues which command more attention in the region, such as global climate change.

Enhancing National Capacity

International institutions have successfully overcome national reluctance to engage in multilateral environmental protection efforts by enhancing national capacity for environmental protection. Such efforts have the effect of providing additional benefits or inducements for states that are indifferent to the environment, as well as enabling states to formulate environmental policy domestically, and to enforce the policies. For countries, particularly developing countries, which are suspicious of international initiatives arising from the North, building domestic institutions makes these governments more confident negotiators and thus more willing to acquiesce to collective deals.

Capacity building has generally occurred by such activities as transfer of technology, establishment of information clearinghouses about pollution control technology, and conducting training seminars for government officials in coastal zone management or for scientists in monitoring techniques. In the short term such capacity building activities often merely provide an expedient justification for

appearing to consult science policy; but in the longer term they may transform states' willingness to rely on science policy by enhancing the domestic political standing of the community, and also alerting the state to possible benefits from its use.

European states trying to protect the North Sea and Baltic Sea have successfully experimented with task forces organized around the quest for best available technologies and best environmental practices with voluntary leadership by countries that already enjoy comparative advantage in particular environmental technologies. Through the use of lead-countries for technologies associated with different economic sectors, countries with an advantage are offered an opportunity for sharing that information with others and thus creating new markets for their firms. In the Mediterranean periodic oil spill conferences with parallel trade shows provided governments the opportunity to promote their country's technology.

Building National Concern

By building state concern about the environment, international institutions can improve the prospects for multilateral efforts at environmental protection. Building national concern about environmental threats occurs in two ways. Directly, institutions may provide information to governments and elites that may increase their willingness to commit resources domestically and collectively to environmental protection. Indirectly, institutions may provide information to the mass public, which will then be channeled up to governments as demand for environmental action. International institutions have been able to magnify domestic pressures on governments through publicity and involvement of national NGOs and scientists. The provision of public education programs, the creation and strengthening of NGOs, and the promotion of findings and the individual status of scientists involved in transnational scientific networks have enhanced national concern.

In Northeast Asia domestic social and political institutions capable of aggregating and articulating interests for the government are quite weak. Japan and South Korea are political democracies with a fair degree of preexisting domestic environmental concern, but Russia, North Korea, and China, may all be relatively immune to such institutional efforts to mobilize organic political concern. Freedom House ranks China among the countries where the press is the least free. International institutions may have a better chance at public education and mobilizing environmental concern in the "free" presses of South Korea and Japan, or the "partly free" press of Russia.[14]

3.4. Transnational Scientific Networks and Communities of Expertise

Another key element to creating effective regional marine regimes is developing a "community of expertise" or transnational network of experts. Systemic inclusion of science in regional environmental governance provides a firm technical foundation for collective action. In its absence political action will be driven by compromise and anticipated potentials for short-term gain. It is only in those cases where regional marine scientists have been involved in collective political efforts that governance structures have emerged that contain long-range planning and research components and are based on ecologically justified principles. While institutionalized science leads to more comprehensive and judicious efforts, it is slow to develop.

Reviews of UNEP's efforts to build a regional communities of expertise in its regional seas program offer the following lessons for building a community of expertise.

1. Carefully survey the population of scientists. In the Mediterranean, a UNEP consultant spent nine months visiting national laboratories to inventory national capabilities and to personally build the scientific network.
2. Recruit carefully for national and regional institutions. Base judgements on professional

credentials and networking ability.

3. Avoid relying on one national institution to provide research and training.
4. Provide professional outlets for members through conferences and publications in refereed professional journals. This also elevates the domestic profile of individual scientists who may then be recruited to fill positions in national administrations.
5. Avoid government designation of scientists to international meetings.
6. Try to make use of joint international panels for environmental risk assessment rather than relying on national assessments.
7. Assure the timely submission in advance of meetings avoid single state sponsorship of collective research.
8. Avoid capture by one scientific discipline or school of expert analysis.
9. Arrange for focused interactions between scientists and policy makers to discuss the technical substance of the issues.
10. Maintain momentum within the community by continuing to have projects and research opportunities so those members don't drift away. This avoids having to reconstitute the community each time a new problem emerges.

