Professor Mary Ellen O’Connell

George C. Marshall
European Center for Security Studies,
Garmisch-Partenkirchen

Environment and Security Concerns for Europe

Vortrag
gehalten am 16. Januar 1996
<table>
<thead>
<tr>
<th>Inhalt</th>
<th>Seite</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction</td>
<td>5</td>
</tr>
<tr>
<td>I. Environment and Security</td>
<td>6</td>
</tr>
<tr>
<td>1. Shared Resources: Fish</td>
<td>8</td>
</tr>
<tr>
<td>4. Energy: Nuclear Generators</td>
<td>11</td>
</tr>
<tr>
<td>5. Population: Environmental Refugees</td>
<td>12</td>
</tr>
<tr>
<td>II. Permissible Responses</td>
<td>12</td>
</tr>
</tbody>
</table>
Environment and Security Concerns for Europe

Introduction

Only a few times have NATO members come close to opposing each other militarily. Of them, three involved environmental disputes. Environmental disputes include conflicts over air, water, arable soil, non-renewable resources (such as oil and gas), and renewable resources (such as fish and timber). During the so-called "Cod Wars" of the 1970's Iceland fired at British and German fishing vessels in an overfished area of the high seas. Britain sent naval vessels to escort its fishermen. In 1994, ships from Iceland and Norway shot at each other. A similar dispute, now called the "Turbot War", broke out in the spring of 1995 between Canada and Spain. These incidents demonstrate how environmental conflicts pose a new type of security issue for Europe, as well as the rest of the world.

This paper provides a general overview of the link between environment and security, looking further at the fish wars and other cases in Europe illustrating this link. It then considers how states may lawfully respond to such concerns, consistently with the United Nations Charter. Spain, for example, has filed a case in the International Court of Justice accusing Canada of violating the Charter by shooting at Spanish vessels. The analysis here suggests the Canada has a defensible position.

---

1 The views expressed in this paper are the author's own and not necessarily those of the United States government.

2 See The Fisheries Jurisdiction Case (Germany v. Iceland), 1974 I.C.J. 175.


I. Environment and Security

The preservation of a healthy environment has been discussed as an issue of national security since the 1970’s. From the end of the Cold War, the link between environment and security has received increased attention. But until very recently, authors always found it necessary to redefine security, to expand the traditional notion of security, in order to include environmental degradation.


Recent studies show, however, that environmental degradation has actually resulted in violent conflict.\(^8\) As a cause of violent conflict, environmental breakdown can be counted as a security concern, even under the most traditional definition. The rapidly deteriorating state of the environment now poses concerns not considered prior to the last ten years. Since then, we have seen erosion of air, water, and soil quality, as well as depletion of natural resources, amenities and ozone cover. Perhaps most worrisome, we now have evidence that the global climate has been altered through human activity. One result of this increasing environmental deterioration has been an increase in conflict. According to one study:

The evidence that [a team of 30 researchers] gathered points to a disturbing conclusion: scarcities of renewable resources are already contributing to violent conflicts in many parts of the developing world. These conflicts may foreshadow a surge in similar violence in coming decades, particularly in poor countries where shortages of water, forests and especially, fertile land, coupled with rapidly expanding populations, already cause great hardship.\(^9\)

While the study suggests the most serious problems are in the developing world, this paper suggests that Europe is not immune from the possibility of violence stemming from environmental breakdown.

In Europe, there are several environmental issues which have come close to resulting in violent conflict, and are most likely to lead to such conflict in the future. These environmental issues all have the following characteristics: 1) a potential target state which is perceived as the source of the problem; 2) a significant, short-term impact on a state’s economy or the lives or health of its citizens and 3) the perception that a non-military solution is very difficult to achieve – usually due to expense or domestic political considerations.


