

Can International Legal Principles Play a Positive Role in Resolving Central and East European Transboundary Environmental Disputes?

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I. INTRODUCTION

The fall of communism and the subsequent opening of Central and Eastern Europe (CEE) have revealed a regional ecosystem under serious strain after over forty years of communist stewardship. Although the entire region suffers from an exploited ecosystem, particular destruction has occurred in the border regions of the CEE states. The substantial environmental destruction and continuing degradation in these border regions give rise to a number of transboundary environmental disputes, which must be resolved if the situation is to be alleviated.¹

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1. Although a number of recent works have cited the level of environmental destruction resulting from the economic and environmental policies of the CEE Communist regimes in great detail, it is useful here to note a few examples to provide a context for this paper: Sixty-five percent of Poland's rivers are polluted to such an extent that they are not suitable for industrial use. G. Nelson Smith III, *The Real Challenge to the Polish Revolution: Cleaning the Polish Environment Through Privatization and Preventive Market-Based Incentives*, 19 PEPP. L. REV. 553, 558 (1992) [hereinafter Smith]. Mercury contamination of the Vistula River is three times higher than the safety standard, with lead contamination twenty-fives times the acceptable limit. *Id.*

There is a five-to-eight-fold increase in infant mortality from respiratory causes as a result of significant airborne concentrations of ambient dust and SO₂ particles in the Czech region of Northern Bohemia. ENVIRONMENT FOR EUROPE, ENVIRONMENTAL ACTION PROGRAMME FOR CENTRAL AND EASTERN EUROPE II-6 (March 29, 1993) [hereinafter ENVIRONMENT FOR EUROPE]. For further analysis of the environmental degradation of the Czech Republic, see generally WORLD BANK, CZECH AND SLOVAK FEDERAL REPUBLIC JOINT ENVIRONMENTAL STUDY, at 10 ¶ 5 (January 22, 1992) [hereinafter JOINT ENVIRONMENTAL STUDY]. In 1988, in the territory of the former Czechoslovakia, sixty-one percent of the fish, ninety-five percent of amphibians, ninety-one percent of reptiles, fifty-two percent of birds, and sixty percent of mammals were considered endangered species. *Id.* at 10.

Thirteen percent of all Hungarian health and welfare expenditures are the result of environment-related health problems. ENVIRONMENTAL MANAGEMENT AND LAW ASSOCIATION, ENVIRONMENTAL LAW AND MANAGEMENT SYSTEM IN HUNGARY: OVERVIEW, PERSPECTIVE AND PROBLEMS 1 (June 1993) [hereinafter HUNGARY: PERSPECTIVE AND PROBLEMS]. See also MINISTRY FOR ENVIRONMENT AND REGIONAL POLICY OF THE REPUBLIC OF HUNGARY, REVIEW ON THE ENVIRONMENT, NATURE

The term "transboundary environmental dispute" is used throughout this article to refer to a dispute between two or more neighboring states regarding the use, allocation, and/or degradation of shared natural resources. These disputes may range from controversies over the construction of a particular project, such as a coke plant or a dam, to a dispute concerning the emission of airborne pollutants covering a range of hundreds of square miles. Similarly, the stage of the dispute may vary from the early recognition that a neighboring state is engaging or might engage in activity harmful to the territory of another state, or lodging of formal diplomatic protests regarding transboundary environmental harm, to the final submission of a dispute to the International Court of Justice.

Current CEE transboundary environmental disputes include: the Polish-Czech-German dispute over transboundary air and water pollution in the region known as the Black Triangle, with all three states exporting and importing pollutants from/to the neighboring states;² the Czech-Austrian dispute concerning the construction and operation of a nuclear power plant

CONSERVATION, BUILDING AND REGIONAL POLICY IN HUNGARY (1991); STATE OF THE ENVIRONMENT IN HUNGARY AND ENVIRONMENTAL POLICY (M. Bulla & I. Juhasz eds. 1989); and STATE OF THE HUNGARIAN ENVIRONMENT (D. Hinrichsen & G. Enyedi eds. 1990).

There are no standards or regulations relating to the use, movement, or disposal of hazardous waste in Romania. WORLD BANK, ROMANIA ENVIRONMENT STRATEGY PAPER 66 (July 31, 1992) [hereinafter ROMANIA ENVIRONMENT STRATEGY PAPER]; see also MINISTRY OF WATER, FORESTRY AND ENVIRONMENTAL PROTECTION, LIST OF PROJECTS TO BE TAKEN INTO ACCOUNT FOR INCLUSION IN THE EC PROJECT PREPARATION FACILITY (1992). As a result, Romania suffers from substantial groundwater and soil pollution in the form of high concentrations of benzene, toluene, mercury, heavy metals, cyanide, chlorinated solvent, and pesticide byproducts. *Id.* Three hundred million metric tons of solid waste, mostly from mining are still dumped annually into Romanian soil, and 100,000 to 200,000 metric tons of untreated waste water are discharged into Romanian rivers each year. 2 Y.B. ENVTL. L. (1991).

Only one of the thirteen major Bulgarian rivers can be considered to be "relatively clean." WORLD BANK, BULGARIA ENVIRONMENT STRATEGY STUDY 16 (March 17, 1992) [hereinafter BULGARIA ENVIRONMENT STRATEGY STUDY]. A river is considered to be relatively clean if it meets the necessary standard for recreational use at all monitoring points along its course. Two rivers, the Beli Lom and the Danube do not meet this standard at any of the monitoring points along their course, and at least fifty percent of the length of six other rivers are considered to be "seriously polluted". Chemicals, heavy metals, and raw sewage are frequently discharged into Bulgarian rivers, either by accident or on a regular basis, as towns under a population of 50,000 do not have sewage systems. Of the towns above 50,000 that do have sewage facilities, only approximately one third have effective treatment facilities. *Id.* During the summer months, many small rivers are essentially "waste canals". George Djolov & Dimitrina Dimitrova, *The People's Republic of Bulgaria*, ENVIRONMENTAL POLICIES IN EAST AND WEST 53, 57 (1987) [hereinafter Djolov & Dimitrova]. See also BULGARIA ENVIRONMENT STRATEGY STUDY at 16; WORLD BANK, ENVIRONMENT AND DEVELOPMENT IN BULGARIA: A BLUEPRINT FOR TRANSITION (September 1992); and WORLD BANK, BULGARIA: CRISIS AND TRANSITION TO A MARKET ECONOMY VII (1992) (A World Bank Country Study).

2. Over fifty percent of Europe's brown coal resources are located in the Black Triangle and Silesian coal basin, and over thirty percent of Europe's SO₂ is generated from these regions. Interview with Dr. Jacek Jaskiewicz, Adviser to the Minister, Polish Ministry of Environmental Protection, Natural Resources, and Forestry, in Warsaw, Poland (May 4, 1994) [hereinafter Interview with Dr. Jaskiewicz].

at Temelin in the Czech Republic; the Slovak-Hungarian Danube river dispute relating to the construction and operation of the Gabčíkovo Dam and the failure to construct the Nagymaros dam; the Croatian-Hungarian dispute regarding the construction of a hydroelectric dam by Croatia along a transboundary river with Hungary; the Romanian-Bulgarian dispute over transboundary air and water pollution in the Danube River basin in the area of Ruse (Bulgaria) and Giurgui (Romania); the Romanian-Bulgarian dispute concerning location of both Bulgarian and Romanian nuclear power plants near the international border and subsequent disposal of hazardous waste; and disputes between Romania, Bulgaria, Ukraine, Russia, and Turkey concerning the environmental management of the Black Sea.

These transboundary environmental disputes surrounding the degraded border regions are influenced and affected by unique ecological, economic, political (domestic and international), human rights, and legal factors particular to CEE. Although resolution of these disputes, and subsequent environmental regeneration of the regions, cannot be accomplished by the application of international law alone, international law may, nevertheless, play a useful role in their resolution.

This article seeks to develop a hypothesis concerning the role of international law in resolving CEE transboundary environmental disputes. In order to determine the role of international law, this article proposes a model that identifies the factors affecting the resolution of transboundary environmental disputes and explores the subset of determinants specifically affecting the role of law in the dispute resolution process. The model is then applied to draw conclusions as to the current role of international law, and to identify possibilities for improving its application to the disputes.

II. THE DEVELOPMENT OF A THEORY CONCERNING THE ROLE OF INTERNATIONAL LAW IN THE RESOLUTION OF CENTRAL AND EAST EUROPEAN TRANSBOUNDARY ENVIRONMENTAL DISPUTES

A theory regarding the role of international law in the resolution of CEE transboundary environmental disputes must be developed in the context of general legal and social science theories concerning the role of international law in transboundary dispute resolution.

A. EXISTING THEORIES CONCERNING THE ROLE OF INTERNATIONAL LAW

1. Legal Theories Concerning Role of International Law in Transboundary Dispute Resolution

Legal theorists approach the question of the role of law from both an examination of the relationship between international and domestic law, and an examination of the relationship between the requirements of

international law and state interest. Three basic views explain the relationship between international and domestic law. According to the nationalist doctrine, international law stems from, and is limited by, domestic law. A state has obligations under international law only to the extent that its domestic law is consistent with putative international law.³ According to the dualist doctrine, domestic and international law co-exist as separate yet linked bodies of law.⁴ Because the systems are separate, the validity of an international legal rule does not depend upon its acceptance in domestic law.⁵ Because the systems are linked, however, international law is not self-actualizing and cannot be applied in the various domestic jurisdictions until some type of implementing legislation has been enacted by the various states.⁶ Finally, the monistic doctrine asserts the primacy of international law, espousing that international law holds a superior position in a unitary legal system.⁷ In the event of a conflict between international law and domestic law, domestic law is invalidated. Similarly, there is no need for implementing legislation, as international law is automatically binding upon all states.⁸ The dualist approach most closely reflects contemporary state practice with regard to international law — particularly in the CEE — and will be used as a framework principle for the exploration of the role of international law in this article.⁹

There are several hypotheses among international legal theorists as to why and when states employ international law.¹⁰ It is generally recognized that states observe international law based on their own competing domestic interests — political, economic, or military.¹¹ International law will typically be applied in circumstances where it serves state interests.¹² These

3. ANTONIO CASSESE, *INTERNATIONAL LAW IN A DIVIDED WORLD* 19 (1986) [hereinafter CASSESE].

4. *Id.* at 20.

5. *Id.*

6. International law exists as the manifestation of the agreement of states on certain principles, with those states being obligated to abide by those principles. States however, as sovereign entities, are entitled to determine how those principles will be implemented in domestic practice. As such, states may easily frustrate the implementation of international law. *Id.*

7. *Id.* at 21.

8. Although the monistic doctrine is quite impractical, it is useful in that it asserts an obligation of states to be bound by international law. *Id.* at 21-22.

9. The dualist approach is particularly useful as a framework principle in that it explicitly recognizes the need to transform international law principles into domestic law if they are to be effectively implemented.

10. See generally CASSESE, *supra* note 3; RICHARD FALK, *THE STATUS OF LAW IN INTERNATIONAL SOCIETY* (1970); LOUIS HENKIN, *HOW NATIONS BEHAVE: LAW AND FOREIGN POLICY* (1979); *THE RELEVANCE OF INTERNATIONAL LAW* (K. Deutsch and S. Hoffmann eds. 1971); GEORG SCHWARZENBERGER, *THE FRONTIERS OF INTERNATIONAL LAW* (1961); G.I. TUNKIN, *THEORY OF INTERNATIONAL LAW* (1974).

11. HENKIN, *supra* note 10, at 37.

12. *Id.* at 49, 68-74 (states correspondingly violate international law when there is a value in doing so). Henkin contends that as there is an inherent value to abide by international law, the advantages

interests may be derived from either domestic or international constituencies.¹³ States refrain from breaching international law to avoid retaliation by other states or a reduction in their international prestige.¹⁴ Prospects for adherence to international law are improved if provisions exist for enforcement of a particular law,¹⁵ if international law is embraced in the national life and institutions of a particular state,¹⁶ and if states have traditionally respected the rule of law.¹⁷

International law may serve a variety of functions, including setting norms of behavior,¹⁸ and providing a structure for carrying out the daily activities of international cooperation.¹⁹ Unless an enforcement mechanism exists, however, international law will be unlikely to control a state's behavior;²⁰ it

of violating international law must substantially outweigh the disadvantages. *Id.* at 49-50. Henkin further asserts that as it is difficult to calculate the costs and benefits of abiding by international law, states will generally observe international law to keep the international system in working order. *Id.* at 50-51. Henkin focuses primarily on well established principles of international law such as territorial integrity and diplomatic immunity essential for the functioning of peaceful state relations. This approach is unlikely to be applicable to the less well established and more vague international environmental law principles relevant to transboundary environmental disputes.

13. *Id.* at 50-51. Henkin asserts that state governments benefit domestically from the perception of leadership and respectability generated by an adherence to international law, and that states benefit internationally because adherence to international law leads to friendly relations with other states. *Id.* at 52. Henkin assumes that it is clear when a state violates international law, however, given the vague nature of many international environmental laws, it is frequently not clear when a state is in violation of those laws.

14. *Id.* at 54. Although retaliation may occur where the basic principles of international law are concerned, states seldom retaliate in cases of a breach of international environmental law. Retaliation is particularly unlikely in cases where all parties to the dispute are violating international law as is the case in the Black Triangle region.