NOWPAP has accorded priority to applying many of these lessons in the Northwest Pacific region. NOWPAP intends to publish a directory of marine environmental institutions and leading researchers in the region and an inventory of the technical capabilities of regional research institutions; and intends to develop collaborative research projects, in addition to establishing a collaborative regional monitoring program. Thus, the raw potential for a community of expertise appears high in Northeast Asia. The following table provides a crude (and outdated) measure of national scientific capability in the region.

Table 3: International Directory of Marine Scientists in Northeast Asia

Country	# of marine scientists	# of institutions/labs	Disciplinary Strengths
China			
Japan	Thousands	Many	Extensive
North Korea			
South Korea	121	22	
Russia (Vladivostok, Kamchatka, Sakhalin,)	81	9	

Source: *International Directory of Marine Scientists, 3rd Edition*, UNESCO, 1983.

A second feature of communities of expertise is their independence from national governments and ability to operate as a transnational network. Transnational networks of scientists can serve as consultants and advisors, and synchronize policy advice across countries.

4. Conclusion

Regional environmental governance works best when it is multilateral. But, prospects are not

promising for effective regional environmental governance in the Northwest Pacific. International institutions are weak; knowledge is only weakly organized and appears difficult to mobilize; and no country appears willing to commit economic or diplomatic resources towards regional leadership on the regional marine environment.

The absence of transnational channels and institutional mechanisms in the region is a consequence of deeper regional realities. No government is at present willing to push for establishing strong regional institutions. There are two basic options in the region for formulating a long run strategy in pursuing effective marine environment governance. One is to seek to applying the lessons from other regions on marine environmental governance. This includes strengthening regional scientific networks and regional civil society. Another (complementary) strategy is to address the underlying causes for the absence of a fertile ground for effective regional cooperation. Here the focus needs to be on changing the larger political and cultural conditions that inhibit effective marine governance.

Endnotes

1. I am thankful to Daojiong Zha, Kim Hyon-Jin, and Ken Wilkening for guidance regarding the politics of the Northwest Pacific region. Return to Paper

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3. World Resources Institute, 1997. *World Resources 1996-1997*, New York: Basic Books, p 309.Return to Paper

4. Bryan Bachner, 1996, "Regulating Pollution in the Peoples' Republic of China," *Colorado Journal of Environmental Law & Policy*, Vol. 7(2), pp 373-408. Return to Paper

5. See Peter M. Haas, "Save the Seas," Ocean Yearbook 9; Peter M. Haas, 1997, "Scientific Communities and Multiple Paths to Environmental Management," in *Saving the Seas*, L. Anathea Brooks and Stacey Van Deveer (eds); and Maryland Sea Grant's Marine Policy Center, 1993,*Comparative Efforts for Regional International Programs to Control Land-Based Pollution*, Woods Hole Oceanographic Institution. Return to Paper

6. Olav Schramm Stokke, 1998, "Nuclear Dumping in Arctic Seas" in *The Implementation and Effectiveness of International Environmental Commitments*, David G. Victor, Kal Raustiala and Eugene B. Skolnikoff (eds), Cambridge, MA: MIT Press. Return to Paper

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8. Russell J. Dalton, 1994, *The Green Rainbow*, New Haven: Yale University Press. Return to Paper

9. Riley E. Dunlap, George H. Gallup, Jr. and Alec M. Gallup, May 1993, *Health of the Planet*, Princeton, NJ: Gallup International Institute, Figure 1, Figure 3, Table 6. Return to Paper

10. Kim Hyon-Jin, 1998, *Marine Environmental Cooperation in Northeast Asia*, a paper presented at the ESENA Workshop: Energy-Related Marine Issues in the Sea of Japan, Tokyo, Japan, 11-12 July 1998. Paper will be available on the website of the Nautilus Institute (69.195.70.34).Return to Paper

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14. Freedom House results published in *The Economist*, 30 May 1998, p 98. Return to Paper

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