For Europe these characteristics are found today in the following environmental sectors: 1) shared resources, 2) hazardous waste disposal, 3) nuclear energy production, and 4) population, possibly in the longer term. Five cases studied below discuss problems being posed in each sector. Problems from other environmental sectors are also confronting European leaders, but they are unlikely to result in violent conflict in the foreseeable future. Climate change and ozone depletion have too many sources and develop too slowly for states to see any utility in resorting to military action.\(^\text{10}\)

1. Shared Resources: Fish

In 1972, Iceland unilaterally claimed the area within 50 miles of its coast as a fishery protection zone and excluded all foreign fishing from the area. Fish comprise 80% of Iceland's exports. Its government believed it had to take drastic action to prevent economic collapse. Britain and Germany, however, refused to recognize Iceland's claim and continued to fish the area. In response, Iceland sent naval vessels to escort the British and Germans out of the area. The fishing vessels resisted and shots were fired. The British and Germans took Iceland to the International Court of Justice ("ICJ"). Although Iceland refused to appear, the Court had jurisdiction and ruled that Iceland had no right to unilaterally extend its maritime territory. The Court further ruled that all interested parties must negotiate a solution to the problem of dwindling stocks. The Court did not rule on Germany's claim that Iceland had unlawfully used force because it found the claim too vague.\(^\text{11}\)

In February 1995, a similar incident occurred, involving Spain and Canada. The North Atlantic Fisheries Organization ("NAFO") awarded Canada the largest share of the protected catch of Greenland Halibut.

\(^{10}\) But see Müller, supra note 8 at 474-7. "Die ungleiche Verteilung der Eigentumsrechte in der Atmosphäre mit der daraus resultierenden Bedrohung durch eine Klimakatastrophe kann die vorhandenen Aggression im Nord-Süd-Verhältnis weiter anheizen, und sie gibt den Ländern ein wirksames Argument in die Hand, wenn der Norden den Zustrom von Umweltflüchtlingen bremsen will. Aus dieser Konstellation läßt sich ein beträchtliches Konfliktpotential ableiten, denn es steht auf beiden Seiten ... ein beträchtliches Maß an Einbussen oder Gewinn von Lebensstandard auf dem Spiel."

\(^{11}\) See The Fisheries Jurisdiction Case (Germany v. Iceland) 1974 I.C.J. 175.
Of 27,000 tons available for harvesting, Canada received 60%. The European Union, Norway, Japan, Russia and several other states divided the remainder.\textsuperscript{12} The European Union exercised its right to reject the NAFO decision and, as a result, Spain preceded to fish beyond the limits imposed by the organization.\textsuperscript{13}

A Canadian naval ship fired across the bow of the Spanish ship Estai to arrest it. A week or so later, Canadian vessels cut the nets of a second Spanish fishing boat and chased a third from the area. Negotiations over the incidents began almost immediately. On April 17, 1995, Canada and the European Union agreed to a new sharing arrangement. Canada reduced its share to 10,000 tons, with the European Union dividing among its members another 10,000 tons, leaving 7,000 tons for other NAFO members. Canada also agreed to repeal a domestic law that allowed its navy to arrest the Spanish ship. However, a number of control measures were implemented, including inspectors on board all vessels fishing in the North Sea. German newspapers raised the question of whether Spain will take the agreement seriously.\textsuperscript{14} Spain has the highest number of fishermen per capita in the EU. At the time of the incident, its overall unemployment rate was 20%. Its interest in conforming to the EU-Canada agreement is very low, and, thus, the chance for continued conflict is high. Moreover, new fish wars are looming. In November 1995, Norway unilaterally set a 1 million-ton herring quota on the stock it jointly fishes with Iceland. The Norwegian Fisheries Minister justified the action by saying that as long as there was not a regional supervisory agency, "Norway had to assume responsibility for the stock's management."\textsuperscript{15} Iceland responded by calling the action "incomprehensibly rude and an excessive provocation."\textsuperscript{16}

\textsuperscript{12} Montreal Gazette, Feb. 2, 1995.
\textsuperscript{13} See Peter G.G. Davies, The EC/Canadian Fisheries Dispute in the Northwest Atlantic, 44 Int'l Comp. L. Q. 927 (October 1995).
\textsuperscript{16} Id.
2. Resource Sharing: The Gabcikovo Barrage System

