

## **The Role of the Press in Creating Effective Environmental Treaty Negotiations**

**Masako Konishi Otsuka**

*When the press covers an issue thoroughly and consistently, the public responds. Policies are changed. Laws get passed*  
(Gelbspan 2004).

In today's world the press has the formidable power to make the public aware of a problem in which formerly it has demonstrated little or no interest. Environmental problems have not been a popular topic; they have not received nearly as much coverage as have political and economic issues, not to mention scandals. If the press covers a story assiduously, the public gets more interested, stimulating the state to be more active in environmental negotiation and implementation.

Although the independent press in most democratic countries cannot be controlled, there are ways to attract them to cover more environmental issues. Each public relations office of international environmental organizations is trying hard to get the press motivated to cover its agenda, but as the environmental problems are developing across the borders over centuries, it is hard for one organization or one state to cover the whole story in a way that would effectively motivate the press. If international environmental organizations made a systematic effort to increase press attention, each individual organization and secretariat would to greatly increase press coverage of their activities, including treaty-making efforts.

This paper proposes a new system to encourage press coverage of environmental protection worldwide: the Strategic Public Relations Method. The first section examines potential impacts of press coverage of the environmental treaty process, which include helping the public become aware of environmental problems; encouraging faster implementation; and motivating the public to support greener candidates and greener industries. An analysis and examples of today's press tendencies follows, demonstrating that the press is influenced by political power, and other media, in addition to original reporting.

The second section offers an analysis of why the press covers environmental issues less than other types of issues. It shows, first, the difficulty of obtaining the exciting visual images crucial to today's media; second, the complexity of environmental science; and third, public indifference to problems that don't directly affect peoples' lives.

The third section proposes the Strategic Public Relations Method. It is a way to give the press more incentive to cover environmental issues by enabling them to dramatize, visualize, and personalize the issue. Science coordinators in charge of providing appropriate information to the press could be placed in existing public relations offices at UN organizations such as the United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), and World Meteorological Organization (WMO). This section is followed by a public relations strategy at the state level that would include cooperation with broadcast meteorologists and NGOs.

The paper concludes with a discussion of two potential challenges to the Strategic Public Relations Method, along with options for mitigating those challenges. I believe this method will greatly enhance the thoroughness and consistency of press coverage, thus speeding up implementation and expanding monitoring of global environmental treaty making. The following two sections analyze first, the impacts of press coverage of events, and then, more generally, the function of the press in today's communication systems.

### **Press Coverage of Events**

Press coverage can affect international negotiations in three ways: by creating public awareness prior to and during the process; encouraging faster treaty implementation following the negotiations; and providing more extensive coverage of "green" candidates and industry initiatives.

#### *Creating Public Awareness*

Before and during international treaty negotiation conferences, the press has tremendous power to help the public realize potential environmental risks by showing and explaining existing problems addressed by a treaty. Not only can reporters provide information about the treaty negotiation itself, but they can also inform and educate the public concerning the importance of environmental protection in general. Moreover, politicians would be more willing to dedicate themselves to international environmental negotiations if their participation drew significant attention from their voters.

#### *Encouraging Treaty Implementation*

A crucial phase in international negotiations that is as important as the negotiation process itself occurs after the agreement has been reached. No international agreement can be effective if the implementation is not done properly in a timely manner. Press attention will make people aware of the existing international agreement which is meant to improve the environment and thus encourage the commitment of the state to implement treaty requirements. While the press might not have much influence on a conference agenda, it can certainly help to accelerate policy making and implementation processes at the national level (Clark 2004).

The press could also play an important role in disseminating information concerning the importance of each individual's cooperation. Changing environmental behavior relies heavily on people's awareness of environmental risks. Global environmental problems such as global warming and ozone depletion often require changes in people's lifestyles: for example, reductions in the use of gasoline or electricity generated by burning fossil fuels.

Monitoring the implementation of treaties occurs usually in the form of regular reports of a state's progress to the treaty secretariat. Although the press has a lesser role at this stage, it could still encourage the state to report its implementation status correctly to the secretariat through constant follow-up reports in newspapers and on television.

#### *Coverage of "Green" Candidates and Industries*

By drawing public attention to environmental protection, the press can influence people to favor candidates who put the environment high on their agenda. For example, in Germany where the public is more concerned about the environment, the Green Party has significant political power (Schreurs *et al.* 2000) whereas in the United States, environmental concerns

are far less represented in the political spectrum. This is partly due to the different electoral system, but the different level of people's concern about the environment also plays a significant role.

The press can also encourage industries to become more environmentally friendly by informing the public of its corporate environmental performance and reporting on new green products. Schreurs (2001) reports, "Japanese industry became more sensitive to global environmental protection issues if for no other reason than that being green increasingly was perceived as making good business sense." A survey in August 1991 showed that 80 percent of large manufacturing and construction companies in Japan were investing in research and development for global environmental technologies or in global environmental protection (*Nikkan Kogyo Shimbun*, August 27, 1991).

Some industries have found environmental protection to be a good business opportunity. Schreurs (2001) observes, "Politicians and industrial actors began to accept the environmentalists' argument that with financial assistance and technological know-how Japan could simultaneously aid developing countries such as China in dealing with their air pollution problems and give a boost to the pollution-control industry at home." Canadian industries were able to avert damage to their business interests when their ozone-depleting substances were banned in 1979 by the government, because they had already produced the new alternative substances in careful consultation with the government beforehand (Parson *et al.* 2001). By 2004, green products ranging from hybrid cars to garbage compost were widely advertised to affluent consumers of television and print media in Japan. Entertainment shows on television often introduce new green products because they are considered trendy. The more the press pays attention to green products, the more industries are willing to produce them to enhance both profits and their corporate images.

### **Analysis of the Press**

Before identifying why coverage of environmental issues is inadequate, the general tendency of the press needs to be examined. Of course, the press differs significantly across countries depending upon the degree of state control of the press. In countries like Hungary before 1990, where the press was under state control, there was very limited press coverage of global environmental risks (Schreurs *et al.* 2001). This paper analyzes the situation in democratic countries where the press is independent and plays an essential role in disseminating information.