15. *Id.* at 55.

16. *Id.* at 60. International law will more likely be enforced if it is codified in domestic law. An example is the inclusion of provisions for ensuring immunity of diplomats from criminal prosecution in domestic legislation. *Id.* at 61. Although it is possible to include provisions for diplomatic immunity in domestic law, it is more difficult to include provisions for environmental principles such as equitable utilization and no substantial injury.

17. *Id.* at 61-62. Henkin asserts that western type democracies are more likely to observe international law since they may be freely criticized if they violate international law, and that the domestic checks and balances afford an opportunity for different branches of the government to invoke international law. *Id.* at 63. Additionally, if the executive branch tends to be composed of a substantial number of lawyers, the government will exhibit a greater degree of respect for international law. *Id.* at 65.

18. KELSEN, *PRINCIPLES OF INTERNATIONAL LAW* 17 (1966). These norms are unlikely to completely deter unwanted behavior, but may delay such behavior. The norms are most valuable when there is a choice of behavior for a state, as the state will likely choose the behavior consistent with international law. See also HENKIN, *supra* note 10, at 41-47.

19. HENKIN, *supra* note 10, at 13-14. International law assigns status, rights, responsibilities, and obligations for states participating in the international society, and provides the procedures for carrying out relations within this society. *Id.* at 14-18. International law, broadly speaking, also provides the process for reaching international agreements and creating mechanisms for their enforcement. *Id.* at 19.

20. *Id.* at 24.

will rather serve to limit the actions of a state.²¹ The role of international environmental law is limited in that states may be rebuked for violating established law, but cannot be condemned for not adopting or implementing newly developed principles of international environmental law which have not yet reached the status of customary international law.²²

2. Traditional Role of Law in Central and East European States

Over the past forty years, the CEE states have developed a view of the role of law that is distinct from that of Western states.²³ Under the previous communist regimes, domestic law was viewed as a tool of Marxism designed to further the evolution of society towards Communism.²⁴ Legal rules were considered binding upon citizens and states, as long as they did not run counter the supreme interests of the state.²⁵ Because the state was the ultimate legal authority and operated all economic enterprises, there was no need to develop a cadre of autonomous lawyers to represent groups with conflicting interests.²⁶ As a result, CEE states lacked a core commitment to the resolution of disputes through legal means.²⁷

The role of international law was similarly perceived: it was viewed as a means for regulating the interaction between CEE states and the West for purposes of peaceful coexistence and economic exchange.²⁸ The primary mission of international law for CEE countries, therefore, was to equalize and regulate international relations through the preservation of the sovereignty of states.²⁹ Consequently, CEE states adopted a positivist approach to international law, positing that international law is solely created by the will of states and that any principles not derived from the explicit consent of states cannot be considered binding international law.³⁰ Accordingly, CEE

21. *Id.* at 29. Although states dislike curtailing their freedom of action, in an international society, cooperation between states is often the most effective means for a state to obtain its objectives. International law forms the basis for that cooperation. *Id.* at 29-31.

22. *See id.* at 31.

23. CASSESE, *supra* note 3, at 109; *see also Role of Law in Socialist Countries*, in INTERNATIONAL LAW (F.I. Kozhevnikov ed. 1962).

24. *Id.* at 109. Laws were designed to ensure peaceful social interaction, and supervision of that action by state authorities. *Id.*

25. The supreme interests of the state were defined by the central authority of the communist party. *Id.*

26. Law was not perceived as a tool for resolving conflict, but as a tool for controlling behavior. *Id.* 110.

27. *Id.* at 109.

28. *Id.* at 110.

29. CEE states interpreted and utilized international law for the political purposes of strengthening the socialist societies, obstructing western intrusion into CEE domestic affairs, and maintaining a sense of decorum between CEE states and the west. *Id.*

30. *Id.* at 111.

states restricted the sources of international law to custom and treaty,³¹ and only applied international law domestically to the extent it was permitted by domestic law. In cases of conflict between international and domestic law, domestic law would take precedence.³² Similarly, because of the primacy of sovereignty, CEE states preferred to develop additional normative international law rather than to develop mechanisms for monitoring and enforcing existing international law, leaving compliance to the discretion of the individual state.³³

CEE states have also commonly opposed international arbitration of disputes since they perceived international law as substantially developed by the West, judges as incapable of setting aside their national biases, socialist countries as likely to be outvoted given the composition of international tribunals, and the potential loss of a case as tarnishing a state's public image.³⁴

Although the iron curtain has dissolved and CEE states have generally adopted the principles of democracy and free market reform, they substantially retain a legal culture based on the primacy and sovereignty of the state and lack an autonomous cadre of legal professionals to promote the use of legal norms to resolve disputes. A telling fact, for example, is that the Polish Environmental Law Association contains only fifteen attorneys.³⁵

3. Social Science Theories Concerning the Role of International Law in Transboundary Environmental Dispute Resolution

Although a substantial amount of literature examines the process of international dispute resolution from a social science perspective, there is seldom an examination of the role of international law in the process of the resolution of international disputes, let alone the role of international law in the resolution of transboundary environmental disputes. As one dispute resolution expert noted, environmental dispute resolution is an area in "which existing applicable rules of international law — for example, principles of good neighborliness and equitable utilization of shared resources — do not stipulate specific obligations or measures on the part of states, but at best provide an obligation and a framework for states to negotiate agreement on concrete and effective actions."³⁶

31. CEE states accept the validity of general rules of international law as well as special rules, and prefer to modify customary international law through treaty making. *Id.* at 112-13.

32. *Id.* at 111.

33. *Id.* at 114.

34. *Id.* at 205.

35. Interview with Dr. Jerzy Sommer, Professor of Law and Director of the Research Group on Environmental Law, Polish Academy of Sciences, in Wroclaw, Poland (May 6, 1994).

36. CECILIA ALBIN, INTERNATIONAL INSTITUTE FOR APPLIED SYSTEMS ANALYSIS, NEGOTIATING THE ACID RAIN PROBLEM IN EUROPE: A FAIRNESS PERSPECTIVE, WORKING PAPER NO. 93-050 (1993), at 4.

Although social scientists tend to minimize the role of international law in international dispute resolution, much can be gained from an examination of recent developments in the field of international dispute resolution. The two most relevant developments are the evolution of the integrative approach to negotiation and the division of negotiations into the stages of pre-negotiation, negotiation, and enforcement.

The integrative approach attempts to bring parties of a negotiation to an outcome which balances the equities affected by the dispute and attempts to alternatively maximize the value for a party while minimizing the cost to the other party. This approach provides a useful perspective for applying or modifying international law which is generally designed more toward determining fault than toward balancing equities.³⁷

The division of the negotiation process into three stages can be paralleled in the division of the dispute resolution process into pre-resolution, resolution, and implementation stages with international law playing a distinctive role at each stage. For instance, international legal obligations to share information and cooperate in the abatement or prevention of environmental harm and principles of liability are most relevant in the pre-resolution stage, with substantive rules governing state behavior or allocation of resources most relevant for the resolution stage, and enforcement mechanisms under international law, where they exist, most relevant in the implementation stage.

B. FACTORS AFFECTING RESOLUTION OF TRANSBOUNDARY ENVIRONMENTAL DISPUTES IN CENTRAL AND EASTERN EUROPE

Before developing a theory for the role of international law in the resolution of CEE transboundary environmental disputes, the larger question of what factors affect the resolution of such disputes must be considered. A proper understanding of the factors motivating and affecting the resolution of a transboundary environmental dispute is necessary to place a theory regarding the role of international environmental law in a realistic and useful context.

The resolution of transboundary environmental disputes in CEE is affected by a matrix of factors including ecological, economic, political (international and domestic), human rights, and international law factors. These factors affect the nature of the transboundary environmental dispute, the political will and actual ability of the parties to resolve the dispute, the parties' perceptions of the principles of justice and fairness and their role in

37. Some international law specifically attempts to balance equities, such as the principle of equitable utilization, but frequently such principles are so vague as to be of little practical use to parties in a dispute.

the resolution process, as well as the ability of the parties to implement any agreed upon measures.

Ecological factors are the facts and circumstances which create the environmental degradation at the root of the dispute. Such factors include: the geography and ecosystem in the area of the dispute; the nature of the pollution, including the mobility of pollutants and the type of harm caused by the pollution; the existence of mechanisms to control or abate such pollution; the ability to identify the source of the pollution; and the ability to allocate responsibility for environmental degradation in the case of two or more sources of pollution.

Economic factors are those which influence the balance between industrial production and environmental preservation, the ability of the parties to implement environmentally compatible technology, and the ability of the parties to pay compensation for harm suffered. They include: a party's energy and other natural resources; the composition of its industrial base; the GNP and living standards; the domestic consumption or export demand for products produced by polluting industries; the cost of protecting the environment either through the closure of industry or the implementation of abatement technologies; and the access to capital for investment in new technologies.³⁸

38. The socialist ideology of the former CEE governments was based upon the principle of public ownership of the resources of a state; both the economic resources necessary for production, as well as the natural resources of the state. Nigel Haigh, Gyula Bora, & Violetta Zentai, *The Background to Environmental Protection in Market and Planned Economy Countries*, in ENVIRONMENTAL POLICIES IN EAST AND WEST 22, 25 (1987) [hereinafter Haigh, Bora & Zentai]. In theory, a socialist society would have substantial influence over the regulation of production, utilization of natural resources, and provisions for environmental protection, with the aim of balancing the economic and social needs of society. *Id.* Because all costs to society are interrelated and reduce the socialist standard of living, states should attempt to reduce those costs, whether they are economic or environmental. *Id.*

Despite the socialist ideal of economic harmony, substantial tension existed between the utilization of resources to improve the standard of living and environmental protection since a number of economic sectors in CEE were substantially underdeveloped. *Id.* at 26. This tension was almost exclusively resolved in favor of raising living standards and ignoring environmental costs. Because state enterprises existed as semi-detached units, such enterprises could treat environmental damage as an unaccountable externality. *Id.* As such, economic planning did not take into consideration the environmental costs of facility siting, raw material consumption, or production quotas. THE DANUBE DEFENSE ACTION COMMITTEE, THE DANUBE BLUES: QUESTIONS AND ANSWERS ABOUT THE BOS (GABCIKOVO)-NAGYMAROS HYDROELECTRIC STATION SYSTEM 3 (Budapest, October 1992) [hereinafter DANUBE BLUES]: The natural result of such economic planning was that industrial production proceeded with little concern for the protection of environmental quality. Although in some CEE states, sufficient environmental legislation existed to protect the environment, it was not enforced as it would have interfered with industry's ability to meet specific levels of production. ENVIRONMENT FOR EUROPE, *supra* note 1, at III-22.

Because of the scarcity of economic resources, CEE enterprises concentrated on short term solutions based on maximizing the utilization of resources, neglecting long term planning, conservation of resources, and investment in infrastructure. Haigh, Bora & Zentai, *supra*, at 28. As a result, many of the heavy industry production facilities developed by State enterprises are inefficient and consume excessive amounts of energy and raw materials per unit of production. HUNGARY:

Political factors are those which influence a party's willingness and ability to enter into a process for resolving a dispute, and the parameters of any agreed upon settlement. Political factors can be both international and domestic. International political factors include: pressure from international donor agencies or states to settle disputes; the supply of resources to make technological investments necessary to resolve a dispute, or conversely the supply of resources to construct projects which will generate or aggravate disputes; pressure from organizations, such as the European Union, with which parties wish to become associated; and the availability of international mediation or good offices. Domestic factors include: the popularity of environmental awareness and activism; the existence of a process for public participation in the development of environmental policies; the perceived need for industrial growth as opposed to environmental protection; the ideological composition of the government and bureaucracy, and the possibility for citizen participation.³⁹

PERSPECTIVE AND PROBLEMS, *supra* note 1, at 3-4. The harm caused by this inefficiency is augmented by the extensive use of brown coal (lignite) as a power and heating source. Lignite and hard coal provide seventy-five percent of Poland's primary energy supply, and twenty-four percent of Hungary's, compared to only nineteen percent for OECD countries. ENVIRONMENT FOR EUROPE, *supra* note 1, at II-10. Sixty-three percent of Polish households are heated with lignite or coal, compared to only five percent in the former West Germany. *Id.* Lignite and coal represent more than seventy-five percent of the total fuel consumption for Bulgaria, the former Czechoslovakia, Hungary, Romania, and the former Yugoslavia in 1989. Heavy reliance on lignite and coal is the result of CEE's preference for domestic energy sources. *Id.* The reliance on lignite for household and small scale uses forms the basis for CEE's widespread urban air pollution. *Id.* And, by the extensive use of low grade Russian oil, and the mis-allocation of natural gas resources. For instance, Bulgaria consumes substantial amounts of natural gas, but rather than allocating it for household consumption, Bulgaria utilizes the natural gas to produce fertilizer at ten percent of market prices. *Id.* at II-11.

39. The environmental catastrophes resulting from over forty years of communist economic policies are generally considered to be a major political factor in bringing about the destruction of those regimes. Although the scientific evidence of environmental degradation was suppressed, the obvious consequences of pollution, and its effects on the daily lives of Central and East Europeans were quite evident. For example, in the fall of 1990, seventy percent of the Czechoslovakians and seventy-one percent of the Hungarians surveyed agreed with the statement, "The environment has to be cleaned up even if it means some loss in manufacturing jobs," while only seven percent of the Czechoslovakians surveyed, and eighteen percent of the Hungarians agreed with the statement "Cleaning up the environment has to take second place to industrial growth and the protection of jobs." Erasmus Foundation for Democracy, *Democratization in Eastern Europe Survey* (Fall 1990).