In 1977, Hungary and Czechoslovakia agreed to construct a barrage system in the Danube to generate hydroelectric power and to improve navigation and flood control on the river. Due to cost and construction concerns, the project was delayed several times. It was finally nearing completion in 1990 when Hungary withdrew out of environmental concerns. Czechoslovakia continued unilaterally, despite evidence that the project would pollute most of Hungary’s drinking water supply. Czechoslovakia had its own environmental concern, limiting the amount of soft coal it was using to generate electricity. Additionally, the newly-emerging state of Slovakia desired energy independence. These issues, together with the huge investment already made, convinced Slovakia to resist pressure to terminate the project. On the days before the barrage system went unilaterally into effect, Hungary considered taking measures to prevent completion. Instead, the EU intervened and persuaded the states to go to the International Court of Justice. The case is pending.\(^{17}\)

3. Waste: Russian Radioactive Waste

Russia lacks adequate disposal facilities for nuclear waste generated by nuclear reactors, decommissioning of nuclear warships and weapons disposal. Much of the waste is, therefore, being improperly stored. Some has even been stolen.\(^{18}\) In one attempt to address the problem, Russia dumped a small amount of liquid radioactive waste in the Sea of Japan. The dumping was lawful, but Japan nevertheless treated it as a violation of its rights and demanded that the dumping cease. Russia did cease dumping, but was left with the problem of disposing of the waste. Its on-land storage facilities are full. At the time of the dumping, Japan was withholding aid promised to Russia for a new treatment facility as leverage in the Kurile Island dispute. In exchange for a temporary halt to the dumping, Japan released the funds. Construction of a treatment facility is expected to be comple-

\(^{17}\) See Paul R. Williams, International Environmental Dispute Resolution: The Dispute Between Slovakia and Hungary Concerning Construction of the Gabcikovo and Nagymaros Dams, 19 Colum. J. Env. L. 1 (1994).

ted in 1997.\textsuperscript{19} It is hoped that this will largely resolve the problems for Russia and its neighbors, but conflict growing from similar waste disposal problems is not difficult to foresee.

4. Energy: Nuclear Generators

Ukraine’s policy regarding the Chernobyl nuclear reactor seems to change every few months. In October 1995, Ukraine reversed its promise to close the whole site by the year 2000, pending sufficient foreign aid and other contingencies. Instead, it began repairs on one of the four reactors at the Chernobyl site, which had been out of commission. Ukrainian officials claimed the site would be usable for another 10 years once the repairs were completed.\textsuperscript{20} In 1986, one of the four reactors melted down, killing (according to the Ukraine) 8000 people. The disaster also caused economic damage in Italy, Austria, Germany, Sweden, and other states, but primarily in Belarus, where 30\% of the soil remains contaminated, and the government spends 20\% of its budget on the aftermath of the accident.\textsuperscript{21} Recent reports indicate that another meltdown could occur, even if the plant is not brought back on line, because the shut down is inadequate. One U.S. Congressman has suggested closing the reactor down by force, if necessary.

Chernobyl generates 5\% of Ukraine’s electricity. Ukraine has insufficient electricity currently, and the cost of closing Chernobyl and building a new gas-fired generator to replace it has been estimated at $4 billion. Ukraine has not secured financing for the project.\textsuperscript{22} Concern in Germany and other down-wind states is very high. The chance of conflict over the closing of Chernobyl or other nuclear power plants is conceivable. There are 57 nuclear rectors, 56 of Soviet design, operating in the territory of the former Soviet Union. Twenty are under construc-

\textsuperscript{19} The Jamestown Foundation Monitor, A Daily Briefing on the Post-Soviet States, 3 Jan. 1996.

\textsuperscript{20} Suddeutsche Zeitung, 12 Oct. 1995.