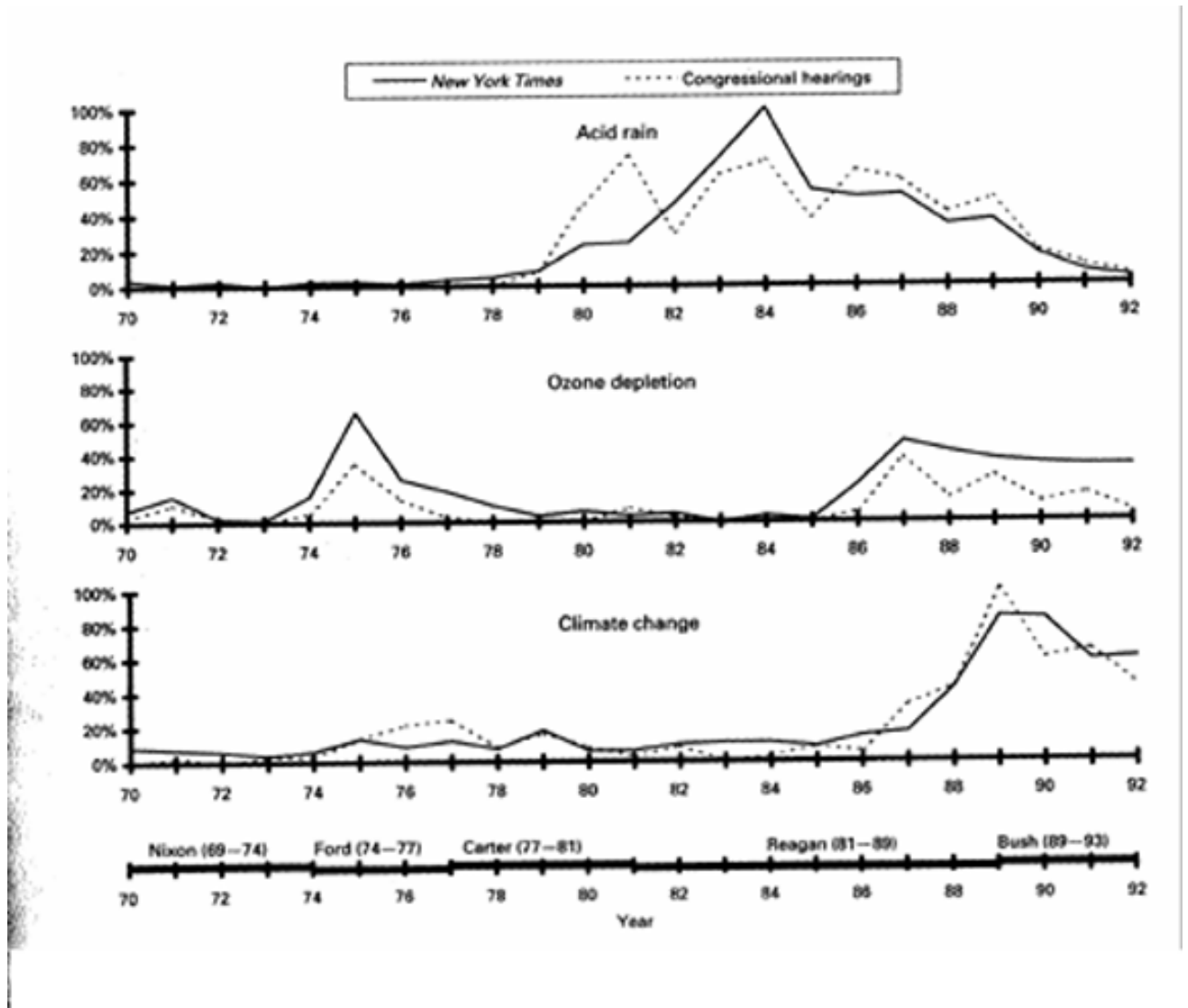
Press, for the purpose of this paper, includes both television and leading newspaper and magazine journalism. As the broader range of the public tends to get its information from television rather than print media, the Strategic Public Relation Method proposed below in focuses mainly on television journalism. However, because television journalism often relies on newspapers and news agencies as their source, it is important to examine both television and print media.

### *Political Influence*

In the United States, the extent of press coverage usually correlates with the priority of issues on the national political agenda. Figure 1 summarizes the rise and fall of public attention to global environmental issues, measured in terms of their coverage by *The New York Times*, a nationally read newspaper of record, and congressional hearings in a public venue where

members of Congress showed their interest in and position on issues they judged to be politically salient. Clark and Dickson (2001) compared the proportion of articles on acid rain, stratospheric ozone, and climate change in *The New York Times* and to the number of congressional hearing days during the years 1970-1992. As political interest, demonstrated by days of congressional hearings, rose and fell, press coverage, as represented by the number of articles in *The New York Times* rose and fell almost in parallel.

**Figure 1. Congressional hearings and *New York Times* attention to global atmospheric issues in the United States, 1970-1992**



Source: Clark and Dickson (2001)

During the 2004 presidential campaign, both politicians and the press paid little attention to environmental issues. The international community has criticized the United States for its lack of commitment to carbon dioxide reduction; lack of public interest in this issue was clearly shown in the 2004 presidential campaign and neither candidate made many statements about the environment. Senator John Kerry mentioned protecting the environment in the second debate on domestic policies, but his statement was vague with no commitments on some of the most important issues such as signing an international agreement to slow global warming.

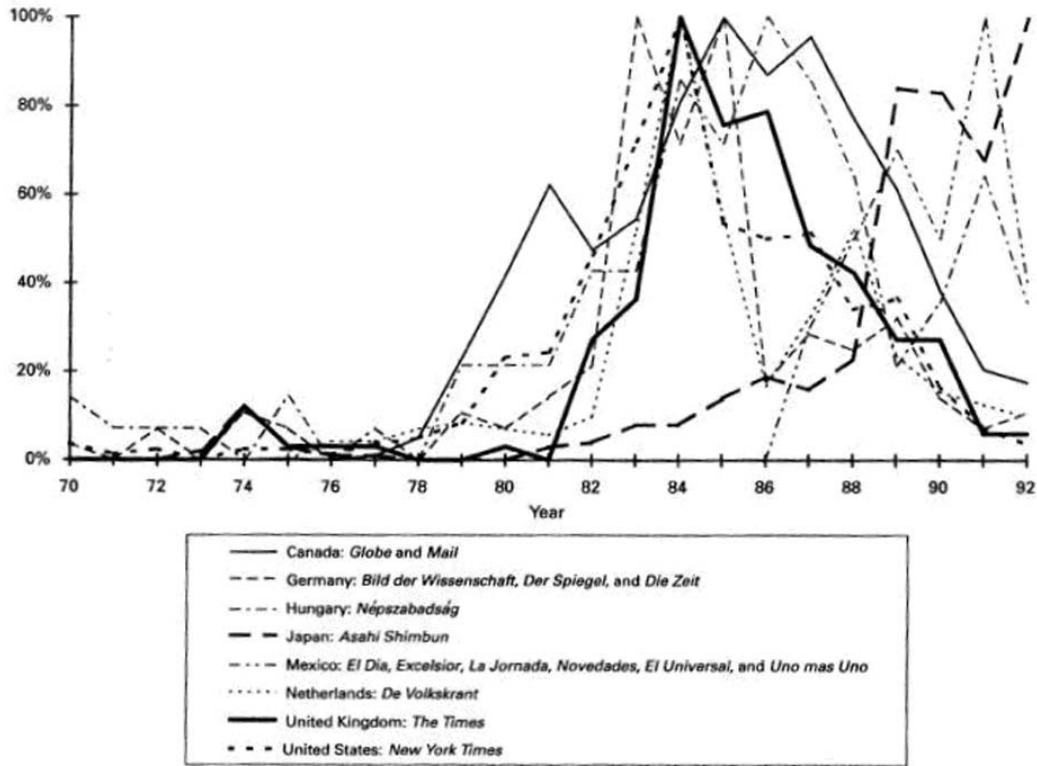
Kent Portney, a professor of political science at Tufts University, said in *The Boston Globe* on 19 October 2004, that presidential candidate John Kerry might be reticent to be specific about certain environmental subjects “because there may not be public support for those issues.” He added that it didn’t behoove Kerry to be specific on environmental matters, since “he’s going to get environmental votes anyway.” The fact that neither presidential candidate mentioned the environment in their first debate on international policies shows that they didn’t see it as a serious international problem that appeals to American voters. Their leadership was mirrored by the American media; there was very limited press coverage of environmental issues in the 2004 presidential campaign.