Political opposition groups were able to effectively tap into this awareness of environmental degradation to rally support against the communist regimes, and environmental groups were able to effectively mobilize mass demonstrations to protest further environmental degradation. In February of 1990, for instance, 100,000 people formed a 100-mile chain to protest the construction of the Gabčíkovo-Nagymaros project. *East Europeans Protest Hydroelectric Project*, N.Y. TIMES, Feb. 4, 1990, Sec. 1, at 22. Environmental issues thus formed a major platform for the involvement of large numbers of people in anti-communist demonstrations which lead to the eventual fall of communism in CEE.

As a result of their prominent role in bringing about the fall of communism, environmental issues received a great deal of attention, and were the subject of many commitments of the political parties

Human rights factors are a combination of political and legal factors that can affect a party's motivation or obligation to resolve a dispute, as well as the manner in which a party approaches the settlement of a dispute. Human rights factors may include: the existence of ethnic minorities within a party's territory (if they are affected by the environmental degradation); the existence of a party's own ethnic population in a neighboring state in an area of environmental degradation; the perceived human right to a clean environment; and the willingness of international human rights organizations or bodies to apply pressure for the resolution of disputes and offer resources for mediation or good offices.⁴⁰

International law factors are the procedural and substantive principles embodied in international law which create obligations on behalf of the parties to reach a peaceful settlement of their disputes and which provide a framework for the development of options for settlement.

Procedural principles include the duty to share information, the duty to

empowered by CEE's move to democracy. However, as the tension between economic growth, environmental remediation and preservation evolves, those commitments are being tempered through redefinition. As the social hardships of the transition to a market-based economy became apparent, public concern for the environment has lessened. ENVIRONMENT FOR EUROPE, *supra* note 1, at 1-2. Similarly, as former communist officials either maneuver to remain in power, or are returned to power by the electorate, they are likely to affect the evolution, or at least the implementation, of environmentally compatible economic policies.

40. A primary factor contributing to tension in border regions suffering from environmental degradation is that often those border regions are inhabited by a substantial population of ethnic minorities of a neighboring state. For instance in the case of the Gabčíkovo dam controversy, the construction of the project not only affects a substantial number of Hungarians in Hungary, but also adversely affects three major Slovak-Hungarian towns located in Slovakia. WORLD WILDLIFE FUND, *REPERCUSSIONS OF THE POWER STATION 3* (1991).

The distribution of substantial numbers of ethnic minority populations in border areas is the result of World Wars I and II. The 1920 Peace Treaty of Trianon ending World War I divided the Austro-Hungarian Empire into the countries of Austria, Hungary, and Czechoslovakia, ceding much of the former Empire to neighboring countries. Peace Treaty of Trianon, *Treaties, Conventions, International Acts, Protocols, and Agreements between the United States of America and Other Powers, 1910-1923* at 3558 (1923) [hereinafter Peace Treaty of Trianon]. Hungary, which had once contained fifteen million Hungarians now contained only ten million, with five million dispersed in neighboring countries.

The 1947 Paris Peace Treaty following World War II reconfirmed the border between Czechoslovakia and Hungary along the Danube River, but adjusted a number of other borders. Treaty of Peace with Hungary, in *Treaties and Other International Acts Series* 1651, art. 1, ¶ 4(c) at 47-48. The readjustment of international borders following World War II, and subsequent migration resulted in the creation of the following ethnic minority populations: 921,300 ethnic minorities in Poland; 833,400 ethnic minorities in the states of the former Czechoslovakia; 351,300 ethnic minorities in Hungary; 2,525,500 ethnic minorities in Rumania; 1,303,800 ethnic minorities in Bulgaria. CIA WORLD FACTBOOK 52, 89-90, 151-52, 277, 285 (1992). Additionally over six million ethnic Germans were relocated from Czechoslovakia and Poland to Germany.

Under the communist regimes, tensions between ethnic minority populations and the majority population were suppressed but not resolved. The implosion of the former Yugoslavia provides an example of how rather than being resolved, ethnic tensions were merely suppressed under communist rule.

cooperate in the preservation of shared resources, the principle of good neighborliness, the duty to settle disputes by peaceful means, and the duty to negotiate in good faith. Procedural principles affect all three stages of the dispute resolution process (pre-resolution, resolution, and implementation).

Substantive principles provide objective standards of justice and fairness within which the parties negotiate possible options for settlement of the dispute. Substantive principles can be derived from the relevant areas of international law, including air pollution (substantial injury), transboundary water allocation (natural flow and equitable use) and pollution (substantial injury), international environmental law (sustainable development), human rights (right to a healthy environment), and bilateral and multilateral treaties (equitable allocation of resources). These substantive principles primarily affect the resolution stage, but also have an impact on the implementation stage.

C. DETERMINANTS OF THE ROLE OF INTERNATIONAL LAW IN THE RESOLUTION OF CENTRAL AND EASTERN EUROPEAN TRANSBOUNDARY ENVIRONMENTAL DISPUTES

Within the above framework of the international legal factors which affect the resolution of CEE transboundary environmental disputes, this article will now identify and discuss the determinants of the role of international law and will put forth a preliminary theory as to how these determinants affect whether and how CEE states will accept and use principles of international law in seeking resolution of a particular dispute.

1. Status of International Law

The first determinant of the role of international law is the status of international law itself. The existence of principles of international law relating to the circumstances of a dispute is essential for the application of international law. Beyond the mere existence of international law, its role is enhanced where the international legal principles are distinct, relevant, and functional.

Distinct legal principles are generally accepted principles which are capable of being understood by the parties, and are not subject to a multitude of varying interpretations and speculative legal argument. Relevant legal principles are those which address the specific circumstances of the dispute, and are not limited to broad principles of equity. Functional legal principles are those which can be applied to the circumstances of the dispute to generate specific options for resolution.

2. Practice of Parties Applying International Law to Resolve Bilateral Disputes

Whether or not the parties to a CEE transboundary environmental dispute have a past practice of applying international law to resolve disputes, either between themselves or with other parties, will affect the role of international law. Previous application of international law evidences a party's awareness and understanding of the benefits and risks of the application of international law, familiarity with the process of implementing international law, and likely a willingness to be bound by international law.

3. Practice of Parties Applying Domestic Environmental Laws to Resolve Resource Disputes

Similarly, the historical application of domestic environmental law to resolve resource disputes affects the role of international law. Parties familiar with the process of applying domestic environmental law in dispute resolution will recognize the value of the rule of law in resolving disputes in the environmental field, and will have experience in translating legal principles into a functional framework for generating options for resolving of environmental disputes.

4. Correlation of Domestic Law and International Law

The correlation of domestic legal principles with international legal principles also affects the role of international law. Where domestic environmental legal principles parallel international environmental legal principles, the international legal principles will be more credible for the particular party. In addition, a party will have a better understanding of the principles of international law, and will be more likely to rely upon international legal arguments. If both parties to a dispute possess compatible domestic legislation, they will be more likely to employ international legal principles in resolving their dispute. As international law is seldom self-executing, domestic law must contain provisions for the implementation of international law, or specific implementing legislation must be passed concerning each instrument of international law.

5. The Existence of Adequate International Dispute Resolution Mechanisms to Utilize International Law

The existence of an adequate international dispute resolution mechanism substantially enhances the role of international law by providing parties with a third party mechanism to resolve their dispute. A third party dispute

resolution mechanism will likely acknowledge the objective nature of international law and thus the value of its application. It will further possess familiarity with the specific principles of international law relevant to the circumstances of the dispute. Dispute resolution mechanisms are also capable of making determinations of international law, and thereby bringing to bear international principles which may have been too indistinct to be applied bilaterally by the parties to the dispute.

6. Is There a "Value" in Applying International Environmental Law?

The role of international law is also enhanced if value is associated with the application of international law. Value is created if donor countries and loan organizations, especially in the case of donations or loans for industrial projects or environmental remediation projects, emphasize the importance of settling transboundary environmental disputes under the rule of international law. Value is also created by a similar emphasis from international organizations or countries with which CEE states are seeking membership or closer relations.

D. PRELIMINARY THEORY AS TO THE ROLE OF INTERNATIONAL LAW

International law cannot play a role in the resolution of a transboundary dispute unless the parties decide that there is value in resolving the dispute. Determining that some value exists is the first step in the development of political will to resolve the dispute. Sources of value that might influence the political will of parties to resolve transboundary environmental disputes include economic, political, and environmental considerations. International law may play an ancillary role in the development of political will if the parties can extract political value from international law by claiming that their position with respect to the dispute is consistent with, or supported by, international legal principles.⁴¹

Once the parties have generated the political will to resolve a transboundary environmental dispute, if the preponderance of the six determinants are affirmative for both parties, then there is a high probability that the parties will employ international law in their attempts to resolve the dispute.⁴² If international law is positively applied, its value will lie in its ability to create an equitable framework within which the dispute can be resolved. The

41. Conversely, international law may provide value to a party whose actions are in violation of international law, because the resolution of the dispute would presumably remove any censure being applied to that party for its violation of international law.

42. If a preponderance of the determinants are affirmative for only one party, then international law will likely play a limited role in terms of providing a basis for that party to justify its positions, and it probably will not provide for the necessary parameters within which the dispute could be resolved.

choice between equitable options, and the specific terms of the settlement of the dispute will be determined by the factors responsible for the generation of the political will to resolve the dispute — ecological, economic, and political.⁴³

III. EVALUATION OF THE FACTORS AFFECTING THE ROLE OF INTERNATIONAL LAW IN THE RESOLUTION OF CENTRAL AND EAST EUROPEAN TRANSBOUNDARY ENVIRONMENTAL DISPUTES

This article has set forth above a framework of the factors affecting the resolution of transboundary environmental disputes (ecological, economic, political, human rights and legal) and a set of determinants of the role of international law in facilitating the resolution of such disputes. The following analysis examines the substance of those determinants in the specific context of CEE transboundary environmental disputes and draws conclusions as to the current role of international law in facilitating a resolution of those disputes as well as the prospects for improving its application.

A. CURRENT STATUS OF INTERNATIONAL LAWS RELEVANT TO CENTRAL AND EAST EUROPEAN TRANSBOUNDARY ENVIRONMENTAL DISPUTES

1. Law of Transboundary Air Pollution

Air pollution is generally categorized as either “transboundary pollution,” which is defined as air pollution which originates in one state while its effects are in another state,⁴⁴ and “long-range pollution,” which is defined as pollution causing deleterious effects in one state at such a distance that it is not generally possible to distinguish the contributions of one or more particular states of origin.⁴⁵ This article limits its analysis to rules of law governing transboundary air pollution.

Although transboundary air pollution is generally difficult to regulate, as

43. Parties enter into the dispute resolution process because there is value associated with resolving the dispute. The actual terms of the resolution will therefore be dictated by which outcome maximizes the value to each party. Because value is determined by such factors as ecological, economic, and political, they will determine the specifics of the resolution, and not international law.

44. Budislav Vukas, *Concluding Observations on General International Law and New Challenges in the Field of Transboundary Air Pollution*, in *TRANSBOUNDARY AIR POLLUTION: INTERNATIONAL LEGAL ASPECTS OF THE COOPERATION OF STATES* (1986), at 533 (citing Art. 2 ¶ 2 of the DRAFT RULES OF INTERNATIONAL LAW ON TRANSFRONTIER POLLUTION, ILA COMMITTEE ON LEGAL ASPECTS OF THE CONSERVATION OF THE ENVIRONMENT, in *THE INT'L. LAW ASS'N., REP. OF THE 59TH CONF. HELD AT BELGRADE 1980*) [hereinafter Vukas].

45. *Id.* at 347 (citing J.G. Lammers, FIRST (PRELIMINARY) REPORT OF THE ILA INTERNATIONAL COMMITTEE ON THE LEGAL ASPECTS OF LONG DISTANCE AIR POLLUTION, in *INT'L. LAW ASS'N., PRIS CONF., INT'L. COMMITTEE ON LEGAL ASPECTS OF LONG DISTANCE AIR POLLUTION 1984*).

the harm caused by such pollution occurs beyond the boundaries of the state in which the pollution is generated,⁴⁶ a number of international instruments have been adopted which are designed to limit the harm caused by such pollution.⁴⁷ The primary principle of transboundary air pollution law was enunciated in the *Trail Smelter* case between the United States and Canada. The arbitration court in *Trail Smelter* established that "no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes in or to the territory of another or the properties or persons therein."⁴⁸ A number of international rules designed to limit the harm caused by transboundary air pollution have evolved from this principle.⁴⁹

These rules can be summarized as follows: states must prevent, reduce, and control transboundary air pollution so that no substantial injury is caused beyond the area of a state's national jurisdiction; states must take all necessary measures within their ability to prevent such substantial injury; states may not discharge into the atmosphere substances generally considered as highly dangerous to human health; states must provide neighboring states with all relevant data concerning their transboundary emissions; states must cooperate with neighboring states to ensure the prevention and abatement of transboundary air pollution; states must notify affected states of new activities that might entail a significant risk of transboundary air pollution and must consult with those states if so requested; and states must cooperate with affected states to resolve emergency situations caused by their emission of transboundary air pollution.⁵⁰

Notably, these principles do not define what level of pollution constitutes an unacceptable risk of substantial injury. They do not require comprehensive environmental impact assessments (EIA's) prior to the commission of new polluting activities⁵¹ and do not address the question of whether states

46. *Id.* at 348.