\textsuperscript{21} Financial Times, Sept. 27, 1995

\textsuperscript{22} I.H.T., April 14, 1995.
tion. Only four have been de-commissioned – all in the territory of the former DDR.23

5. Population: Environmental Refugees

Overpopulation is probably the single greatest cause of all environmental damage. With a world population greatly reduced from its present numbers, the environment could sustain the pressures put upon it by man. As it is, the current population of 5 billion could reach 9 billion in 50 years. The effect of population has been seen most clearly in Rwanda, where returning refugees put pressure on the already overburdened supply of land. This was likely a chief element in the recent genocide and the tide of refugees that spilled over the borders into Zaire and Tanzania.24 Both border states have used their militaries to police refugee camps and in an attempt to maintain order on the borders. The flight of people from environmentally devastated states is a realistic security concern for Europe.

II. Permissible Responses

The possibility that environmental breakdown can lead to violent conflict presents the international lawyer with a new problem to address. Is it ever lawful for a state or international organization to respond with force to the threat of environmental disaster? If not, how may states or international organizations respond?

All states are obligated to settle disputes peacefully. And thus states should first negotiate when faced with an environmental concern – indeed, in most cases no other options make sense. But in some very extreme cases, it may be lawful to use counter-measures. In a very rare case, it may even be lawful to use force. Rules governing the use of force are found in the United Nations Charter and should be thought of in three different categories: rules for individual states, rules for regional organizations, and rules for the United Nations.

23 Euromoney, April 1995, p. 112.

Individual states may only use force when exercising the right of self-defense, as defined in Article 51 of the Charter, namely, in response to an armed attack. Under current law, therefore, a state’s right to take military action when faced with an environmental threat would depend on whether the threat fit the category “armed attack”. Obviously most will not, but a rare case could qualify.

The only authoritative guidance we have on this subject is from the ICJ in the 
Nicaragua case. The Court held that the right to use force in self-defense can only be in response to an armed attack. This ruling appears to exclude any use of force to respond to an environmental threat. However, the Court did suggest that some threats other than flying bullets or bombs might trigger the Article 51 right. In Nicaragua’s case against the United States, the Court considered whether shipments of weapons by Nicaragua to El Salvador was an armed attack. The Court found that the United States could only prove Nicaragua had shipped small amounts of weapons and at that level, weapons shipments could not amount to an armed attack. The implication, however, is that a high level of shipments of a very threatening nature, could perhaps have resulted in the right by El Salvador and the United States to invoke the Article 51 right to take self-defensive action.

While slim, the possibility in a highly threatening situation regarding the environment as a case for self-defense cannot be closed out. The case most likely to be accepted by the international community would be defense from an imminent meltdown of a nuclear power plant. If a state feared that managers of a nuclear power station either could not or would not take measures to prevent a catastrophe and the time for going to the Security Council was too short, a good case would exist under international law for sending experts into the territory of the nuclear reactor state.

These circumstances are clearly far from Iceland and Canada’s actions in the fish wars. Did those states act lawfully? Canada perhaps yes; Iceland not so clearly. First and foremost, Canada’s action is not correctly labeled a use of force. Canada fired across the bow of a privately-owned Spanish fishing vessel on the high seas. The Definition of Aggression which elaborates which actions constitute an

unlawful use of force does not include anything like the Canadian action. If the vessel had been a Spanish naval vessel or if the fishing vessel had been within Spanish jurisdiction, the issue would be different.26

Rather than force, Canada used what we now call in international law a counter-measure. Counter-measures are measures short of the use of force, which may otherwise be unlawful actions, taken in response to a prior unlawful action. They must also be proportionate to the initial wrong and deemed necessary under the circumstances.27 Normally, Spain would have the right to fish on the high seas, unhindered by other states. Canada violated Spain’s right, but could justify the action as a counter-measure for a prior unlawful action by Spain.