#### *Influence of the Other Media*

The media has a tendency to echo its peers, particularly the more important news organizations. It is influenced not only by other domestic media, but also by leading international media. Schreurs (2001) says that “In many countries the media appear to have followed the lead of the media in other countries in increasing attention to an environmental risk.” In the author’s personal 15 years of experience as a reporter for several TV networks in Japan, newsrooms are filled with various daily newspapers, journals, magazines, and televisions tuned to other stations. Reporters are sent to cover stories that appear in these media. In addition, international news sources such as the Associated Press (AP), Reuters, and Kyodo News provide daily flows of newsworthy information. News producers are always worried about falling behind their competitors, which leads to a convergence of attention on the same topics by all news media.

Figure 2, 3 and 4 show coverage of global environmental issues in quality newspapers of eight countries. As the data in Figure 2 shows, the rise in concern about acid rain in North America was soon followed by sharp increases in public attention to acid rain in Europe. Concern spread rapidly within Germany. There was also a sudden rise in public attention to acid rain elsewhere in Europe, as indicated by the figures from the Netherlands and the United Kingdom. The spread of attention extended to the east, as shown by the data on Hungary and the former Soviet Union. Japan was very slow to pay attention to acid rain, which was at first considered to be a regional problem that had less impact on Japan. So, it is visible from the graphs that the amount of attention in one medium parallels stories from other prominent media both domestically and internationally (Schreurs *et al.* 2001).

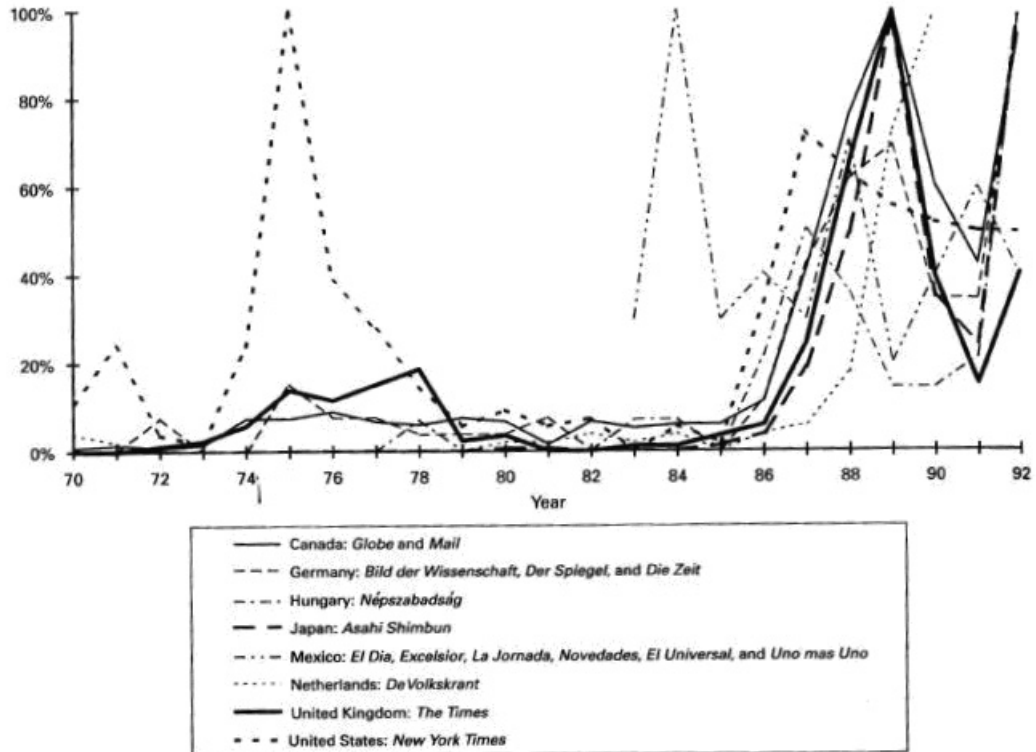
Figure 2. Country comparison of newspaper attention to acid rain



Source: Schreurs *et al.* 2001

Figure 3 shows the case of ozone depletion. The first noticeable public attention to stratospheric ozone depletion shows up in the early 1970s in the context of debates in the United States, United Kingdom, and France regarding the potential risks of supersonic transport aircraft. However, this initial attention was minimal compared to later attention paid to the threat of ozone depletion. When a hole in the ozone layer above Antarctica was discovered in 1985 the issue came to high-level attention in most of the countries. Again, North America led the way and unlike in the mid-1970s, the ozone-depletion issue quickly emerged after 1985 onto public and political agendas worldwide (Schreurs *et al.* 2001).

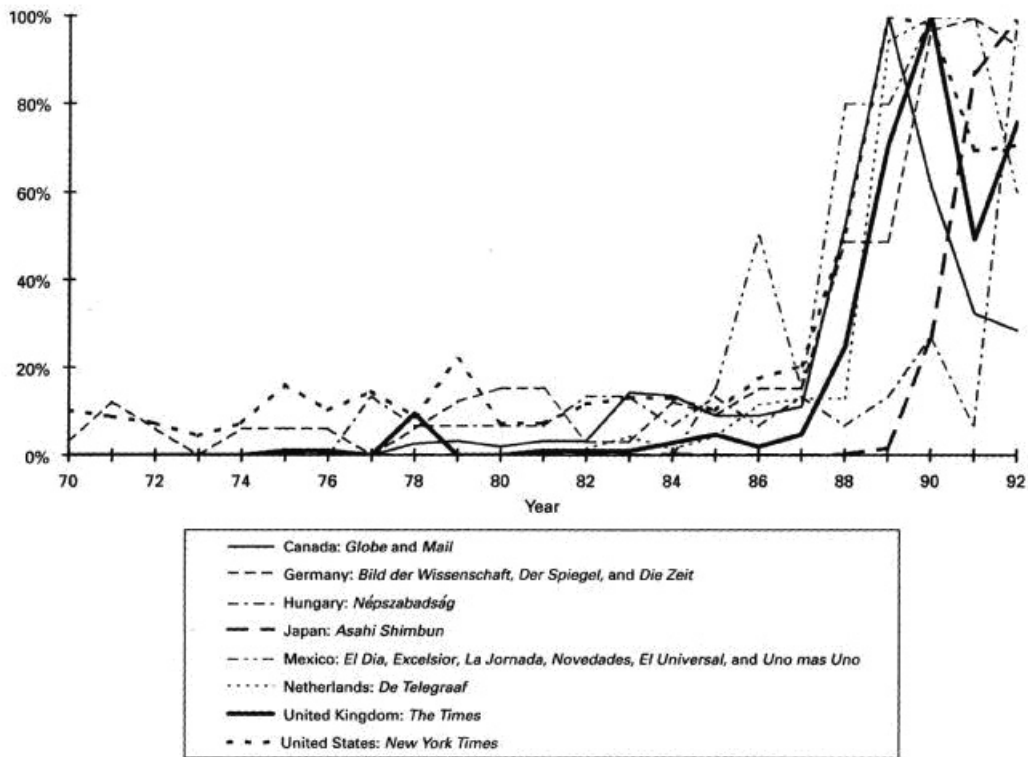
Figure 3. Country comparison of newspaper attention to ozone depletion



Source: Schreurs *et al.* (2001)

Figure 4 compares media coverage on climate change in eight countries. Of the three issues—acid rain, ozone depletion and climate change—the latter shows the highest degree of simultaneity across countries in the timing of when this issue became known to the general public. In this case, the linkage of climate change with ozone depletion played an important role in getting it onto the agenda of the public and policy makers. Because of the high global warming potential of CFCs, the rise of stratospheric ozone depletion to the political agenda forced a certain amount of political attention in some countries to the issue of global climate change. Political leadership played an important role. In the late 1980s, high-ranking politicians in many of the politically powerful countries started to speak about the need to take action regarding the global warming threat. By 1989 and 1990 a relatively high level of attention was being paid to the issue of global climate change in the media of almost all of the countries examined (Schreurs *et al.* 2001). These data show the media’s tendencies both to respond highly to political agendas and to echo other media.