47. See ILA Montreal Rules of International Law Applicable to Transfrontier Pollution, and Draft Rules on Long-Distance Air Pollution, 1982; Nordic Convention on the Protection of the Environment, 1974; Barcelona Convention on the Protection of the Mediterranean, 1976; Protocol for the Protection of the Mediterranean Sea against Pollution from Land-Based Sources, 1980.

48. Vukas, *supra* note 44, at 350. It is important to note that this principle is recognized both as a principle of international law and as a principle embodied in U.S. domestic law. The Rapporteur, Professor Rauschnig, notes that this principle is a standard provision of a public health and safety right found in most states' criminal codes. *Id.* See also D. Rauschnig, *Report on the Legal Aspects of the Conservation of the Environment*, in THE INT'L. LAW ASS'N. REP. OF THE 60TH CONF. HELD AT MONTREAL 1982, at 157-177 (modifying this principle to state, "States shall refrain from causing transfrontier pollution by discharging into the environment substances generally considered as being highly dangerous to human health.")

49. These rules are derived from treaty principles, customary international law and general principles of international law. Vukas, *supra* note 44, at 350.

50. *Id.* at 353.

51. See *id.* at 352.

are liable for a breach of these rules.⁵² The question of liability is particularly important, as damage from air pollution cannot be avoided, creating a need for a mechanism to allocate the costs the damages suffered as a result of this pollution.⁵³

2. Law of Transnational Rivers

Early Roman law provided that an individual may not legally change the bed or banks of public rivers in a manner that would modify the existing natural flow of the waters.⁵⁴ Over time, this principle has come to be stated as: "[t]here may be no diversion from a watercourse which is of a nature likely to cause substantial injury to other owners or territorial units whose boundaries are bordered or traversed by the same watercourse."⁵⁵

The prohibition against causing substantial injury to a downstream riparian is a basic tenet of the principle of equitable utilization. This principle embodies the tenets of equity and proportionality of interest⁵⁶ to

52. Alfred Rest, *Responsibility and Liability for Transboundary Air Pollution Damage*, in TRANSBOUNDARY AIR POLLUTION 299,301 (1986).

53. See *id.* at 300. Some commentators have unsuccessfully attempted to argue that although principles of general and customary international law do not establish liability for air pollution, a case can be made for states being fiscally liable for harm caused by activity within their borders. See *id.* at 302 (citing Treaty Banning Nuclear Weapon Tests in the Atmosphere, in OUTER SPACE AND UNDER WATER (August 5, 1963), and Convention on Long-Range Transboundary Air Pollution. These treaties do not specifically create liability, but simply articulate substantive rules and prohibitions. Rest assumes that if an activity is prohibited then a state is liable if such prohibitions are violated). *Id.*

54. BELA VITANYI, THE INTERNATIONAL REGIME OF RIVER NAVIGATION 338 (1979) [hereinafter VITANYI].

55. *Id.* at 339 (citing G. Sauser Hall, *L'utilization Industrielle des Fleuves Internationaux*, in 83 HAGUE RECUEIL (1953)). The Italian Court of Cassation in 1939 expressed this principle in more detail:

International law recognizes the right of every riparian State to enjoy as a participant of a kind of partnership created by the river, all the advantages deriving from it for the purpose of securing the welfare and the economic and civil progress of the nation . . . However, although a State, in the exercise of its rights of sovereignty, may subject public rivers to whatever regime it deems best, it cannot disregard the international duty, derived from that principle, not to impede or destroy, as a result of that regime, the opportunity of the other States to avail themselves of the flow of water for their own national needs.

Id. at 340-41 (citing 9 ANN. DIG. OF PUB. INT'L. LAW CASES (1938-1940), Case No. 47, at 120); see also *Diversion of Water from the Meuse (Neth. v. Belg.)*, 1937 P.C.I.J. (ser. A/B) No. 70 at 26 (June 28), Lake Lanoux Arbitration (Fr. v. Spain), 53 A.J.I.L. at 158-170 (1959).

More recently, this principle has been expressed in *United Nations Convention on the Protection and Use of Transboundary Watercourses and International Lakes*, art. 2, 31 I.L.M. 1312 (1992) [hereinafter *Convention on Transboundary Watercourses*] and *Report of the International Law Commission, Draft Articles on the Law of the Non-Navigational Uses of International Watercourses*, art. 8, U.N. GAOR session 45, Supp. No. 10 at 140, U.N. Doc. A/45/10 (1990) [hereinafter *Non-Navigational Uses*].

56. The proportionality of interests test weighs "the value of conflicting interests of opposing

determine whether the diversion or use of a watercourse should be permitted.⁵⁷ The equitable utilization principle aims to maximize the reasonable and equitable use of water by riparian states, circumscribed by a prohibition against the cause of substantial injury to an individual riparian.⁵⁸

The factors relevant to determinations of equitable and reasonable use include: the natural character of the watercourse; the social and economic needs of the riparian states; the effects of the use on other riparian states; the existing and potential use of the watercourse; the cost of conservation and protection measures; and the availability of alternatives of corresponding value to a particular planned or existing use.⁵⁹

Although the international law of watercourses establishes detailed and useful criteria for equitable allocation of water resources, it neither creates rules of liability for environmental harm caused by a breach of the principle of equitable allocation,⁶⁰ nor does it provide for a choice between "reasonable use" and "more reasonable use." Further, by providing a lengthy list of factors to be considered in determining reasonable use, the international law of watercourses creates the possibility that many undesirable polluting activities can be justified under the rubric of "reasonable use."

3. International Law of Sustainable Development

As a result of increased concern for environmental protection, many states have signed and/or ratified a number of multilateral international conventions which emphasize the need for balancing the competing interests of development and environmental protection. The United Nations Conference on the Human Environment provided the forum for the first major multilateral declaration, the Stockholm Declaration, to focus on the

States according to the effect (benefit or detriment) upon each of the contested uses of waters." VITANYI, *supra* note 54, at 343.

57. *Id.*

58. See *Non-Navigational Uses*, *supra* note 5, at 139, art. 6, which states:

Watercourse States shall in their respective territories utilize an international watercourse in an equitable and reasonable manner. In particular, an international watercourse shall be used and developed by watercourse States with a view to attaining optimum utilization thereof and benefits therefrom consistent with adequate protection of the international watercourse.

See also *Convention on Transboundary Watercourses*, *supra* note 55, art. 2, ¶ 2(c), at 1315.

59. *Non-Navigational Uses*, *supra* note 55, art. 7 at 139-40.

60. Traditionally, international law has recognized the award of damages for riparian interference that adversely affects the domestic water supply, hydroelectric generation, flood control, fishing resources, and navigation. BUSH, *Compensation and the Utilization of International Rivers and Lakes: The Role of Compensation in the Event of Permanent Injury to Existing Uses of Water*, in *THE LEGAL REGIME OF INTERNATIONAL RIVERS AND LAKES* 315-21 (1981) [hereinafter BUSH]. International law has not, however, generally recognized a right of compensation for general environmental degradation.

relationship between humans and their environment, and on the need to promote sustainable development.⁶¹ The principles of the Stockholm Declaration most relevant to transboundary environmental disputes in CEE provide that: nature conservation must be a priority in economic planning;⁶² states should integrate economic development with protection of the environment to provide the maximum benefit to their population;⁶³ and while states have a sovereign right to use their own natural resources, they must ensure that such use does not adversely affect the environment of neighboring states.⁶⁴

The World Charter for Nature, adopted by the United Nations General Assembly on October 28, 1982, also reflects the international community's growing concern over the destruction of the environment in the course of economic development.⁶⁵ The World Charter for Nature departs from the ecological/economic balance sought by the Stockholm Declaration, preferring specific principles of environmental protection designed to guide economic development. The principles of the World Charter most relevant to CEE transboundary environmental disputes provide that: the essential functioning of ecosystems shall not be impaired;⁶⁶ genetic diversity must be protected;⁶⁷ and nature conservation is an integral part of economic development.⁶⁸

The Rio Declaration on Environment and Development adopted by the United Nations Conference on Environment and Development on June 14, 1992, returns to the sustainable development balancing approach first articulated in the Stockholm Declaration.⁶⁹ The Rio Declaration provides that: states have a sovereign right to use their own resources but must ensure that such exploitation does not adversely affect the environment of neighboring states;⁷⁰ environmental protection shall be treated as an integral part of economic development;⁷¹ and states should apply the precautionary

61. *United Nations Conference on the Human Environment Declaration*, 11 I.L.M. 1416 (1972) [hereinafter *Stockholm Declaration*]. For additional information on sustainable development see D. Vanderzwaag, *The Concept and Principles of Sustainable Development: "Rio-Formulating" Common Law Doctrines and Environmental Laws*, 13 THE WINDSOR Y.B. OF ACCESS TO JUST. 39 (1993); James P. Karp, *Sustainable Development: Toward a New Vision*, 13 VA. ENVTL. L.J. 239 (1994).

62. *Stockholm Declaration*, *supra* note 61, at 1418, principle 4.

63. *Id.*, principle 13 at 1419.

64. *Id.*, principle 21 at 1420.

65. *World Charter for Nature*, G.A. Res. 36/539, U.N. GAOR session 37, Supp. No. 51 at 17, U.N. Doc. A/37/51 (1982) [hereinafter *World Charter for Nature*].

66. *Id.*, principle 1 at 17.

67. *Id.*, principles 2 & 3.

68. *Id.*, principle 7 at 18.

69. *Rio Declaration on Environment and Development*, June 14, 1992, 31 I.L.M. 874 [hereinafter *Rio Declaration*].

70. *Id.*, principle 2 at 876.

71. *Id.*, principle 4 at 877.

principle in taking cost-effective measures to protect the environment even in the face of scientific uncertainty. The precautionary principle requires states to anticipate, prevent or minimize damage to transboundary resources and mitigate adverse effects of harmful behavior. Lack of full scientific certainty may not be used as a reason for postponing such necessary measures.⁷²

The norms of environmental protection articulated in the Stockholm and Rio Declarations reflect an understanding that states should promote economic development compatible with environmental protection. These declarations do not flatly prohibit economic development where it results in harm to the environment. Although the international norms of environmental protection have attained substantial acceptance by states, these norms have not achieved the status of customary international law, and as such, are frequently referred to as "soft law".⁷³ Until these norms reach the status of customary international law, states will likely take into account the principles embodied therein, but will not consider themselves compelled to strictly conform their behavior to these principles. Additionally, because the principles are quite broad, a number of harmful activities may be carried out in conformity with the principles of sustainable development.

4. Existing Regional or Bilateral Treaties

CEE states have entered into a number of regional and multilateral treaties regarding resource allocation and development. While some of these treaties are primarily concerned with improving conditions for economic development, such as the Danube River Convention,⁷⁴ others attempt to establish regimes for cooperation in the management and preservation of transboundary resources. For example, the 1976 Czechoslovakia-Hungary Bilateral Agreement Regarding the Management of Water-Supplies of Border Waters specifically provides that the two states will not "take any action in the management of water-supplies that would unfavorably interfere with the mutually determined conditions of the waters" without mutual consent, and that they must "make use of riverbeds . . . in

72. *Id.*, principle 15 at 879.

73. For an explanation of the concept and authority of "soft law" see Pierre-Marie Dupuy, *Soft Law and the International Law of the Environment*, 12 MICH. J. OF INT'L. L. 420 (1991); Steven A. Kennet, *Hard Law, Soft Law and Diplomacy: the Emerging Paradigm for Intergovernmental Cooperation in Environmental Assessment*, 31 ALBERTA L. REV. 644 (1992); Tadeusz Gruchalla-Wesierski, *A Framework for Understanding Soft Law*, 30 MCGILL L. J. 37 (1984).

74. Convention Regrading the Regime of Navigation on the Danube, Aug. 18, 1948, 1949 U.N.T.S. 197, 199. The Danube River Convention is primarily concerned with improving conditions of navigation along the Danube, and thereby creating a sturdy infrastructure for economic development. *Id.*

such a manner that they do not cause damage to each other.”⁷⁵ A further example is the Romanian-Bulgarian Convention on Environmental Cooperation, which was specifically designed for the purpose of developing joint proposals to reduce environmental pollution and to ensure public safety in the transboundary region between Romania and Bulgaria.

Although the legal structure for cooperation exists in a number of bilateral cases, the parties in those cases have generally failed to fulfill the basic obligations necessary for such cooperation.⁷⁶ Moreover, in some cases, states have been unable to agree on the necessary procedures for cooperation and have thus decided against entering such agreements.⁷⁷

5. Human Rights, Obligations Under International Conventions, and Customary International Law

International human rights law provides that all peoples may freely use natural resources based upon the principles of mutual benefit and international law. In no case may a people be deprived of its own means of subsistence.⁷⁸ This general right provides a minimum level of protection for “peoples” to use natural resources and an assurance of sufficient means of subsistence. It does not, however, amount to protection from environmental degradation unless that degradation is of such a magnitude that it devastates the natural resources necessary for subsistence. Additionally, this human rights principle does not define “peoples,” rendering it unclear whether it refers only to national groups, or whether it also covers minority ethnic groups that might be located in particular regions of a state suffering from environmental degradation, e.g. Slovak-Hungarians along the southern border of Slovakia. Furthermore, an aggrieved individual does not have standing to take judicial action against a neighboring state, as this human rights principle appears to be only applicable to the state of the nationals affected.