Spain’s unlawful action was fishing without regard to the sustainability of the North Atlantic Turbot stock, a violation of the obligation on all states not to damage the environment beyond national jurisdiction.28 The prevention principle incorporates the concept that living and renewable resources should only be exploited at sustainable levels. If the NAFO has determined that a catch of 27,000 tons is the sustainable level, how can the EU exercise its right to ignore the limit and yet still fulfill its obligation to prevent damage to the environment?29

On the other hand, the NAFO allows states to opt out of the limit and provides no means of enforcing the level even for those states which choose to abide by it. This would appear to be a specialized regime for

29 Since sending this article to press, the international community has adopted the Straddling Stocks Convention which incorporates an even tougher standard than the prevention principle. It holds states to the precautionary principle, meaning that even where scientific evidence is equivocal states must take conservation measures. See Anderson, supra at 469. Thus it is even easier for Canada to argue that Spain was obligated to respect, at the least, the prevention principle in the spring of 1995.
the North Atlantic which might trigger the *lex specialis* rule – that is, the more specific rule has priority over the more general rule. In this case, the NAFO is a more specific regime, or set of rules, for North Atlantic fisheries than the prevention rule. But as the NAFO’s decisions are not binding, Canada could argue that this is not a legal regime at all. Rather, it could be considered at best a soft-law system, good for setting scientific standards, but not capable of taking priority over a hard rule, like the prevention principle.

Canada has not made this argument. It has instead argued that it had "a legal right to take action against the Spanish ... established under the doctrine of necessity, which applies when an essential interest of a State is threatened by a grave and imminent peril and there is no other means of averting."  

Since the doctrine of necessity is generally applied only when human life is at stake, it will be difficult for Canada to maintain this defense. Canada would do better to argue it was enforcing the prevention principle, of which it and every other state in the international community is a beneficiary. Canada’s actions were clearly proportional to the violation – it aimed only at preventing a violation of the NAFO standard.

Spain has made much of the fact that the arrest was made on the high seas, alleging this is outside Canada’s jurisdiction. But when no other options exist to protect areas of common jurisdiction, states may take unilateral counter-measures. Under the agreement hammered out in Brussels, inspectors will be used to try to prevent cheating, but if Spain circumvents this control mechanism, Canada would have the legal right to once again take proportionate, unilateral measures.

Iceland’s case is somewhat more difficult. Iceland did not try simply to preserve a species or its clear right to a portion of a species. It claimed a larger share of jurisdiction over ocean space, an approach that is a basic violation of international law. Nor could it claim it was taking a counter-measure because the prevention principle had not yet crystallized into a rule of custom by the early 1970’s. Thus, Iceland unlawfully took counter-measures against Britain and Germany.

As a policy matter, there are clear disadvantages to an international system that permits unilateral enforcement measures. Nevertheless,

---

30 *Davies, supra note 13, at p. 936.*
the right to take such actions under international law reflects the fact that the international legal system is not highly-centralized, and that much policing of the system depends on self-help. Without at least this type of policing, the rules would have virtually no meaning. Therefore, individual states faced with an environmental threat may not, for the most part, use force. However, if a rule of international law has been violated and negotiations have failed, they generally may employ counter-measures.

The Security Council has wider authority than states acting individually or collectively. The Council may use force, according to Article 39 of the Charter, when there is a threat to or violation of international peace and security. Arguably, the drafters of the Charter only intended to give the Council authority to respond to traditional cross-boundary acts of aggression. Since the end of the Cold War, however, the Council has taken actions which have effectively re-interpreted Article 39 to allow the Council to respond to human rights violations by states, including the failure to provide democratic governance.

Clearly the Council may authorize force in response to crises like those in Haiti and the former Yugoslavia (at the beginning of the crisis) under the formula „threats to international peace.“ It follows, then, that it can clearly interpret an environmental crisis as such a threat, even if the crisis were to occur within the borders of one country. Indeed, few international lawyers today would argue that the Council does not have the authority to order a member to close down a nuclear reactor or clean-up hazardous waste – as odd as that would sound to the drafters of the Charter.

While the Security Council seems to have difficulties responding to the new issues it has taken on, it is quite likely that it will be called upon increasingly in future to deal with security concerns stemming from the environment, even in Europe.