Figure 4. Country comparison of newspaper attention to climate change



Source: Schreurs *et al.* 2001

*Spontaneity*

The press tends to scramble for the latest hot topic, always paying attention to what other media are covering. However, its attention rapidly decreases as the topic becomes familiar. This tendency of the press impedes the long-term coverage of environmental issues needed for effective processes of environmental protection.

The data suggest that the attention of the media drops off quickly when news staff has the impression that there is no fresh element to captivate the audience anymore. In the case of acid rain as shown in Figure 2, by 1983 and 1984, in most of the countries examined, attention had peaked and soon began to decline. For stratospheric ozone depletion as shown in Figure 3, media coverage grew in the period of 1985 to 1986 and then began to drop off within a year of the signing of the Montreal Protocol in 1987. Attention dropped sharply in 1990 and rose again in response to heightened concern for climate change and prior to the Rio Conference in 1992. In the case of climate change, attention dropped sharply in most countries toward the mid-1990s before rising again in the period preceding the Kyoto Conference of 1997.

**Reasons for Inadequate Environmental Coverage**

There are three fundamental reasons why there has been little coverage of environmental negotiation conferences and why global environmental issues have not been a popular topic among the press. The first one is lack of exciting visual images, the second is the ambiguity of the scientific context,<sup>1</sup> and the last is one of few linkages to individuals.

### *Need for Exciting Visualization*

Both print and particularly television journalism need exciting visual images because the attention of the public is attracted by images rather than words. According to Doris A. Graber (2001), a majority (56 percent) of Americans get most of their information from television journalism. This picture is similar in most countries. Press coverage of an international environmental negotiation conference usually consumes only one minute of straight news, giving no more than its theme, place, and date. Print and on-line newspapers cover only the date, place, and a brief explanation of the theme. Generally available pictures of the conference are often of scientists and delegates attending it, with mathematical data derived from computer calculations.

### *The Complexity of Environmental Science*

The science of environmental problems is often too difficult and ambiguous not only for audiences and readers, but also for the journalists who cover the stories. Environmental press coverage requires basic understanding of science. In some cases, reporters need to disentangle legal, economic, and highly political terms as well as an incomprehensible scientific terminology. Then they need to convert the information into everyday language. For these reasons, the processes of crafting environmental reports can take much longer than other types of reporting.

It is difficult for the press to find scientists who can explain environmental issues in everyday words. According to Kelly Gallagher, who worked for CNN News during the Kyoto conference of 1997, there were few scientists who were willing to explain environmental problems in clear, simple, yet accurate everyday terms which can be understood by the general public (Gallagher 2004). Moreover, since the causes of the environmental problems are often uncertain, scientists are reluctant to provide definitive explanations.

A good scientific explanation is clear, simple, and often figurative. It should avoid technical terminology and use everyday language that the general public understands easily. Data, including too many mathematical expressions, should be limited. Scientific concepts such as how carbon dioxide warms the atmosphere should be explained graphically.

### *Lack of Personalization*

Global environmental problems are often considered to be “not in my backyard (NIMBY)” problems, meaning that while people may agree that there is a need for a specific measure, they are unwilling to be the ones to make the necessary sacrifices. Problems at the other end of the scale, such as global warming, are difficult for a person to relate to his or her own life. For example, a Southern Pacific island may be the first location to be threatened by rising sea levels, but the fate of these islands raise no significant interest in other parts of the world. People are not willing to give up their comfortable modern lives for someone living far away from them. Unless the risk directly threatens an individual or the environment a citizen lives in, he or she is generally indifferent.

### **Strategy to Increase Coverage of Environmental Issues**

News outlets, especially television, in democratic countries are usually licensed companies and therefore have social responsibility enforced by some regulation by the government or

self-discipline. However, the media are basically free to pursue sensationalism to attract their audiences or readers. The strategy to maximize the press coverage on environmental issues is to make the issues look “sexy” (This is a term that journalists often use for hot topics) enough for the press to cover it. The Strategic Public Relation Method consists of two elements. The first is to make issues look sensational, and the other is to provide practical support to journalists by making the science comprehensible.

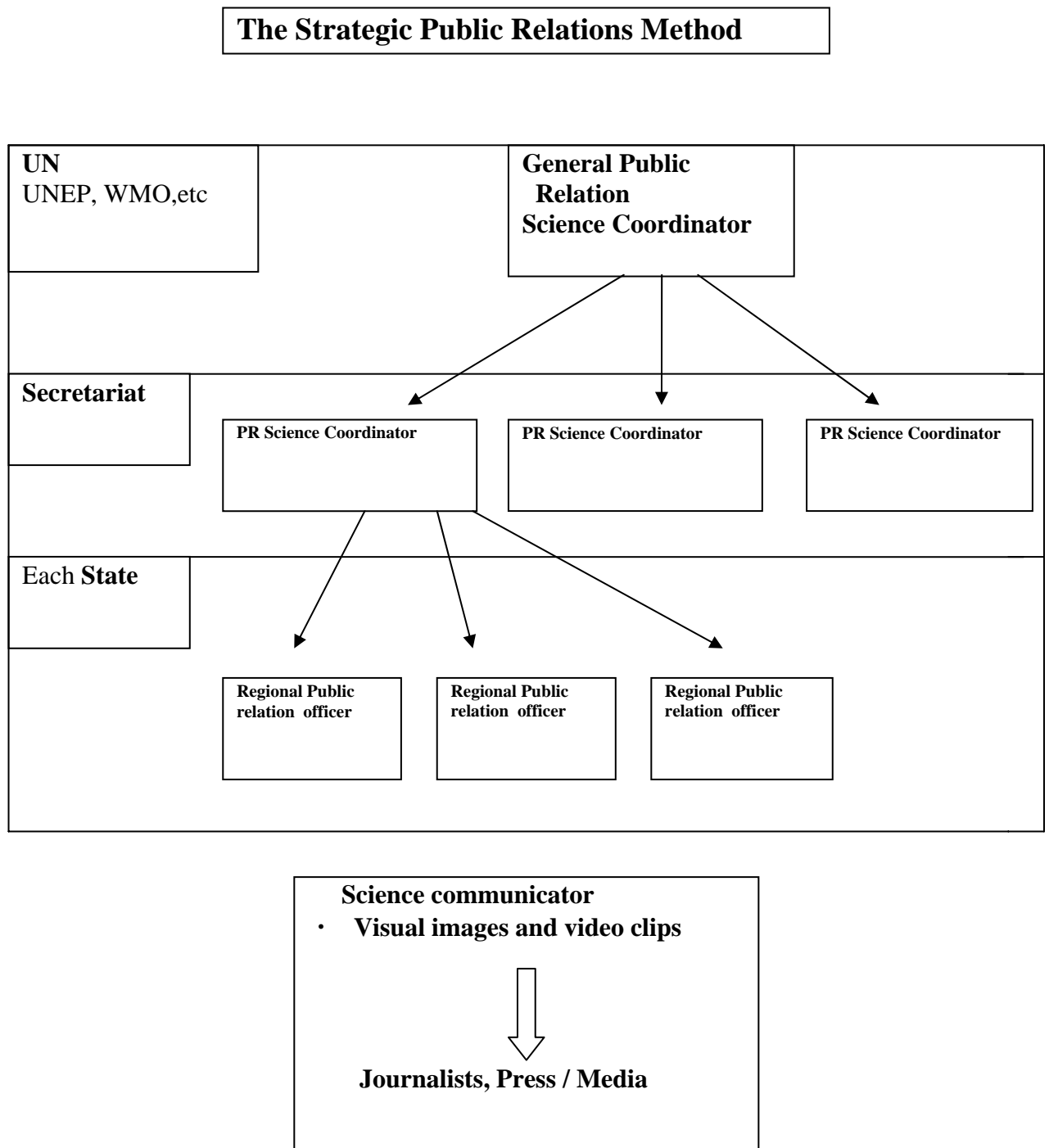
#### *Structure of the Strategic Public Relations Method*