A second potentially applicable human rights principle is the custom that natural resources belonging to a nation must be used to benefit that state’s national development and the well-being of its peoples.⁷⁹ Although it at first

75. Bilateral Agreement Regarding the Management of Water-Supplies of Border Waters, 1976, Czech.-Hung. art. 3, ¶ 1.

76. In the case of the Romanian-Bulgarian Cooperation agreement, the parties have failed to adopt necessary domestic legislation, and have failed to appoint members to nuclear and chemical safety teams. FBIS-EEU, *World Bank Supports Environmental Project with Romania* 5 (July 15, 1993).

77. For instance, the Czech Republic and Poland recently decided to terminate discussions concerning an environmental cooperation agreement.

78. See International Covenant on Civil and Political Rights, December 16, 1966, art. 1; see also International Covenant on Economic, Social and Cultural Rights, December 16, 1966, art. 1, 999 U.N.T.S. 171.

79. *Declaration on Permanent Sovereignty over Natural Resources*, December 14, 1963, G.A. Res. 1803/27, U.N. GAOR (1963).

appears to grant a tool for regional environmental protection, this right is limited by its embodiment of two frequently contradictory principles — the right to development on the one hand, and the well-being of a nation's peoples on the other. Much of the environmental degradation suffered in CEE is a result of rapid industrialization in the development of national interests. In cases where, due to industrial development, environmental pollution so severe has resulted as to reduce life expectancy and cause serious health effects, it might be argued that this principle of human rights law has been violated. This argument would be most convincing in a situation where the development benefits from the industrialization are minimal or where the benefits are exported to a foreign state.

The strongest human rights principle that might be brought to the defense of individuals suffering from transboundary regional pollution is that states are required to formulate development policy aimed at the constant improvement of the well-being of the "entire population and of all individuals, on the basis of their active, free and meaningful participation in development and in the fair distribution of the benefits resulting therefrom."⁸⁰ Individuals living in border regions suffering from substantial pollution may successfully contend that they are bearing a disproportionate share of the costs of industrial development, embodied in environmental degradation and its resulting negative health effects.⁸¹ This argument, however, can only be used against the state of the complainant, and cannot be invoked against a neighboring state that may be responsible for the pollution.

B. PRACTICE OF PARTIES APPLYING INTERNATIONAL LAW TO RESOLVE BILATERAL DISPUTES

1. Past Practice

a. *Environmental Issues*

Because information relating to the extent of the environmental harm in CEE states prior to 1989 was frequently suppressed, cases of environmental degradation often did not lead to a dispute. States entering into agreements to pursue joint development projects would minimize or disregard informa-

80. *Declaration on the Right to Development*, G.A. Res. 41/128, art. II, part 3, U.N. GAOR (1986).

81. For an examination of the emerging human right to a clean and safe environment see A. KISS, *An Introductory Note on a Human Right to Environment*, in ENVIRONMENTAL CHANGE AND INTERNATIONAL LAW 199 (1992); R.S. PATHAK, *The Human rights System as a Conceptual Framework for Environmental Law*, in ENVIRONMENTAL CHANGE AND INTERNATIONAL LAW 205 (1992); Vid Vukaso-
vic, *Protection of the Environment: One of the Key Issues in the Field of Human Rights*, 59 REV. JUR. U.P.R. 889 (1990); see also W. Paul Gormley, HUMAN RIGHTS AND THE ENVIRONMENT (1976).

tion concerning the environmental consequences of those projects.⁸² And, where a transboundary dispute did exist, this dispute was suppressed by the need to maintain a united front as Soviet bloc countries,⁸³ or by the direct influence of the Soviet Union.⁸⁴ In the case of the 1977 Agreement to construct the Gabčíkovo and Nagymaros dams on the Danube River, pressure by the Soviet Union on Hungary played a significant role in Hungary's final acceptance of the project.⁸⁵ The Soviet Union saw the construction of the dams as essential to improve economic development between the Soviet Union and CEE, and necessary to improve the speed with which the Soviet fleet could navigate the Danube.⁸⁶

In one notable case, a dispute did erupt between Czechoslovakia and Poland concerning Czechoslovakian plans to build a coke fired power plant in Stonava, located two kilometers from the Polish border. Because of the location of the plant and the local meteorological conditions, over eighty percent of the air and water pollution emitted from the plant would be deposited on Polish territory.⁸⁷ In the mid 1970's, during the design phase of the project, Poland had agreed to assist Czechoslovakia in the construction of the plant and provide coal for the production of coke. By the mid 1980's, Poland became concerned about the environmental implications of the plant and requested that Czechoslovakia cease construction of the plant.⁸⁸

During negotiations in 1989 between the respective Ministries of Environment, the Polish delegation presented a series of legal arguments for the termination of the project based upon the 1958 Agreement on Transboundary Co-operation between Poland and Czechoslovakia, the 1974 Agreement

82. Although the environmental dangers of the Gabčíkovo-Nagymaros Project were known to a small group of scientists and hydrologists when the Agreement to construct the project was negotiated, their views were suppressed by the ruling Communist Party, leaving the population unapprised of these effects. DANUBE BLUES, *supra* note 38, at 3-5.

83. The preamble to the agreement to construct the Gabčíkovo-Nagymaros Project specifically states that a primary motivation of the project is to "further strengthen the fraternal relations of the two states and significantly contribute to bringing about the socialist integration of the states members of the Council for Mutual Economic Co-operation." Treaty Between the Hungarian People's Republic and the Czechoslovak Socialist Republic Concerning the Construction and Operation of the Gabčíkovo-Nagymaros System of Locks, Sept. 16, 1977, 1109 U.N.T.S. 236.

84. GALAMBOS, *Political Aspects of an Environmental Conflict: The Case of the Gabčíkovo-Nagymaros Dam System*, in PERSPECTIVES ON ENVIRONMENTAL CONFLICT AND INTERNATIONAL RELATIONS 75 (1992) [hereinafter GALAMBOS].

85. Hungary and Slovakia, as Soviet satellites, were susceptible to diplomatic and military pressure from the Soviet Union. See I. GADOUREK, *THE POLITICAL CONTROL OF CZECHOSLOVAKIA: A STUDY IN SOCIAL CONTROL OF A SOVIET SATELLITE STATE* (1953). By 1989, "many Hungarians had come to regard [the Gabčíkovo Project] as a symbol of high-handed Communist rule and Soviet domination." *Slovaks Finish Much-Criticized Dam on Danube*, N.Y. TIMES, Nov. 3, 1992, at A8.

86. GALAMBOS, *supra* note 84, at 79.

87. Interview with Representatives of the Polish Ministry of the Environment, Warsaw, Poland (May 4-5, 1994) (anonymity requested).

88. At this point, Czechoslovakia had constructed only about 10% of the works necessary for the plant. *Id.*

on Clean Air in the Transboundary Relationship between Poland and Czechoslovakia, and general rules of international law requiring transboundary cooperation in such matters.⁸⁹ Particular emphasis was placed on Principle 21 of the Stockholm Declaration of 1972. The representatives from Czechoslovakia rejected these international legal arguments as "capitalistic" law, not relevant to the dispute.⁹⁰ Significantly, the Polish delegation did not consider the legal arguments to be independently persuasive, but only as tools in supporting their political argumentation.⁹¹ In the end, Czechoslovakia decided against continuing construction of the plant on economic grounds.⁹²

Despite the general proclivity to simply suppress disputes, or to discount the relevance of international law, CEE states did in fact develop two international legal avenues to avoid transboundary environmental disputes by regulating and reducing transboundary pollution: implementation of the Council for Mutual Economic Assistance (CMEA) Programme for Cooperation Concerning Environmental Protection, and bilateral treaties. However, no formal mechanisms existed for actual resolution of environmental disputes.

In the early 1970's, the CMEA adopted a Comprehensive Programme of Socialist Economic Integration.⁹³ This economic program contained a subsidiary program for Cooperation Concerning Environmental Protection (CCEP).⁹⁴ The CCEP was intended to develop means for reducing harmful transboundary emissions, to create models for monitoring the amount and effect of harmful transboundary emissions, to correlate methods, standards, terminology, and facilities for monitoring transboundary air pollution, and to explore legal and organizational means for reducing transboundary air pollution.⁹⁵ Although the CCEP provided for the creation of mechanisms to share and correlate information, it did not formulate or recommend specific legal rules or institutions for reducing transboundary air pollution.⁹⁶ As a result, the CCEP had little effect on the actual reduction of transboundary pollution.

On the bilateral level, CEE states entered into a number of bilateral cooperation treaties concerning the management of transboundary

89. *Id.*

90. The Czechoslovakian representatives offered to apply principles of socialist international law to the dispute, but none could be identified. *Id.*

91. *Id.*

92. *Id.*

93. JERZY SOMMER, *Transboundary Co-operation Between Poland and Its Neighboring States* 205, 213 in *TRANSBOUNDARY AIR POLLUTION* (1986) [hereinafter SOMMER].

94. *Id.*

95. *Id.* at 214.

96. *Id.*

resources. Poland will be used as a case study to examine the content and effectiveness of such bilateral agreements.⁹⁷

With respect to the management of transboundary water resources, Poland entered into agreements with Czechoslovakia, the USSR, and the German Democratic Republic.⁹⁸ These agreements provided that "activities undertaken by the parties with regard to water management should be subject to the respect of the rights and interests of the other side."⁹⁹ A party was not permitted to take action that would negatively affect the economy of the other party without that party's consent.¹⁰⁰ Pollution of watercourses was specifically defined in the USSR and GDR agreements, which also provided that the parties were required to "maintain the purity of the transboundary watercourses, apply appropriate measures to properly purify and treat waste water, and to refrain from discharging harmful pollutants into the water."¹⁰¹ These agreements further required bilateral consultation concerning any long term projects that would have a substantial effect on water quality or quantity.¹⁰²

With respect to transboundary air pollution, Poland entered into agreements with Czechoslovakia and the GDR.¹⁰³ The Poland-GDR agreement did not contain any substantive legal norms, but rather relied upon

97. Czechoslovakia also entered into bilateral water agreements with the Soviet Union, Hungary, Poland, the former East Germany, and Austria, designed to protect the quality of its frontier waters. Zdenko Kordick, *Legal Protection of Waters*, 18 BULL. OF CZECH. L. 102, 109 (1979). These agreements adopt principles governing the protection of frontier waters against pollution and floods, generally stating: "In keeping with their economic and technological potential, the contracting parties are pledged to do their utmost to maintain the existing state of quality of the frontier waters and, if possible to take measures which would improve that quality." *Id.* Specific requirements include obligations to "a) follow and inspect the quality of the frontier waters and evaluate the results, b) prepare forecasts regarding the quality of frontier waters, c) inform each other of cases of substantial deterioration of the quality of frontier waters, d) act according to agreed directives in cases of calamity or extreme situations." *Id.*

98. See Agreement on Water Management in International Watercourses, March 21, 1958, Pol.-Czech.; Agreement on Water Management in International Watercourses, November 17, 1964, Pol.-USSR; Agreement on Co-operation on Water Management in International Watercourses, March 11, 1965, Pol.-GDR, cited in SOMMER, *supra* note 93, at 217-234.

99. SOMMER, *supra* note 93, at 217.

100. *Id.*

101. *Id.* at 218. Water purity standards were to be established through the implementation of side agreements. *Id.*

102. *Id.* In order to facilitate the transfer of information, the agreements provided for the creation of Government Plenipotentiaries for International Water Management. These Plenipotentiaries were responsible for facilitating the exchange of information and empowered to pass non-binding resolutions concerning transboundary water utilization. The authority of the Plenipotentiaries was substantially limited as all actions had to be approved by the individual parties in accordance with their internal regulations. *Id.* at 224.

103. See Agreement on Protection of the Atmosphere Against Pollution, September 24 1974, Pol.-Czech.; Agreement on Co-operation in Environmental Protection, June 4, 1973, Pol.-GDR, cited in SOMMER, *supra* note 93, at 219-224.

procedural and organizational norms.¹⁰⁴ Rather than requiring the parties to endeavor to reduce transboundary air pollution, the agreement provided for the creation of cooperation mechanisms designed to facilitate the reduction of harmful emissions if the parties determined it was in their interest to reduce those emissions.¹⁰⁵ This agreement provided for the appointment of plenipotentiaries responsible for developing plans for the implementation of the cooperation mechanisms.¹⁰⁶

The Polish-Czechoslovak agreement provided a more detailed process for reducing transboundary air pollution by defining air pollution, creating a responsibility to reduce air pollution, promoting economic, organizational and technical activity designed to reduce air pollution,¹⁰⁷ establishing a joint management committee,¹⁰⁸ and requiring expanded cooperation between the parties.¹⁰⁹ This agreement defined pollution as undesirable substances emitted into the air as the result of direct or indirect human activity.¹¹⁰ Although the first step in the effective reduction of transboundary air pollution is the definition of pollution, given the vague definition of undesirable substances, this definition is of little use. Undesirable substances were likely presumed to be of types and quantities which exceed sanitary and technical norms.¹¹¹ However, because Poland relied on emission standards to regulate pollution, while Czechoslovakia relied on hygienic norms,¹¹² this definition does not create the necessary common ground from which the parties may proceed to reduce the emission of harmful pollutants.