The Strategic Public Relations Method proposes to have a *General Public Relations Science Coordinator (General PR Science Coordinator)* within each environment-related UN organization to coordinate all relevant resources related to an environmental issue in a single big picture and provide them to all relevant public relations offices. The Public Relations Offices at UN organizations are well suited to fulfill their currently stated objectives. However, although the environmental issues they deal with overlap to a large extent, the resources that each Public Relations Office has are not usually shared with other organizations and secretariats. Taking desertification as an example, the World Meteorological Organization (WMO) is in charge of researching droughts and the United Nations World Food Programme (WFP) is providing the urgent aid to the desertification area, whereas the Food and Agricultural Organization of United Nations (FAO) helps agriculture in those affected areas. Each organization has its resources such as historical data, images, and video clips from affected areas for journalists.

The General PR Science Coordinator would be in charge of educating *Public Relations Science Coordinators (PR Science Coordinators)*. Once a treaty negotiation is concluded and a secretariat formed, one of these PR Science Coordinators will be sent to organize the public relations for this particular environmental treaty. After the treaty agreement, a *Regional Public Relations Officer* will coordinate with each country involved to supervise and lead the domestic public relations. (See Figure 5.)

The Public Relations Science Coordinator is a person who can link science with journalism and policies. His or her primary role is to dramatize, visualize, and personalize environmental issues sufficiently to stimulate media coverage. The best qualification for a Science Coordinator is a background in environmental or scientific journalism. He or she should have strong contacts in international journalism, a scientific background; be able to speak several languages; and command knowledge relating to policy and economy issues.

Figure 5. Strategic Public Relation Method



### *Three Basic Rules for Catching the Attention of the Press*

First, the PR Science Coordinator needs to *dramatize* the environmental issue so that journalists are convinced that they could attract their audience or readers. One method is to symbolize the issue. In Germany, a leading magazine, *Der Spiegel*, linked acid rain to the ecological crisis of the dieback of forests (Waldsterben) with a dramatic photo. Media reports like this led to a surge of attention to acid rain and concern spread rapidly within Germany. In Japan in the late 1980s, the extinction of dinosaurs was used as a symbol of global warming and its sensational image drew significant attention from the public. These are good examples of how dramatization can demonstrate the impacts to the public and lead their concern into environmental protection.

Second, *visualizing* an event is a crucial aspect of media coverage. As a television journalist for major TV Networks based in Japan, such as NHK (Japanese public television), TBS (Tokyo Broadcasting System) and CNN Japan, the author was constantly looking for visual images, especially sensational ones. The chief producer at CNN Japan, Makoto Ishihara, stated when we were producing the programs of “the Review of the Year”, which featured the major events that happened that year, “If there were no video clips, forget it. It’s as if it never happened” (Ishihara 1997). All television journalists share this attitude. Print journalists also seek impressive visual images; they pay significant amounts of money to buy photos from news agencies such as Reuters and AP to illustrate international stories.

A General PR Science Coordinator would organize available still and video images from all UN affiliated organizations. For example, WFP and FAO have contracts with camera men who constantly take pictures of devastated areas, including environmentally endangered areas. Examples include drought areas in Africa threatened by desertification; flooded cities in the Mekong Delta where water management is poor; and people wearing dust masks in heavily polluted cities in China. From time to time WFP and FAO will send a camera crew to these areas to make video clips to use appealing to the world for contributions.

The PR Science Coordinator could collect and organize visual images and clips of environmental issues held by UN affiliated organizations. These visuals could demonstrate in a cost-effective way the extent of environmental degradation. The General PR Science Coordinator’s office should also have its own camera crew for taking visuals from around the world. Because environmental problems are spread around the world, it is difficult for a sole media outlet to get the visuals from that affected area. For example, when talking about deforestation, video clips of precious species living in the rain forest are useful. PR officers could encourage press coverage by providing supporting visual information.

The General PR Science Coordinator should also be able to provide all available satellite imagery. Technology is improving day by day, and their resolution is excellent. They are clear, inexpensive, and easily compared with earlier pictures--a good way to show environmental degradation. Coverage of the shrinking Aral Sea is a good example of effective satellite image usage. Images from 1980, the 1990s, and finally 2004 clearly show the rapid shrinking of the Aral Sea, which is one of the biggest environmental catastrophes of the twentieth century. Other examples are the expansion of desertification, flooded areas all over the world, drought areas, sand storm tracking, and the melting ice shelves in Arctic areas. These pictures have been used by scientists for their research and their reports, but so far except for specialized press such as Discovery Channel and National Geographic, the

general press is less aware of these satellite images, especially earlier pictures. If the General PR Science Coordinator can make all relevant satellite images ready for the press at each treaty negotiation conference, it would greatly contribute to increasing press coverage.

Computer graphics could also be used to illustrate environmental topics. During a negotiation conference, the Science Coordinator would hold workshops and seminars for journalists to help them understand the environmental science well with minimum time and effort. Appropriate graphics can help journalists understand the complicated nature of environmental science and demonstrate potential impacts if nothing is done to deal with a given issue.

Graphics to enhance understanding will help the journalists reduce the time required to craft a report on an environmental negotiation conference and enable them to cover it deeply. These computer graphics don't need to be fancy; very simple, basic graphics are adequate. Each media company will produce its graphics in its own style for publication or broadcast. Those produced by the Science Coordinator should be designed to encourage reporters to delve into the subject further.

Graphics that emphasize negative future prospects will enable reporters to write captivating stories. For example, the Science Coordinator could produce an image of two women--one who used sun protection, and one who didn't--and compare what they would look like in their sixties. The former would have smooth and younger-looking skin, whereas the latter would have freckles and deep wrinkles. Seeing is believing. If you can impress journalists, they will be eager to carry bigger, more absorbing stories.

Stratospheric ozone depletion is a good example that succeeded in getting enough attention from the press. The dramatic discovery of the ozone hole in 1985 drew high-level attention that led fairly quickly to the Montreal Protocol. The ozone hole, which could be clearly delineated graphically with dramatic colors above Antarctica, was sensational and distinctive enough to draw the attention of the public. Individuals could also be easily engaged by the threat of skin cancer and the risk of accelerated aging. Furthermore, the linkage of spray cans to ozone depletion was simple enough to be understood by the public and it was not onerous to switch to alternative technologies.

Third, it is important to *personalize* an issue. The general public is interested in things that relate to them. People won't pay attention to an unpleasant issue unless they see some connection to themselves. Personalization is achieved when the issues are illustrated in individual, economic, or political terms.

Individual terms are those linking a global issue to a person's own circumstances. Drawing on the earlier example of the rising sea level, Bostonians may not be interested in hearing that a Southern Pacific Island is going under water, but if a Bostonian hears that Logan Airport would go under water, he or she would be alarmed (Moomaw 2004). As for the deforestation of rain forests in the Amazon or Southeast Asia, if the press frames their story in terms of the potential loss of new medicines that might be discovered in these forests, people might be interested (Susskind 2004). It is essential to link environmental issues to people's everyday lives.

Also, issues put in economic terms have more influence on policy makers. According to the estimates released by UNEP in 2001, losses due to severe weather conditions, diminished agricultural yields, submerged lands, and other consequences of climate change could climb to \$300 billion a year in the future. It is a great threat to all industries, including insurance companies. Climate-change-related droughts, fires, and floods are expected to cause losses of \$40 billion in the agricultural and forestry industry.

Public attention is drawn by putting things in personal terms such as pension funds. For example, journalists could alarm the public by saying global warming could threaten their pension funds. California treasurer Philip Angelique said, “In global warming, we are facing an enormous risk to the U.S. economy and to retirement funds that Wall Street has so far chosen to ignore”(Angelides 2003). The need for international cooperation especially between industrialized countries and developing countries could also be told in economic terms that are more appealing to the public and to policy makers. Dr. Morris Miller, the former executive director of World Bank said “Every dollar you invest in clean energy in poor countries creates one more job, more wealth than the same dollar invested in any other sectors in the economy” (Morris 1999).

Telling stories in political terms has significant influence on policy makers and the public. For instance, Gelbspan suggests that if the United States continues to create large quantities of carbon dioxide emissions, while the EU and the rest of the world are reducing their emissions, global society might place retaliatory heavy taxes on US exports. He adds: “If you were to extend clean energy to poor countries, it would empower nations and turn them into equal trading partners, thus undermining the economic desperation that could cause terrorism” (Gelbspan 2004).

If journalists can personalize and portray the issue in terms of poverty, equity, economic growth, environmental destruction, terrorism, and security rather than just address environmental risk, political and economic leaders would be much more interested (Gelbspan 2004). It is important for the PR Science Coordinator at the head office of the UN and at each Secretariat level to illustrate the issue in those three terms so that journalists get interested in exploring more about those views and write sexier stories that appeal to the public.

#### *Structuring Science Communication for the Media*

Environmental science is difficult to understand and often ambiguous not only for the public but also for journalists. Scientists who can explain science in a simple, clear and understandable way to the media are invaluable assets. Each Treaty Secretariat has a body of scientists who do research on the topic. According to Susskind (1994), five types of scientists are needed for effective environmental treaty making: trend spotters, theory builders, theory testers, applied policy makers, and science communicators. As Susskind points out, science communicators have a critical role:

Communicators take responsibility for making the work of the first three types of scientists understandable to a larger audience. They may themselves engage in one of the first three types of work, but they specialize in writing or preparing material for the popular press or television. Their particular skill rests on an ability to translate scientific methods and findings into terms that the public at large can understand. Some

journalists with technical backgrounds perform this role well, but the most effective scientific communicators tend to be highly trained individuals who have developed the knack of simplifying the complex mysteries of science, and who do not believe that their technical status is diminished by doing this kind of work (Susskind 1994).

In this view, science communicators should be scientists with good communication skills rather than journalists, particularly for television. The PR Science Coordinator of each treaty can link the science communicators to the press. Since timing is critical to press coverage, PR Science Coordinators should have a list of science communicators ready for the press by the time the negotiation conference starts. They could organize a daily press conference during the meeting, using all the tools described above.

In the past, there has been less systematic press relations management at negotiation conferences, and journalists often had to find scientists who have the skills of communicating to the public on their own. Having press workshops and science communicators ready will greatly reduce the burden on the press, and thus encourage them to cover the conference topic in depth. A PR Science Coordinator might also develop a broader list of communicators by holding communication workshops for scientists who are interested in this role. In addition to science communicators, environmental economists who can communicate might also be needed in areas such as tradable permit systems for carbon dioxide emission.

When writing a report, journalists need to have a historical overview of the environmental science and negotiation for a topic. A PR Science Communicator should provide, perhaps in brochure form, the history of an issue, including visual images from the past so that the press can easily include the historical overview of the issue in their report. This would also make the press more willing to pursue the story in depth.

#### *The Function of the Science Coordinators*

The institutional organization supporting the science coordinators should be carefully maintained. The General PR Science Coordinator would be in charge of all the PR Science Coordinators. His or her office should become a permanent position within each UN organization that deals with environmental data from around the world, such as the United Nations Environment Programme (UNEP), United Nations Development Programme (UNDP), World Meteorological Organization (WMO), Food and Agriculture Organization of United Nations (FAO) and United Nations World Food Programme (WFP). This General Public Relation Science Coordinator will organize a team of expert PR Science Coordinators and send one to each Secretariat to supervise press relations.

The office of the General PR Science Coordinator would be responsible for collecting all visual images and video clips available from other UN organizations and will have its own camera crew constantly collecting possible visuals from around the world. A data-based visual library system should be ready for each treaty process. This is very important because environmental issues are broadly spread around the world and require long-range observation, which makes it impossible for a sole media outlet to access all relevant visuals when an issue is raised. The PR Science Communicator assigned to a treaty secretariat will reorganize all those materials according to each treaty's provisions and get them ready for the press during the negotiation conference.

After the conference, the PR Science Coordinator will encourage each state to establish its own Regional Public Relation Officer in the agency that works closely with him or her. He or she can either recommend someone who is on their list, or build a close relationship with the person whom each state has nominated.

The role of the Regional Public Relations Officer is to serve as press officer at the executive committee of each treaty within each state's governmental organization. The officers should be science journalists who have broad contacts with the domestic press, politicians, and NGOs. They should be open-minded and not an advocate for any group so that they will be regarded as neutral and impartial representatives.

These officers will help the state explain environmental risk through the mass media. First, they convey to the press all the materials, including visuals and dramatized, personalized stories that were provided by the PR Science Coordinator during the negotiation conference. They will also help the domestic press access the visuals library at the General PR Science Coordinator's office. Also, they will have a list of domestic science communicators and economists ready for the press and hold workshops and seminars to teach the press about the environmental science of each issue.