The Polish-Czechoslovak agreement also set forth a detailed legal commitment by the parties to regulate harmful emissions based on the extent of environmental degradation in a particular region.¹¹³ Unfortunately, this

104. SOMMER, *supra* note 93, at 225.

105. The agreement provided for cooperation in the following fields: exchange of information, joint planning, scientific and technical cooperation, cooperation in development and construction of facilities for measuring levels of pollution, and cooperation in the construction of new industrial plants, and the modernization of existing plants. *Id.*

106. *Id.* at 226.

107. *Id.* at 220.

108. The actual authority of the joint management committee was limited as all of its actions must be approved by each party in accordance with their own internal regulations. *Id.* at 224.

109. *Id.* 219.

110. *Id.*

111. *Id.*

112. *Id.* at 220.

113. Specifically the Agreement provides:

Each contracting party shall take appropriate measures in its territory to reduce pollution of the atmospheric air above the territory of the other party in such a way as to: =ft

- a. apply protective measures in territories, above which the atmospheric air is not excessively polluted, ensuring a most advantageous situation within the norms binding in the two states;
- b. take measures in territories, above which pollution of the atmospheric air exceeds

language is subject to a variety of interpretations.¹¹⁴ The ambiguous nature of this substantive legal requirement to a large extent reduces its ability to effectively guide the behavior of the parties in their attempt to reduce transboundary air pollution. The agreement did, however, produce a number of useful procedural requirements, including the obligations to exchange relevant information, consult on measures to reduce emissions, exchange relevant experience, ensure comparability of emission measurements, unify domestic legal regulations, pursue joint research, seek to measure transboundary air pollution, and notify the other party in case of emergency.¹¹⁵

b. Acceptance of International Arbitration

Although CEE states have not entered into bilateral treaties providing for arbitration or other dispute resolution mechanisms for the resolution of environmental disputes, they have a significant history of established procedures for resolving international trade disputes. While not directly analogous to environmental disputes, the acceptance of arbitration of trade disputes evidences a familiarity with dispute resolution mechanisms, and a willingness to adopt treaties containing such provisions and requirements.¹¹⁶

During the years of their membership in the CMEA, CEE states developed a tradition of settling international trade disputes through permanent

the norms binding in both states, in pursuance of the technical advancements to gradually improve on the purity of atmospheric air;

c. appoint representatives of both sides to determine which amounts of pollution are permissible to be transported onto the territory of the other party — in cases in which binding norms are exceeded on the territory of only one of the contracting parties.

Id. at 220-21.

114. An interpretation based on a determination of the air quality of the receiving state would be that the state which generates transboundary pollutants affecting the territory of the neighboring state which is not excessively polluted, must not emit pollutants in an amount that will cause that territory to become excessively polluted. If the territory of the neighboring state is already excessively polluted, the generating state must reduce its emissions using the best available technology to attempt to achieve an acceptable level of air quality in the neighboring state. *Id.*

Alternatively, an interpretation could be based on the determination of the air quality of both states. Thus, if the emission standards have not been exceeded in either state, both states would be obligated to maintain the current level of emissions, or at a minimum such that the air quality standards are not exceeded. If both states are exceeding the emission standards, they would both be obligated to reduce emissions consistent with the best available technology. And, if only one state is exceeding the emission standards, the parties would have to agree as to the amount of emissions the exceeding state may export to the neighboring state. *Id.* at 222.

A third interpretation could be based on the air quality of the emitting state. *Id.*

115. *Id.* at 223.

116. There still remains the question of whether these dispute resolution mechanisms were actually used to resolve disputes, or whether the parties resorted to other means to resolve their trade disputes.

arbitration courts to which jurisdiction had been transferred via a number of international treaties.¹¹⁷ In 1958, the CMEA countries signed the General Terms of Delivery of Goods Between Organizations of the Member-States of the Council for Mutual Economic Assistance, providing for the arbitration of international trade disputes.¹¹⁸ This agreement was replaced by the amended General Terms of Delivery of the CMEA in 1979, which provided that international trade disputes would be subject to the sole jurisdiction of arbitration courts located in the defendant's country. Upon agreement of both parties, the dispute could be submitted to the arbitration court of a third CMEA state.¹¹⁹ Some CMEA states also became parties to a number of multilateral treaties on international commercial arbitration independent of CMEA obligations.¹²⁰

CEE states have also enacted domestic legislation promoting the settlement of international trade disputes. Czechoslovakia, for example, had enacted extensive domestic legislation providing for the settlement of international commercial disputes through arbitration,¹²¹ as well as for domestic recognition and enforcement of arbitral awards.¹²²

2. Current Practice

Since the fall of communism, and the dissolution of the CMEA, the CEE

117. Jaroslav Hrivnak, *Czechoslovak Regulations Governing Arbitration in International Trade*, 24 BULL. CZECH. L. 19, 35 (1985) [hereinafter Hrivnak].

118. *Id.*

119. In order to regulate international contracts arising out of economic, scientific and technical cooperation, the CMEA states signed the Convention on the Settlement of Civil-Law Disputes Arising from Relations of Economic, Scientific and Technical Cooperation in Arbitration proceedings on May 26, 1972. *Id.* at 36. Parties to this agreement include Bulgaria, Czechoslovakia, the GDR, Hungary, Poland, Romania, the USSR, and Cuba. This Convention provides for the exclusive jurisdiction of arbitral court, with the award being final and enforceable in the territory of any state party. *Id.*

120. For example, Czechoslovakia was a party to the following arbitration conventions: Protocol on Arbitration Clauses, Geneva, September 24, 1923; Convention on the Execution of Foreign Arbitral Awards, Geneva, September 26, 1927; Convention on the Recognition and Enforcement of Foreign Arbitral Awards, New York, June 10, 1958; European Convention on International Commercial Arbitration, Geneva, April 21, 1961; and the Convention on the Settlement of Civil-Law Disputes Arising from Relations of Economic, Scientific and Technical Cooperation in Arbitration Proceedings, Moscow, May 27, 1972. Hrivnak, *supra* note 117, at 88.

121. Hrivnak, *supra* note 117, at 19. Act No. 98/1963 provides for the establishment of a court of arbitration suitable for resolving international trade disputes. The Act further provides that the parties to a dispute may properly agree to submit the dispute to this court of arbitration, which will have sole jurisdiction over the matter and be empowered to render a final and enforceable decision. *Act No. 98/1963 Relating to Arbitration in International Trade and to Enforcement of Awards*, 24 BULL. OF CZECH. L. 55 (1985). Czechoslovakia also signed bilateral agreements providing for arbitration of international trade disputes with Albania, China, North Korea, and Vietnam. Hrivnak, *supra* note 117, at 36.

122. Czechoslovakia also concluded a number of bilateral treaties with non CMEA states providing for the recognition and enforcement of arbitral awards, including: Greece (1929), Portugal (1926), Spain (1931), and Switzerland (1929). Hrivnak, *supra* note 117, at 19.

states have exhibited little interest in cooperating to resolve transboundary environmental disputes. Almost as a backlash to the intense integration of the CMEA, the CEE states are evidencing a disdain to cooperate with each other.¹²³ Specifically concerning environmental cooperation, some of the CEE states have attempted to reach new environmental cooperation agreements and have failed. The lack of interest in environmental cooperation may be a result of the fact that local sources of pollution pose the most immediate threat to human health.¹²⁴

Despite this prevalent reluctance to cooperate to resolve transboundary disputes or to use international law to resolve such disputes, CEE states have taken some action to cooperate on transboundary environmental matters. Poland, the Czech Republic, Slovakia, and Germany established the Black Triangle Environmental Programme in August of 1991 for coordinating environmental measures in the region.¹²⁵ Bulgaria, Georgia, Romania, Russia, Turkey, and Ukraine have formed the Black Sea Environmental Management Programme the purpose of which is to identify the principle sources of pollution of the Black and Azov Seas.¹²⁶ Other CEE states have developed the Environmental Programme for the Danube River Basin for the purpose of developing a strategic action plan for the reduction of pollution.¹²⁷ The Baltic Sea states have developed the Baltic Sea Joint Comprehensive Environmental Action Programme which has identified 132 hot spots involving point and non-point sources of pollution. The program will address issues of wetland protection, reduction of agricultural run-off, and acid rain with a budgeted eighteen billion ECU over the next twenty years.¹²⁸ Further, Bulgaria and Romania have entered into an Environmental

123. Since the dissolution of the CMEA no mechanisms have been created to carry out its function of providing a forum for cooperation among CEE states. Interview with Government Official from the United States Department of State, U.S. Consulate, Krakow, Poland (May 9, 1994) (anonymity requested) [hereinafter Interview with Government Official].

124. ENVIRONMENT FOR EUROPE, *supra* note 1, at I-6. For instance, transboundary SO₂ and NO_x are responsible for acid rain, and although acid rain causes serious environmental harm, it does not have the immediate effect on human health that acid smog created by local sources might have. *Id.* at I-6.

125. *Id.* at II-12. The European Union has appropriated 16 million ECU to support this program from 1992-1995. Interview with Jaskiewicz, *supra* note 2.

126. Pollution of the Black sea has led to the extreme eutrophication of the sea and a marked decline in fish populations and biodiversity. *Id.*

127. Financial support for the Programme is provided by the EC Commission, Global Environment Facility, EBRD, USAID, Austria, the Netherlands, and the World Bank. The plan provides for an applied research program designed to lead to an international accident alert system, a stronger monitoring system, and long term improvements in environmental management and scientific understanding in the region. A separate grant from the Global Environmental Facility will aim to develop a long-term management plan for the Danube Delta. *Id.*

128. *Id.*

Cooperation Agreement designed specifically to address issues arising from air and water pollution in the Ruse-Giurgui region.¹²⁹

Poland has recently submitted draft comprehensive environmental cooperation agreements to the Czech Republic and Slovakia.¹³⁰ These agreements are designed to combine cooperation in the areas of transboundary air, water, and hazardous waste pollution. Significantly, these proposed agreements contain no provisions for compensation arising from transboundary harm, but rather provide for a commitment to discuss the possibility of compensation for such harm.¹³¹ The proposed drafts do require, however, joint EIAs for projects located along the border region.¹³²

Unfortunately, none of the above cooperation mechanisms specifically rely upon or invoke international law as a basis for cooperation. The only clear case using international law to resolve a transboundary dispute is the submission of the Slovak-Hungarian dispute concerning the construction and operation of the Gabčíkovo and Nagymaros dams to the International Court of Justice.

C. PRACTICE OF PARTIES APPLYING DOMESTIC ENVIRONMENTAL LAWS TO RESOLVE RESOURCE DISPUTES

1. Past Practice

Despite the fact that a number of domestic environmental regulations were in place during the last forty years in CEE, these laws were seldom implemented or enforced.¹³³ Environmental regulation necessary for a cost accounting of environmental harm, although existing, was of little effect in controlling the environmental consequences of socialist production.¹³⁴ Environmental regulation focused primarily on the setting of fees for the use of natural resources, and fines for excessive exploitation or pollution of those resources. Unfortunately, these regulations were seldom enforced, especially those relating to fines.¹³⁵

A number of reasons have been suggested for the lack of enforcement of domestic environmental regulation in the former communist bloc. First, the state enterprise and the state environmental agency, although different

129. So far this agreement has been of little use as the states have failed to appoint the necessary experts to the joint cooperation committees.

130. Interview with Representatives from the Polish Ministry of the Environment, Warsaw, Poland (May 4-5, 1994) (anonymity requested).

131. *Id.*

132. *Id.*

133. See *supra* notes 23-28.

134. Haigh, Bora & Zentai, *supra* note 38, at 26.

135. *Id.* In cases where fines have been applied, their amount is insufficient to produce any apparent affect on the behavior of polluters. ENVIRONMENT FOR EUROPE, *supra* note 1, at III-24.

state actors, were funded from the same central authority. Therefore, if fines were collected, the penalty imposed on one enterprise was used by the central authority to offset fines paid by another enterprise, with no net benefit to the environment. Second, the incentive for central governments to enforce environmental regulations was further diminished as the central government was able to reallocate profits from state enterprises to other areas of interests for the government, such as social programs, or further profit making enterprises.¹³⁶ Of course, the collection of fines would reduce profitability, and thus reduce the resources available for these other interests.¹³⁷ In addition, since environmental regulation focused mainly on air immission standards (ambient air quality) and river classification standards, rather than emission standards, even if the state was interested in attaching liability for environmental degradation, it was next to impossible to determine which of the many industrial polluters were responsible for excessive pollution or use of natural resources.

Although not regularly enforced, a brief examination of CEE domestic environmental laws will provide an indication of the perceived role of environmental law in resolving conflicts over domestic resource utilization.¹³⁸ The pre-revolution environmental legislation of Bulgaria will be used as a case study.¹³⁹

136. Haigh, Bora & Zentai, *supra* note 38, at 28.

137. *Id.*

138. Although the velvet revolutions of Eastern Europe have dramatically changed the governing structure of these states, the perceptions of the role of law in society have generally remained consistent.