Second, they need to check the state's regulation of the media. Since the media are considered to have social responsibility in many countries, they are often expected to produce contents contributing to public welfare. For example, Japanese public television has an educational channel as well as the general channel. Also, major television networks in Japan are obliged to produce educational programs as a certain percentage of all programming. Regional public officers could use this to enhance press coverage of environmental issues on a regular basis.

Regional officers need to focus particularly on extending press coverage of environmental issues. The press has a tendency to jump promptly onto a hot topic and to drop it quickly when the next one comes along. Regional Public Relations Officers could play the role of fueling press interest in each fresh angle related to the environmental issue so that coverage continues. Fresh perspectives can be garnered from the PR Science Communicator at the Secretariat, from the successes of Public Relation Officers in other countries, and from their own resources.

There are several different ways to highlight a topic. For example, one story could emphasize that ozone depletion threatens to increase skin cancer. A following story could highlight the increased danger for children of the effect of harmful ultraviolet rays accumulated over time, providing scientific data on the melanocyte which is created inside the body by exposure to the sun and which will not diminish even after a suntan fades (Kawai 2002). Children's health care is always a favorite topic for the press, The key point is to manage press relation systematically so that they won't run out of stimulus.

Regional Public Relation Officers also need to manage the tension between scientific correctness and sensationalism. Officers trying to make an issue attractive and understandable enough for the press might be criticized for oversimplification, exaggeration, and distortion of the issue. This is a long-standing controversial problem between scientists

and journalists. Officers should carefully craft fresh topics related to an issue with the help of credible scientists and be prepared for any counterargument. Placing this Regional Public Relation Officer within the governmental organization closely related the UN would enhance their authority with both scientists and journalists.

#### *Use of Television Weather Broadcasts*

One powerful and feasible way to enhance coverage of environmental issue is to use television weather forecasters. Meteorology and environmental science overlap widely. Broadcast meteorologists generally have a good understanding of environmental science, especially weather-related issues such as global warming, desertification, and ozone depletion. Moreover, they have communication skills which are an asset for conveying the science to the general public. Dr. Keith L. Seitter, who is Executive Director of the American Meteorological Society (AMS), stated “Meteorology is in a good position in terms of having our representatives daily on evening news. Our slogan is that the “Broadcast Meteorologist is the Station Scientist”(Seitter 2004). The AMS is trying to promote broadcast meteorologists (weather presenters) as science reporters who cover environmental issues at the station.

In order to increase the credibility of presenters, the AMS launched a new certification system for broadcast meteorologists in January 2005. Their “Seal of Approval for Radio and Television” has required weather presenters to have scientific competence and effective communication skills since 1960. However, the upgraded new “Certified Broadcast Meteorologist” qualification will require them to have a meteorological degree, pass a written test, and also to have effective communication skills. As one of the new requirements for acquiring a “Seal of Approval for Radio and Television”, the candidates should; “Attend a scientific or technical seminar or lecture that is not part of a conference. Presentation must be at least 50 minutes long. Examples include environmental or ecological issues, astronomy, marine science, zoology, aviation, etc., which solidify the meteorologist’s position as the ‘station scientist’.”(AMS 2004). By increasing the scientific credibility of the broadcast meteorologist, the AMS could convince the station that he or she would be competent to cover environmental science stories (Seitter 2004).

In Europe and Japan as well as in the United States, the broadcast meteorologists’ society is trying to increase the credibility of weather presenters. International broadcast meteorological organizations such as the International Weather Forum (IWF 2004), International Association of Broadcast Meteorology (IABM 2004), the Broadcast Board of European Meteorological Society (Cegnar 2004), and the Japanese Weather Forecaster’s Network (Iwaya 2003) are also eager to increase the credibility of weather presenters as scientists who can also cover environmental topics.

Signs of global warming--one of the gravest environmental threats of our times--will probably show up first as increased extreme weather. (Some of them have already occurred.) Giving broadcast meteorologists incentive to include the environmental view in their weather broadcast should both increase press coverage and ensure continuing coverage on environmental issues. In 1997, the Clinton administration invited weather presenters across the country to learn about global warming so that they would be willing to cover the story on their shows. The administration considered weather presenters to be valuable allies in the effort to raise public awareness of global warming. The Regional Public Officer should be in

close touch with his or her regional broadcast meteorological society and systematically encourage broadcasters to cover environmental issues by every means possible.

#### *Cooperation with International NGOs*

International NGOs have traditionally played the role of disseminating ecological sensibility. Greenpeace is one of the international NGOs that try to influence public policy by informing people. As Wapner states,

Through presenting alternative images of the environment, bearing witness, criticizing predominant modes of conduct, and exposing ecological atrocities, Greenpeace tries to express itself through communication technologies to joggle the minds of the world. It literally speaks through the air waves spanning the globe. Satellite dishes, fax machines, video cameras, and electronic mail service are the tools of Greenpeace's political action. And these are, essentially, entry ways into the world media network. Global communication systems are the sites for disseminating an ecological sensibility. (Wapner 1996)

NGOs such as Greenpeace play the role of encouraging the press to cover environmental issues through lobbying and providing the visual images. Greenpeace has its own camera crews and constantly sends them to endangered environments. The Regional Public Officers can closely work with them, carefully managing their messages to avoid polarization of issues. The officers could help to increase the credibility of NGO's messages by checking claims of advocacy groups with scientists, politicians, and the business world. For the Regional Public Officer who seeks every possible means to increase press coverage, cooperation with respectable NGOs is crucial.

#### **Challenges to the Strategic Public Relations Method**

Although this Strategic Public Relation Method will greatly contribute to increasing press coverage and thus improve public awareness and understanding of global environmental issues, there are two critical challenges to be addressed: the difficulty of monitoring compliance and pressure from industry.

#### *Monitoring Compliance*

General Public Relation Officers at the UN organization and Public Relation Officers at each secretariat can effectively encourage the press to cover the relevant stories during the negotiation conferences. The weak points in the system will lie at the level of the Regional Public Officer in each country. Because they sit on the executive committee within each state's governmental organization, these officers can give the press timely and credible information with authoritative power. However, the fact that they are placed within the governmental organization discourages them from giving the press negative information particularly about how quickly their own government is implementing a treaty.

When a state is willing to commit itself to compliance with treaty requirements, there will be few problems. However, if the state is reluctant or inactive, the Regional Public Relation Officer may be under pressure to restrict this information. Through improved public awareness, the Systematic Public Relations Method will still be a powerful motivating influence on noncompliant states to speed up implementation. Also, the follow-up stories of the press facilitated by this Systematic Public Relations Method would exercise some

influence on a state's compliance efforts. In his 2004 book *Boiling Point*, Gelbspan wrote "If a political leader raises an issue, the press follows it. Conversely, if the press raises a significant issue, it is almost impossible for politicians to ignore it." Therefore, establishing a Systematic Public Relations Method of increasing press coverage can still be a feasible method for encouraging the state's implementation of an agreement.

#### *Pressure from Industries*

One more challenge the Systematic Public Relations Method cannot ignore is pressure from the major industries. For example, the coal and oil industry in the United States has opposed the regulation of carbon dioxide emissions and developed a large campaign promoting some scientists willing to contest the validity of climate change. Although that campaign targeted the public and policy makers, it also had a profound effect on journalists. As a result, for many years the American press "accorded the same weight to the skeptics as it did to mainstream scientists. This was done in the name of journalistic balance" (Gelbspan 2004).