139. Although not all East European states enacted identical legislation, their attempts at environmental regulation were typically similar. For an examination of pre-revolution environmental regulation in Czechoslovakia, see generally *Act No. 138/1973 Concerning Waters*, 18 BULL. CZECH. L. 147 (1979); *Act No. 61/1977 Concerning Forests*, 18 BULL. CZECH. L. 169 (1979); Zbynek Kiesewetter, *Exploitation and Protection of Natural Resources and Their Impact on Human Environment*, 18 BULL. CZECH. L. 77 (1979); Zdenko Kordik, *Legal Protection of Waters*, 18 BULL. CZECH. L. 102 (1979); Josef Leden, *Legal Regulation of Air Pollution Control*, 14 BULL. CZECH. L. 64 (1975); Zdenek Madar, *General Problems of the Legal Regulation of Environmental Protection in Czechoslovakia*, 14 BULL. CZECH. L. 5 (1975); Zdenek Madar, *Protection Against Air Pollution in Czechoslovakia*, 18 BULL. CZECH. L. 120 (1979); Rudolf Mekota, *Legal Protection of Nature*, 14 BULL. CZECH. L. 90 (1975); Jiri Silar, *Legal Protection of Water as it Relates to Environmental Protection*, 14 BULL. CZECH. L. 75 (1975); Jiri Silar, *The Forestry Act*, 18 BULL. CZECH. L. 110 (1979); *Survey of the Most Important Czechoslovak Legal Regulations in the Sphere of Environmental Care*, 14 BULL. CZECH. L. 117 (1975).

For an examination of pre-revolution environmental regulation in Poland, see generally THE NATIONAL PROGRAMME OF ENVIRONMENTAL PROTECTION UNTIL 1990 (Warsaw 1984); Smith, *supra* note 1, at 553; Anna Starzewska, THE POLISH PEOPLE'S REPUBLIC, in ENVIRONMENTAL POLICIES IN EAST AND WEST 294 (1987).

For an examination of pre-revolution environmental regulation in Hungary, see generally Bandi, *The Development of Environmental Law in Hungary*, 18 REV. CENT. & E. EUR. L. 57 (1992); GYORGY ENYEDI & VIOLETTA ZENTAI, THE HUNGARIAN PEOPLES REPUBLIC, in ENVIRONMENTAL POLICIES IN EAST AND WEST 213 (1987).

For an examination of pre-revolution environmental regulation in Romania, see generally ROMANIA ENVIRONMENT STRATEGY PAPER, *supra* note 1, at 78.

Prior to 1956, Bulgaria relied on legislation requiring the planned use of natural resources and the planned protection of the environment consistent with socialist principles of societal ownership of these resources.¹⁴⁰ Specific legislation was limited to forest, property, erosion, and fisheries concerns.¹⁴¹ This legislation was ineffective, as it applied outdated standards of protection, did not regulate substantial areas of the environment, and was not generally enforced.¹⁴²

Subsequent to 1956, Bulgaria adopted a number of environmental laws geared towards the prevention of air, water, and soil pollution.¹⁴³ This new legislation recognized the competition between economic development and environmental preservation, and attempted to address the needs of the growing national economy for raw materials and encourage the application of recently developed environmental technologies.¹⁴⁴ The 1960 Decree for Nature Protection attempted to balance these interests by stating that all governmental bodies and all citizens of Bulgaria were obliged to protect the environment.¹⁴⁵ The 1960 Decree also shifted the emphasis from conservation of nature to rational use of natural resources consistent with the protection of nature.¹⁴⁶ The 1963 Law of Protection of Air, Waters and Soil from Pollution, and the 1967 Law of Nature Protection attempted to refine the principles of the 1960 Decree by reorganizing institutions responsible for enforcing environmental regulations and more clearly defining those environmental regulations.¹⁴⁷ Despite these improvements, the legislation remained at the advisory level and had little impact on the protection of the environment.¹⁴⁸

By 1976, Bulgaria had begun to include a section on environmental protection in its five year plans that required specific quantities of clean water, clean air, and forested land.¹⁴⁹ Although the inclusion of this section indicated a further recognition of the need to balance economic development with environmental protection, no guidelines were provided as to how to achieve these goals. By 1980, the Bulgarian government had adopted

140. Djolov & Dimitrova, *supra* note 1, at 57.

141. *Id.*

142. *Id.*

143. As well as the protection of rare and national objects. *Id.* at 58.

144. *Id.*

145. *Id.*

146. *Id.*

147. *Id.* at 59.

148. The purpose of the 1967 Law of Nature Protection was to "create a mechanism to prevent any contradictions between economic development and the environment, as well as to provide for the rational use of natural resources, and to raise responsibility of government bodies, economic units, and the population." The decree did not provide any clear regulations for the creation of such a "mechanism." *Id.*

149. *Id.* at 63.

"Methodological Guidelines, Forms and Indicators for Preparation of [the] Environmental Protection."¹⁵⁰ These guidelines remained vague, providing no real substantive regulations for achieving environmental protection.

The most substantive segment of Bulgarian environmental regulation was the attempt to require the preparation of EIAs for new construction projects, including industrial plants, highways, and housing projects.¹⁵¹ The EIAs were to evaluate the admissible quantities of pollutants that may be emitted into the atmosphere, water, and soil, the creation of sanitary zones, and the reclamation of lands. They were also to provide recommendations on improving the general ecological situation of the area.¹⁵² In practice, the EIAs were compiled in a cursory manner, and did not affect the actual design or construction of the project.¹⁵³

Finally, Bulgarian environmental legislation provided for imposition of fines for violation of pollution standards.¹⁵⁴ In addition to being seldom enforced, the fines were based on a complicated formula accounting for the type of pollution, quantity of waste, concentration and duration of pollution, and providing for a number of modifications to reduce the amount of the fine.¹⁵⁵

Pre-revolution Bulgarian environmental legislation evidences a developed comprehension and recognition of the need to protect environmental resources and the concept of reasonable use. However, other than the requirement for an EIA, this legislation does not reflect an understanding of how the law may accomplish environmental protection. The legislation fails to grasp the need for specific rules designed to guide and affect the behavior of corporations and individuals using natural resources. Further, the legislation fails to accurately distinguish between permissible and impermissible uses of natural resources, or delineate a prioritization of permissible uses.

2. Current Practice

Since the transition to democratic governments and market-based economies, most CEE states have begun a process of developing new systems of environmental protection. Although a number of these developments are still in progress, an examination of the current state of environmental protections will aid in ascertaining whether CEE states are now more likely

150. *Id.* at 63-64. The Methodological Guidelines generally provided for the rational use of natural resources through non-waste technologies, for preservation of the purity and quantity of waters, for air and soil protection, afforestation, noise protection, nature reserves, wildlife protection, and utilization of municipal waste.

151. *See id.*

152. *Id.*

153. *See generally id.*

154. *Id.* at 65-66.

155. *Id.*

to use domestic environmental law to resolve resource disputes, and whether in turn they will be more likely to use international law to resolve transboundary environmental disputes. The current environmental legislation of Hungary will be used as a case study.

Although Hungary is in the process of substantially restructuring its environmental legislation, it is unclear whether this effort will lead to a more effective system of environmental protection, as compared to the system under the communist government of Hungary.¹⁵⁶ The environmental plan set forth by the Hungarian government contains a number of valuable principles such as the principle of prevention and the principle of international cooperation. However, the plan represents an expansive, vague, and unprioritized list of aspirations that are unlikely to be actualized in workable legislation.¹⁵⁷ Further, the implementation of an effective legislative scheme for environmental protection is limited by the continuation of the financing system developed under the communist regime.¹⁵⁸ Despite the rescission of state control over environmental enforcement, local governments have not taken on this responsibility. Consequently, some commentators argue that the state of the environment is worse than before the transformation from communism to democracy.¹⁵⁹

Current Hungarian environmental administrative law continues to focus on punitive rather than preventative measures, and as such does not provide for a compulsory EIA.¹⁶⁰ Fines continue to play a key role, but are ineffective as the environmental authorities do not adequately monitor polluting enterprises and pollution levels. There is no accountability for the expenditure of funds generated from fines, and the fines are too low to deter future violations.¹⁶¹ Moreover, the ability of private groups to influence the administrative process is severely hampered by the lack of any rules providing for access to information,¹⁶² and, although subject to judicial review, there is no legal standard by which a court can determine whether an administrative agency has acted in accordance with its responsibilities.¹⁶³

Hungarian civil law, although containing a number of useful provisions for environmental protection, has yet to play a key role in such matters.¹⁶⁴

156. HUNGARY: PERSPECTIVE AND PROBLEMS, *supra* note 1, at 10.

157. *Id.* at 6.

158. *Id.* at 8. This central financing system undervalues environmental resources, restricts the dissemination of environmentally sound technologies, relies upon a system of punitive fines, and treats the environment as a cost-increasing factor. *Id.*

159. *Id.*

160. *Id.* at 11. This is despite the fact Hungary is a party to the EIS EPSOO Convention.

161. *Id.* at 12.

162. *Id.* at 23.

163. *Id.* at 25.

164. *Id.* at 17. These provisions include personal civil rights, intellectual property rights, nuisance, trespass, and the utilization of the strict liability standard. *Id.* at 17-20.

This is primarily due to the continuation of the socialist view that environmental protection should be handled through administrative procedures with little judicial review of those procedures.¹⁶⁵ Similarly, Hungarian criminal law plays a minor role, although it is a crime to damage the environment or nature.¹⁶⁶

Hungary currently relies on statutory standards to protect environmental quality. Despite the existence of a 1976 Act on the Protection of the Human Environment, there is no significant coordination between the different areas of environmental regulation, which hinders any effort to reduce excessive pollutants.¹⁶⁷ Water standards are enforced through the assessments of fines when water contamination exceeds certain levels.¹⁶⁸ Air pollution is controlled through a combination of ambient standards and emission standards, which provide for monetary penalties when the standards are violated.¹⁶⁹ However, substantial disharmony exists between the ambient and emission standards, as public health authorities set the ambient standards and environmental authorities set the emission standards.¹⁷⁰ Enforcement of air and water standards is substantially limited as enterprises are responsible for monitoring and reporting their own levels of pollution to the central government.¹⁷¹

Thus, despite the substantial amount of effort invested in creating a system capable of effective environmental management, environmental protection in CEE suffers from many remnants of the communist regimes.¹⁷² As such, CEE states have not developed a familiarity with or reliance on the environmental rule of law to resolve environmental disputes. This diminishes the possibility that CEE states will rely on international environmental law to resolve transboundary environmental disputes.

D. THE CORRELATION OF DOMESTIC AND INTERNATIONAL LAW

The question of a correlation between principles of domestic and international law seeks to determine whether the domestic environmental laws of a CEE state are parallel to international environmental laws, and whether

165. *Id.* Civil litigation is further chilled by the requirement that the moving party must pay the costs of the litigation in advance. Upon the conclusion of the trial, costs are assessed against the losing party. *Id.* at 19.

166. *Id.* at 21. The role of criminal law is constrained by the almost complete lack of enforcement. *Id.* at 22-23.

167. *Id.* at 26.

168. *Id.* at 29.

169. *Id.* at 29-30.

170. *Id.* at 47.

171. *See id.* at 30.

172. For a detailed summary of the deficiencies of Hungary's current state of environmental regulation, *see id.* at 40.

domestic law provides full force and effect to international law. Again, Hungary will be used as a case study.

Hungarian domestic law recognizes the principle that the environment should not be contaminated or polluted,¹⁷³ and that resources must be used equitably. However, Hungarian law does not recognize any of the following principles: the precautionary principle,¹⁷⁴ the polluter pays principle,¹⁷⁵ or the principle of sustainable development.¹⁷⁶ Hungarian law, relying on fines and other punitive measures, is inconsistent with the emphasis of international environmental law on allocative and preventative measures.¹⁷⁷ The absence of a requirement for a comprehensive EIA is similarly inconsistent with international environmental law on ecosystem management and the interrelation of different sources and types of pollution.

Under Hungarian domestic law, international agreements only become part of domestic law if the Hungarian government explicitly enacts implementing legislation.¹⁷⁸ Although Hungary has signed numerous international environmental agreements,¹⁷⁹ it has only enacted implementing legislation for two of those agreements.¹⁸⁰

As the domestic environmental law of CEE states continues to evolve, there may be a greater correlation between CEE domestic and international law. Until greater correlation is achieved, and until CEE states enact sufficient implementing legislation, the current lack of correlation will likely inhibit the role of international environmental law.

E. CURRENT INTERNATIONAL DISPUTE RESOLUTION MECHANISMS ACCESSIBLE TO CENTRAL AND EAST EUROPEAN STATES

A number of international dispute resolution mechanisms currently exist

173. *See id.* at 29.

174. *Id.* at 42, 90.

175. *Id.* at 44, 90.

176. *Id.*

177. *See id.* at 30.

178. *Id.* at 35.

179. Hungary is a party to the following agreements: Convention on Wetlands of International Importance Especially as Waterfowl Habitat; Convention on International Trade in Endangered Species; Convention on the Conservation of Migratory Species of Wild Animals; Convention on Long-Range Transboundary Air Pollution and its three subsequent Protocols; Vienna Convention for the Protection of the Ozone Layer and its Protocol; Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal; Convention on Measures to Combat Pollution of the Tisza River and its Tributaries; Convention on Environmental Impact Assessment in a Transboundary Context; Declaration on the Cooperation of the Danube Countries on Water Management and Especially Water Pollution Control Issues of the Danube Rivers; 1948 Treaty on the Navigation of the Danube; and the Council of Europe Draft Convention on Civil Liability. *Id.* at 35-36.

180. Hungary has enacted implementing legislation for the Convention on International Trade in Endangered Species and the 1948 Treaty on the Navigation of the Danube. *Id.*

to resolve disputes between states.¹⁸¹ Unfortunately, CEE states only have access to a few, most of which are not well suited to resolve transboundary environmental disputes in the CEE region. The International Court of Justice (ICJ) provides the most visible legal means for resolving transboundary environmental disputes.¹⁸² According to an early model developed by Gamble and Fischer, however, the ICJ is not well suited to resolve environmental and natural resource disputes, and thus, parties to such disputes will likely select alternative measures.¹⁸³

The agreement between Slovakia and Hungary to submit the Gabčíkovo-Nagymaros dispute to the ICJ might, however, indicate an enhanced prospect for the ICJ to become involved in CEE environmental dispute resolution. Unfortunately, significant skepticism exists as to whether the court will be able to effectively resolve the dispute in a manner that will protect the environmental interests in the region. Specifically, it is estimated that the resolution of the dispute will take at least three years, and because the Gabčíkovo dam began operation prior to the submission to the ICJ, much of the short term environmental damage has already occurred.¹⁸⁴ And with the long term damage estimated to commence from five to ten years after operation of the dam, there is a significant possibility that irreparable damage will occur before the ICJ will effectively resolve the dispute.¹⁸⁵ Finally, there is concern that the ICJ will not render a decision dictating a settlement to the parties, but rather a decision that addresses a number of international legal questions and directs the parties to reach a settlement consistent with those legal determinations. Such a settlement could take an additional two to three years, increasing the possibility of substantial long term harm from the project.¹⁸⁶

Ultimately, the nature and quality of the decision made by the ICJ will

181. For an examination of the existing dispute resolution mechanisms available to states see generally *INTERNATIONAL COURTS FOR THE TWENTY-FIRST CENTURY* (Mark Janis ed. 1992).

182. For an examination of the traditional role of the ICJ see TASLIM ELIAS, *THE INTERNATIONAL COURT OF JUSTICE AND SOME CONTEMPORARY PROBLEMS* (1983); *THE FUTURE OF THE INTERNATIONAL COURT OF JUSTICE* (Leo Gross ed. 1976); and EDWARD MCWHINNEY, *JUDICIAL SETTLEMENT OF INTERNATIONAL DISPUTES: JURISDICTION, JUSTICIABILITY AND JUDICIAL LAW-MAKING ON THE CONTEMPORARY INTERNATIONAL COURT* (1991).

183. JOHN GAMBLE AND DANA FISCHER, *THE INTERNATIONAL COURT OF JUSTICE: AN ANALYSIS OF A FAILURE* 119-121 (1976).

184. The short term damage of deforestation and destruction of wildlife habitat and diversity has already occurred. The long term damage likely to occur in the near future would be contamination of ground water resources, and destruction of substantial bio-diversity.

185. Interviews with officials from the Slovak and Hungarian Ministries of the Environment, Bratislava, Slovakia and Budapest, Hungary (October 8-14, 1994). Officials of the Slovak Ministry of the Environment point out that interim remediation measures can be taken to protect and in some instances promote environmental values, but that Hungary has been reluctant to take such measures as they might prejudice the case before the ICJ. *Id.*

186. *Id.*

affect whether other CEE states choose to submit similar disputes to the ICJ. However, even if the ICJ renders an effective decision on the Gabčíkovo case, other CEE states may still be reluctant to submit their disputes to the ICJ as these disputes frequently contain substantial elements of political, economic, and other circumstances which must be considered when crafting a resolution of the dispute. Finally, the ability of the ICJ to successfully resolve CEE disputes is limited by the fact that no CEE state has submitted to the compulsory jurisdiction of the court.

Several other available mechanisms for dispute resolution are provided by the Organization on Security and Cooperation in Europe (OSCE).¹⁸⁷ These mechanisms include the Convention on Conciliation and Arbitration within the OSCE which promotes directed conciliation (but has yet to enter into force),¹⁸⁸ the Valletta Mechanism containing the mandatory involvement of a third party conciliator, as well as a host of mini-mechanisms offering good offices, mediation, or conciliation services. Unfortunately, these mechanisms are designed primarily either for disputes involving the threat of force, or the protection of national minorities. As such, these mechanisms tend to focus on conciliation and short term mediation. These mechanisms lack a compulsory element, and thus do not possess the technical capacity to perform as long term cooperation and coordination mechanisms.

The OSCE is particularly inappropriate for use by CEE states attempting to resolve transboundary disputes with the assistance of international law, as it is perceived by western states as primarily a political body designed for the purpose of the acculturation of the former USSR and CEE with western values of democracy and capitalism. This bias of the OSCE substantially inhibits its ability to offer a dispute resolution mechanism suitable to the particular geo-political realities of Central and Eastern Europe.

The resolution of CEE transboundary environmental disputes is inhibited by the lack of dispute resolution mechanisms similar to those in other regional areas with a need for transboundary environmental cooperation.¹⁸⁹ Without the existence of such mechanisms, there is little ability for international

187. See generally UNITED STATES INSTITUTE OF PEACE, ROUNDTABLE ON CSCE: MECHANISMS FOR THE PEACEFUL SETTLEMENT OF DISPUTES (1992) [hereinafter ROUNDTABLE ON CSCE]. For a discussion of the development of OSCE see BELGRADE AND BEYOND: THE CSCE PROCESS IN PERSPECTIVE (N. Andren & K. Birnbaum eds. 1980). For a discussion of more recent developments in the CSCE, and its role in promoting regional stability see, D. McGoldrick, *The Development of the Conference on Security and Co-operation in Europe (CSCE) After the Helsinki 1992 Conference*, 42 INT'L & COMP. L.Q. 411 (1993).

188. This Convention envisions the establishment of a tribunal to facilitate conciliation and arbitration between state parties. ROUNDTABLE ON CSCE *supra*, note 187 at 96.

189. For instance, the United States — Canada International Joint Commission, the United States — Mexico International Boundary and Water Commission, the European Court of Justice, and mechanisms under the Organization of American States.

law to be effectively applied to disputes that are not of an entirely legal nature.

F. THE CURRENT VALUE DERIVED FROM APPLYING INTERNATIONAL ENVIRONMENTAL LAW

CEE states will be more likely to apply international law to resolve their transboundary environmental disputes if they perceive value in doing so. Value may be derived from either western states or from other CEE states. If western states that provide economic and technical assistance to CEE states, or organizations with which CEE states seek to associate, such as the European Union, place a priority on the observance of international environmental law, CEE states will be able to benefit from demonstrating that they too abide by international environmental law. Conversely, CEE states may suffer from the fact that they consistently violate these laws.¹⁹⁰

The primary factor in determining whether value can be derived in such a manner is whether western states do in fact place an emphasis on the rule of international environmental law. So far, western states have emphasized the rule of law, but only to the extent that it promotes a market economy, democracy, the non-proliferation of weapons, and respect for human rights — particularly minority rights. With respect to aid, some western institutions such as the Group of 24,¹⁹¹ the World Bank, the European Bank for Reconstruction and Development (EBRD), and the International Monetary Fund have begun to emphasize the application of international environmental law. In contrast, international financial institutions are still in the process of recognizing the value of environmental protection.¹⁹² For instance, the EBRD has been recently criticized for its willingness to disregard its own environmental procedures and to restrict public participation, as well as its failure to create a plan for establishing sustainably developed economies in Central and Eastern Europe.¹⁹³

Similarly, donor states have failed to emphasize transboundary cooperation

190. See HUNGARY: PERSPECTIVE AND PROBLEMS, *supra* note 1, at 56.

191. *Id.* at 137.

192. The international financial institutions are most likely to apply pressure to use international environmental law to resolve disputes in transboundary regions where the Institutions are providing aid to remedy a particular environmental problem — as frequently the environmental remediation program will not be effective without transboundary cooperation. See Bulgarian-Romanian Danube Delta World Bank Program.

193. Dan Goldberg & David Hunter, *EBRD's Environmental Promise: A Bounced Check?*, in Center for International Environmental Law Brief 1 (December 1994). The EBRD has been further criticized for supporting environmentally unsound projects, such as an aluminum smelter in Slovakia "that is a major source of pollution and that requires huge amounts of energy from an unsafe nuclear power plant." *Id.*

tion. For instance, of the many U.S. AID projects in the northern tier of CEE, only one project specifically focuses on transboundary environmental issues.¹⁹⁴ Other projects are location specific and are frequently designed as pilot or demonstration projects.¹⁹⁵ The international financial institutions have also failed to promote transboundary cooperation, and have tended to lose interest in the northern tier states as these states have re-oriented their environmental investment programs, focusing on small scale projects and localized transboundary cooperation.¹⁹⁶

Even where the international organizations or western states emphasize the resolution of disputes and the use of international environmental law, this emphasis is potentially limited by the fact that CEE states continue to finance the vast majority of environmental projects in their respective countries, thus limiting the avenues for constructive pressure from donor countries and agencies. For instance, ninety-five percent of Poland's expenditures on environmental protections are domestically generated.¹⁹⁷ In fact, some CEE countries are finding that EU assistance for projects may not be of significant value as the EU requires both open bidding and western rates for advice and counsel.¹⁹⁸

A particular CEE state may derive value from other CEE states in the form of improved relations or avoidance of retaliation, if the other CEE states emphasize the rule of law. Currently, most CEE states do not emphasize the rule of international environmental law, and most are, to some extent, in violation of those laws.¹⁹⁹ Similarly, CEE states have been reluctant to take retaliatory measures based on international environmental law, as it is based on preventative, not punitive measures and does not provide for clear retaliatory measures.²⁰⁰

194. Project Silesia involves transboundary cooperation between Poland and the Czech Republic to reduce air and water pollution in the Silesian coal basin area which is located on both Polish and Czech territory.

195. Interview with Government Official *supra*, note 123. In some cases, western funding decisions are made for purely political reasons; devoid of both rational planning and any desire to encourage transboundary environmental cooperation, or the use of legal mechanisms. For instance, the U.S. and Polish Governments decided to allocate \$10 million to retrofit a power plant located 12 kilometers from Krakow, despite the fact that the plant was operating at 20% capacity and should have been closed for both economic and environmental reasons. The impetus for this investment decision was that President Bush was scheduled to visit Krakow to announce an environmental aid package for Poland, and diplomatic protocol dictated that a sizeable portion of the aid should be directed to a high profile project in Krakow. Interview with Dr. Krzysztof Gorlich, Director of CityProf, Krakow, Poland (May 9, 1994).

196. Interview with Dr. Jaskiewicz *supra*, note 2.

197. Interview with Dr. Andrzej Kassenberg, President of the Polish Institute for Sustainable Development, in Warsaw, Poland (May 5, 1994).

198. Interview with Dr. Jaskiewicz, *supra* note 2.

199. In the Black Triangle region, for instance, all three states export significant amounts of air pollution in violation of the duty not to cause substantial injury to neighboring states.

200. States could take unrelated retaliatory measures, but are unlikely to do so unless there is a

Until western states place a greater emphasis on the rule of international environmental law, and CEE states rely on international environmental law in their relations, CEE states will see little value in applying international environmental law to resolve their transboundary disputes.

IV. CONCLUSION AS TO THE ROLE OF INTERNATIONAL LAW IN THE RESOLUTION OF CENTRAL AND EAST EUROPEAN TRANSBOUNDARY ENVIRONMENTAL DISPUTES

An examination of the circumstances concerning resolution of CEE transboundary environmental disputes leads to several conclusions. First, sufficient ecological, economic, and political factors exist to create the necessary political will to resolve transboundary environmental disputes — at least in circumstances where there will be a net health or economic benefit to populations on both sides of an international border.

Second, there is an opportunity for international law to be usefully integrated into the dispute resolution process with the goal of setting up a framework within which disputes may be settled. In cases of transboundary water law, there is potentially more of a role for international environmental law, as international water law is more defined and settled than other areas of international environmental law. Currently, however, the role of international environmental law is quite limited, as it is generally ill defined. In addition, the CEE states, although committed to a number of bilateral and multilateral treaties, have seldom invoked international law to resolve transboundary environmental disputes. Similarly, although CEE states have adopted a substantial amount of domestic environmental legislation, this legislation is not generally effectively invoked or enforced to resolve domestic environmental disputes. Finally, there is marginal correlation between domestic and international law, and there are no adequate dispute resolution mechanisms available to CEE states wishing to invoke international environmental law to resolve their disputes.

Third, the role of international environmental law in resolving CEE transboundary environmental disputes can be substantially enhanced by refining international law to tailor it to the particular geographical, historical, and political circumstances of the CEE, including development of specific rules of international liability for injury caused by polluting activities. Additionally, the role of international environmental law may be enhanced by refining and strictly applying domestic environmental laws and by the conclusion of substantive and implementable bilateral and multilateral environmental cooperation and dispute resolution treaties. Further,

the role of international environmental law may be increased through by heightened western interest and aid in promoting the rule of international environmental law, and by the development of a regional CEE environmental dispute resolution mechanism.