The press in the United States persisted in giving equal balance to views affirming and denying climate change. This stance downplayed the urgency of the issue and reduced US press coverage; accordingly, it has failed to raise public interest. Given the absence of broad public concern, the US government's refusal to ratify the Kyoto Protocol did not generate decisive debate in the United States.

Against such tremendous pressure, the Strategic Public Relations Method might work less well, but still it could exercise two functions. One would be to make it easier for journalists to understand complex environmental science, and the other is to place peer pressure on the domestic press. The Strategic Public Relation Method is designed to generate press coverage in countries all over the world; journalists in one country may feel peer pressure from journalists in another country to cover a given issue.

As mentioned above, journalists without scientific backgrounds often find it difficult to digest complex environmental science. Interviews with scientists who use technical language tend to sound too uncertain and ambiguous. Combined with the constant pressure of deadlines, reporters' coverage tends to be limited and weak. These barriers can be greatly reduced by the Strategic Public Relations Method. The Regional Public Officers can provide journalists with clear explanations, materials, and access to science communicators.

The press has a tendency to be influenced by the other media internationally as well as domestically. When an influential press outlet in one country publishes sensational stories, media in other countries pick them up. If applied to all national stakeholders the Strategic Public Relations Method should increase press coverage in each state. Successful treaty compliance in some states will further influence other states.

#### **Conclusion**

Gelbspan writes, "The power of the press in the United States, however diluted by commercial pressures, is still formidable. When the press covers an issue thoroughly and consistently, the public responds. Policies are changed. Laws get passed" (Gelbspan 2004). The press is tremendous, not only in the United States, but also in most democratic countries. The press is "the amplifier" of messages generated elsewhere. Moreover, environmental negotiation is full of press-worthy tensions:

The climate issue is riven with conflicts at every level—and conflict is, if nothing else, the lifeblood of journalism. This is by far the most important and exciting story any reporter could ever want to work on. The conflicts are there. They are just waiting to be written (Gelbspan 2004).

Most organizations and industries in democratic countries are trying their best to use press power to promote their own interests. Expert political media advisors put advertisements on television which are themselves controversial enough to generate considerable press coverage around the country (*The Wall Street Journal* 2004). The same formula could be used for environmental negotiation. Press coverage along with the attention of the public would help the state adopt environmental treaties more quickly, and move more steadily toward environmental protection before it's too late.

*The Day after Tomorrow* was the first major Hollywood movie that presented global warming as a catastrophic enemy to all of humankind. In spite of its dubious distortions of scientific findings and projections, it has had the positive effect of being a wake-up call for the public at large. The time has come for people to regard environmental risk as an everyday threat. Systemizing the strategy of increasing press coverage on environmental negotiations is a strong means of enhancing the move toward environmental protection.

#### **Note**

1. Kelly Gallagher, member of an NGO called Ozone Action, worked for CNN during the Kyoto protocol conference in 1997. CNN was the only television station to send staff to cover the whole process of the Kyoto Protocol conference. Gallagher says there were two challenges; one was to find scientists who can explain the mechanism of global warming clearly and understandably enough for the audience on air and the other was a lack of exciting visual imagery which is crucial for both television and print media (Gallagher 2004). This explains two of the biggest reasons why there has been little press coverage on international environmental negotiations.

#### **References**

American Meteorological Society (AMS). 2005. AMS Certification Program about Certified Broadcast Meteorologist. (Accessed from <http://www.ametsoc.org/amscert/>)

Angelique, Philip. 2003. Statement in “Pensions Funds Plan to Press Global Warming as an Issue” by Barnaby J. Feder, *New York Times*, November 22.

Cegnar, Tania. 2004. Media Committee Chair, European Meteorological Society (EMS). October 2004. Paris. Interview.

Clark, William C. and Nancy M. Dickson. 2001. Civic science: America's encounter with global environmental risks. In William C. Clark (ed). *Learning to Manage Global Environmental Risks*. Cambridge, MA: MIT Press.

Clark, William C. 2004. Personal interview. Professor, Harvard University. October 2004. Cambridge, MA.

Gallagher, Kelly. 2004. Personal interview. Director of Environmental studies at Kennedy School of Government, Harvard University. October. Cambridge, MA.

Gelbspan, Ross. 2004. *Boiling Point : How Politicians, Big Oil and Coal, Journalists, and Activists are Fueling the Climate Crisis-and What We Can Do to Avert Disaster*. New York: Basic Books

Gelbspan, Ross. 2004. Personal Interview. Environmental journalist. October. Cambridge, MA.

Graber, Doris A. 2001. *Processing politics: learning from television in the Internet age*. Chicago: The University of Chicago Press.

International Association of Broadcast Meteorology (IABM). 2004. All about us at the IABM. (Accessed from <http://www.iabm.org/>)

International Weather Forum (IWF). 2004. Symposium on Weather, Climate and Information. Paris. October.

Iwaya, Tadayuki. 2004. Personal interview. Executive Director, The Japanese Weather Forecaster's Network (WFN). May. Tokyo..

Ishihara, Makoto. 1998. Personal communication. Chief Producer, CNN Japan at Japan Cable Network. December. Tokyo..

Kawai, Toshio. 2003. Personal interview. Chief researcher, Kao Research Center. May. Tokyo.

Miller, Morris. 1999. Former executive director of the World Bank, interviewed by Ross Gelbspan.

Moomaw, William. 2004. Personal interview. Professor at Fletcher School of Law and Diplomacy, Tufts University. October. Medford, MA.

*Nikkan Kogyo Shimbun*, August 27, 1991:7.

Parson, Edward A. with Rodney Dobell, Adam Fenech, Don Munton, and Heather Smith. 2001. Leading while keeping in step: Management of global atmospheric issues in Canada. In The Social Learning Group. *Learning to Manage Global Environmental Risks*. Cambridge: The MIT Press

Schreurs, Miranda A., William C. Clark, Nancy M. Dickson, and Jill Jaeger. 2001. Issue attention, framing, and actors: An analysis of patterns across arenas. In The Social Learning Group. *Learning to Manage Global Environmental Risks*. Cambridge: The MIT Press

Schreurs, Miranda A. 2001. Shifting priorities and the internationalization of environmental risk management in Japan. In The Social Learning Group. *Learning to Manage Global Environmental Risks*. Cambridge: The MIT Press.

Seitter L.Keith. 2004. Personal interview. Executive Director, American Meteorological Society. October. Boston.

Susskind, Lawrence E. 1994. *Environmental Diplomacy: Negotiating More Effective Global Agreements*. New York: Oxford University Press

Susskind, Lawrence E. 2004. Personal interview. Professor, Massachusetts Institute of Technology. November. Cambridge, MA.

Daley, Beth. 2004. "On energy and environment, a vast divide," *The Boston Globe*, October 19. p.A20.

United Nations Environment Programme (UNEP). 2005. Impact of Climate Change to Cost The World \$ US 300 Billion A Year. (Accessed from <http://www.unep.org/Documents/Default.asp?DocumentID=192&ArticleID=2758>)

Wapner, Paul.1996. *Environmental Activism and World Civic Politics*. Albany: State University of New York.